

Greening the Educational Experience

SUNY College at Oneonta



A Report from the Educational Sub-Group of the Sustainability Task Force

Respectfully Submitted on March 15, 2011

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Introduction

Background

Strategic Plan of 2009-2010.

In the strategic plan developed by SUNY College at Oneonta's Strategic Planning and Resource Council in 2009-2010 and endorsed by the College Senate in April 2010, an increased emphasis on sustainability in the management, operation, and curriculum of the college was identified as one of the plan's six key goals over the next three to five years.

Sustainability Task Force and Changes to Group.

The Sustainability Task Force has served as both an advisory and lead action group on campus for the last several years in regards to sustainability concerns and issues. It has met several times each semester and has served as a forum for faculty, staff, and students. The group has heard regularly about accomplishments in energy savings, the progress of greenhouse gas inventories, and other initiatives on campus. It has served as the main organizing group for Earth Day and Green Dragon Week activities for the past several years.

In the Fall of 2010, the group was asked by the Provost to renew its efforts and focus on ways to improve the presence of sustainability in the *education* of our students. To that end, a new co-chair was named and a number of new members were invited from departments and offices from across campus to participate in the articulation of specific recommendations.

Participants in the Educational Sub-group.

Faculty and Staff.

James Mills—*Chair*; Tracy Allen – *Geography*; Jacqueline Bennett – *Chemistry and Biochemistry*; Phil Bidwell – *IT Networking*; Nancy Cannon – *Milne Library*; Joshua Frye – *Communication Arts*; Greg Fulkerson – *Sociology*; Tom Horvath – *Environmental Sciences*; Narges Kasiri – *Economics and Business Division*; Gina Keel – *Political Science*; Achim Koeddermann—*Philosophy*; Genevieve Marchand – *Physical Education*; Daniel Payne – *English*; Donna Vogler – *Biology*

Student Participants.

Alexia Baker; Michael Lindquist; Alex Lyakhov; Rachael Smith; Katie Whitcomb

Overview

Sustainability in the broader world.

The fact that sustainability was identified as a high priority in the strategic plan reflects the fact that sustainability is an increasingly prominent topic and issue in the world today. Although there has been a widespread awareness of pollution, resource depletion, loss of species, and other such environmental issues at least since the 1960's, current and imminent climate change has sharpened everyone's concern. We can no longer ignore the drastic changes we are making to the world, which will increasingly affect our daily lives. We could be facing a number of serious environmental disasters and even collapse if we don't quickly and substantially change our environmental impacts. The issues surrounding sustainability have social impacts, including educational impacts which we must concern ourselves with as a higher education institution.

Need to prepare students for this new set of conditions.

The students at SUNY Oneonta will be among the people most affected by these changes. Young people perhaps have the greatest stake in what happens to the world they are about to enter as educated adults. They need to be the primary agents of change in order to assure their own futures. We need to make sure they have a good grasp of what the issues are and how they can best be dealt with. We want to know that students who graduate from SUNY Oneonta have the potential and skills to become sustainability stewards for their immediate communities and future generations.

Sustainability in higher education.

SUNY Oneonta is not alone in this realization. Institutions of higher education across the globe are pioneering sustainability as a higher priority and targeting essential aspects of their teaching, research, and service. Hundreds of institutions have joined the Association for the Advancement of Sustainability in Higher Education (AASHE). Many institutions are making changes such as reductions in energy consumption, increased campus recycling programs, increased use of local and fair trade foods, commuting programs and more. College presidents, including our own have committed their institutions to major reductions in greenhouse gases. In short, we are not alone. In fact, we might be a little behind the curve in many aspects of creating a more sustainable campus and a more robust sustainability education program for our students. Nevertheless, we can benefit and learn from what has been done at other institutions and become part of the change movement.

Sustainability education at SUNY Oneonta.

This is not to say that there has not been a great deal accomplished already. There have been and continue to be countless dedicated faculty across the campus who have been teaching about sustainability for decades. Many of our current courses and majors implicitly deal with aspects of sustainability. One of the members of this group, Jacqueline Bennett, recently received a national award that recognizes her innovations in green chemistry education. Even as early as 1970 our campus hosted a major symposium entitled *Search for a Quality of Life* that brought nationally known speakers to talk on environmental issues. For the past eleven years we have been fortunate to have the annual Cornell-Gladstone-Hanlon-Kaufmann Lecture on Environmental Education and Communication. We also host the Burroughs Conference and Seminar on a bi-annual basis, which focuses on nature writing and connected areas. In the mid 1990's we instituted a new and inter-

departmental major in environmental sciences. The College Camp and the Biological Field Station are great outdoor educational resources for students and faculty.

Nevertheless, much more needs to be done if we want to fulfill our larger mission and become active players in sustainability education. A relatively small percentage of the student body is majoring in an obvious sustainability related major such as environmental sciences. The majority of our students do not attend special lectures or spend time in field courses, if for no other reason than their academic programs give them little flexibility or lack the resources to do so. It is easy at the present time for a student to go to school here for four years and perhaps never have to grapple with the complex understandings needed to understand sustainability and the ways we move forward in this regard. Faculty often report a lack of understanding of the meaning of sustainability coming from students.

Goals

1. To integrate sustainability at all educational levels of our campus, including into class curriculum and encourage all departments to consider incorporating sustainability concepts into their programs.
2. To build an interdisciplinary approach to issues and problems in sustainability within courses, and foster innovative sustainability teaching approaches in the classroom and through experiential curricular and co-curricular activities.
3. To increase support for existing interdisciplinary environmental programs, and foster interdisciplinary environmental program development and programs who contribute directly to various levels of sustainability (i.e. environment, local community, social justice, outdoor activities).
4. To develop place-based attachments (cognitive, emotional, behavioral) among faculty and students, and develop awareness of their ecological footprints, living practices, and attitudes in ways that shape their behavior.
5. To promote cross-disciplinary faculty engagement and interdisciplinary faculty communities in sustainability education endeavors.
6. To develop outreach and educational partnerships with the local community to address sustainability issues, and promote sustainable actions, public awareness, and civic engagement.
7. To encourage and support sustainability research among faculty and students.

Assessment

At the most basic level, the recommendations included in this document should be assessed for feasibility, implementation, resource requirements, and monitoring for continuous improvement. We recommend that feasibility be a multi-level effort amongst the various parties cited in this document. Once a recommendation or initiative is adopted for implementation, an assessment system should be set in place to assure full implementation, learning outcomes, and feedback loops between the various stakeholders (i.e., Admin, SPARC, Sustainability Council, students, departments, etc.)

In the words of one of our current students, Alex Lyakhov,

“Humanity can no longer rely on politicians or large corporations to lead us to a clean and sustainable lifestyle . . . SUNY Oneonta can show the world that sustainable practices can be achieved. Big changes tend to start small. The SUNY Oneonta campus is the perfect place to start. We can serve as an example for similar sized campuses across the nation. They will see what we have accomplished given our relatively small student-body and feel empowered and motivated to promote the same changes on their own campuses. Such changes would not only positively affect their campus and surrounding area, but ultimately benefit the entire Earth and all its inhabitants.”

Initial Recommendation

Create a Position of Sustainability Coordinator

We believe that the hiring or re-assignment of an individual with broad knowledge and an array of expertise in educational sustainability initiatives is inherent to the success of greening the education at SUNY Oneonta.

According to the *Campus Consortium for Environmental Excellence* and the *Environmental Association for Universities and Colleges*, the number of sustainability professionals has steadily risen over the last few years in higher education, partly in response to the demand of students and faculty for more sustainability initiatives. While a large number of faculty discuss and partake in sustainability initiatives through their course curriculum, we believe that there are disconnections between the different campus entities that have an interest in sustainability, including links between our classrooms and campus as a whole community.

These are some of the duties such a position might entail:

- Serve as an agent to drive new sustainability initiatives, including classroom opportunities and student activities
- Oversee the promotion of campus-wide sustainable programs
- Ensure a follow-up and accountability of sustainable education and practices
- Facilitate the integration of sustainability and environmental concepts into the curriculum
- Link sustainability initiatives in the classroom with on campus projects, as well as community projects (see the section on Service Learning)
- Manage the collection, organization and formatting information from anyone doing any work that could be classified as sustainability-related, and to post that information online as well as disseminating it to any other appropriate channel
- Promote the dissemination of best practices of sustainability resources with a focus on accessibility to the whole campus community
- Promote to students the role of Eco-Reps or a similar model that enhance sustainable responsibilities on campus in the form of service learning programs, linked to classroom learning when possible.
- Recruit and manage student intern(s)
- Recruit and work with retired faculty members who have the time and inclination to contribute to the work on sustainability issues

A possible place in the organizational structure for this position would be in the Center for Social Responsibility and Community, working alongside Linda Drake, the current director, as elaborated below.

We would be happy to provide a more in depth report on sustainability coordinators around the country, including recognized benefits of such an individual on campus, qualifications, salary, and detailed job descriptions.

Curricular and Learning Objectives

Vision

To purposefully create curricula and for-credit educational opportunities that will integrate sustainability into classroom learning and be reflected in transcripts by students in diverse degree programs.

At the most basic level we want each and every student who graduates from SUNY Oneonta to walk away with a strong and nuanced understanding of sustainability. Sustainability is inherently complex and multi-faceted, and students should be provided with various methods to achieve the following learning objectives.

1. Articulate what sustainability means to their discipline as well as in a global context and possess an increase awareness of environmental issues, including major issues surrounding resources
2. Identify several major threats to environmental sustainability within their major concentration and—but not limited to—air and water pollution, loss of biodiversity, climate change, overconsumption of renewable and non-renewable resources, soil erosion, food systems, and other environmental degradations, increased levels of toxic substances in natural and man-made environments, and local sustainability issues
3. Identify and analyze contributing factors to sustainability problems, including historical resource practices, social, economic, and political structures, and cultural values
4. Recognize how sustainability problems also contribute to environmental injustice in regional, national and international relations
5. Articulate multiple ways that sustainability problems can be mitigated by individuals, New York state, the U.S., and transnationally through individual and collective actions.
6. Have the knowledge, analytical, and experiential tools to develop more sustainable lifestyles.

“The fundamental problem faced in meeting the goal of education for a healthy and sustainable society for all students is that the existing curriculum in higher education has not been developed to examine how we shape a sustainable world. Much of the curriculum has been developed to provide students with an increasingly narrow understanding of disciplines, professions and jobs and is focused on specific knowledge and skills employed in the given area. What is needed is a curriculum that prepares learners for living sustainably, both professionally and personally, and that explicitly helps the learner deeply understand the interactions, inter-connections, and the consequences of actions and decisions. Regardless of the subject of the curriculum, students must learn and practice holistic systems thinking and be able to apply such thinking to real world situations. Furthermore, students must understand how the systems of which they are a part (social, economic, and ecological) function and are integrated. In order to accomplish this we need a significant segment of the learning opportunities for students to be structured to accomplish these outcomes. To do so will require significant changes in the curriculum and the pedagogy used to deliver that curriculum. These changes will only occur when large numbers of faculty have the knowledge, skills, resources, support, incentives, and disposition to change what and how they teach. “

-AASHE Sustainability Curriculum in Higher Education: A Call to Action

Initiatives/Recommendations

1. General Education requirement

- In an effort to meet our educational objective that every student is able to articulate basic understanding of sustainability concepts, we recommend that our campus adopts sustainability as one of the campus based general education requirements

2. Courses

- Compile, maintain, and publish a listing of current courses offered at SUNY Oneonta that include a strong emphasis on sustainability.
- Encourage the development of new and innovative courses that deal with sustainability both as general education courses and courses targeted at specific majors (e.g., Communication Arts recently developed a new course in Environmental Rhetoric with the support of faculty development funds to attend an AASHE workshop on integrating sustainability across the curriculum).
- Facilitate the revision of current courses to further enhance sustainability content.

3. Majors

- Support and strengthen existing majors that have sustainability as a major component, such as environmental sciences.
- Encourage the development of new and innovative majors that deal with sustainability or promote sustainable understanding and behaviors at various levels. Programs in environmental humanities, environmental studies and outdoor education have been mentioned as such programs.
- Encourage the modification of existing majors to include coursework with emphasis on sustainability.
- Avoid limiting changes to majors (and minors) that inherently include environmental sustainability, but widen the scope of these changes to various programs.

4. Minors

- Encourage the development of innovative new minors and encourage students to declare and work towards the completion of such minors. Students who might not have the freedom to complete a second major, might benefit from the wide range of opportunities that interdisciplinary minors might offer.
- Promote current minors that include or focus on sustainability.

5. Graduate programs

- The English Department is in the process of creating a graduate program in Literature and the Environment. This is also a good opportunity for encouraging more interdisciplinary work at the graduate level. Other departments might consider similar initiatives.

6. Facilitate interdisciplinary courses, majors, and teaching

- Short term: Leverage existing buildings to create a “green area.” Long term: Build a facility dedicated to interdisciplinary focus on sustainability and the environment.
- Remove current obstacles to inter-disciplinary work—FTEs, “silo-building,” etc.
- Include a sustainability module in orientation program.
- Include a sustainability/environmental component in Honors Program.
- Increase the coordination between the Outing Club, the Outdoor Education academic program, and other entities on campus which can benefit from such collaborations.

7. Consider implementing pre and post SUNY Oneonta sustainability awareness and behavior assessment. There are several existing instruments for measuring sustainability awareness and behavior. This could take place as a part of the orientation program for incoming college freshmen and transfer students.

“... liberal arts education is all about asking and answering the big questions. Sustainability issues are broad and encompassing, making them a perfect fit for the liberal arts. Resolving these issues will require the skills and qualities fostered by liberal learning: critical thinking, problem solving, communication, a broad base of knowledge from many disciplines, as well as tolerance, imagination, creativity, and openness to new ideas.” University of Minnesota- Morris Website

Extra and Co-Curricular Initiatives

Vision

To embrace a model where sustainability education collaborates in and out of the classroom within a symbiotic system that simultaneously serves the students and the college community.

We believe that limiting sustainability education to the traditional classroom could lead to apathetic students who lack investment in their learning. The objective is to offer a variety of avenues to students who have concerns with sustainability issues, while maintaining the educational value of these initiatives. To succeed, multilayered collaboration must happen between academic departments, classroom teaching, the Student Association, Oneonta Auxiliary Services, Residential and Community Life, and other relevant entities. We believe in the unique value and potential success of extra- and co-curricular education with the help of the whole campus community. Generally, we wish to see the student culture of sustainability nourished and expanded in a direct and personal way that only extra- and co-curricular activities can provide. In turn, this culture will likely cultivate a passion for sustainability that will carry over from and into the classroom, as well as in all aspects of our student's lives.

Initiatives/Recommendations

1. Service learning with a Sustainability Focus

Over the last few years, interest in promoting service learning on college campuses has blossomed nationwide as a way to enhance “town-gown” relations. The general idea of service learning is to simultaneously meet a community need while meeting the educational needs of students (Robinson and Green 2011). At SUNY Oneonta, there are several courses that have a service learning component, and these are arranged in conjunction with the Center for Social Responsibility and Community. The CSRC has achieved national recognition for its role, gaining a spot among only 311 schools nationally on the Carnegie Foundation's Community Engagement Classification list. The estimated economic value of service learning in the Oneonta community is well in excess of \$1 million. The individual and societal values of such programs are well over any economic numbers.

As the college seeks to make sustainability a priority, it makes logical sense to further promote service learning with a sustainability focus. Further, the CSRC would be the best “home” for the abovementioned position of Sustainability Coordinator. This coordinator would share in many of the same activities as the CSRC director (currently Linda Drake), while identifying and expanding service learning opportunities with sustainability in mind. On a related note, it would be logical to re-name the CSRC as the Center for Social Responsibility and Sustainability (CSRS), as many colleges/universities have created similar centers. Sustainability subsumes community and environmental concerns, as well as social justice issues and thus provides a more comprehensive umbrella for handling service learning.

In addition to the Sustainability Coordinator position, we also recommend a faculty appointed position be created to assist with the added workload in the CSRC, on a two –three year term or permanent position.

Finally, after discussing the potential challenges of adding a sustainability component to the CSRC with Linda Drake, she mentioned it would be a huge help if they would be able to receive a dedicated van. This will transport the students to off-site locations and thus enhance the reach of the college and the ability of students to engage in service learning

2. Green Dragon Sustainability Certification (GDSC) Program

This new certification will be based on the logic of the SUNY Oneonta LEAD program (not to be confused with the LEED program) which stands for Leadership Education and Development. Various campus and community activities can gain LEAD certification if they address one of the key dimensions of leadership identified by the program. In order to receive certification, a group hosting an activity must submit a form to the director (currently Robin Nussbaum) who reviews it and makes a decision about whether to approve it for certification. Over the long-run, students work to accumulate as many LEAD credits as they can in order to receive special recognition at graduation—there are different levels they can achieve (platinum, gold, and silver). Students have voiced that they are more likely to participate in a program if they can receive LEAD credits. (More information about this program can be found at its website: http://www.oneonta.edu/development/lead/Lead_pyramid.asp).

Based on the successful LEAD model, we would like to see the development of a “Green Dragon Sustainability Certification Program.” Such a model would be consistent with what Erickson (2010) refers to as a peer-to-peer sustainability outreach program or “Eco-Reps.” According to Erickson (2010), such programs help promote educational awareness, have a positive ecological and financial impact on campus resources and help to build a more sustainable campus culture. For Lipscombe (2008), extra-curricular activities offer a sphere in which sustainable education can be advanced.

The Green Dragon Sustainability Certification Program name derives from the Earth Day/Week activities we already have on campus in April. Like the LEAD program, this program would involve a point system and student organizations would apply to have an activity or event certified that promotes sustainability. In turn, students who attend these events and participate can earn “Green Dragon Points” that accumulate during their time in college. Based on the number of points that are earned, students would be able to receive different levels of distinction. An example of this could include two levels: 1) Sustainable citizenship, and 2) Sustainability leader.

Lipscombe (2008) offers a general framework for categorizing potential extra-curricular sustainability activities: awareness campaigns, on campus events, training and personal development opportunities, Groups, Off-campus events, and modifications of campus environments. Student groups can focus their energies on promoting any activity that falls under these categories, and the Sustainability Coordinator can use this framework in deciding whether to approve an activity for Green Dragon certification. In addition, the sustainability coordinator would process the certified applications and keep track of the points earned by students. The program itself would not require a large amount of resources, since the recognition given to students would be symbolic. This would provide a free incentive that could channel student organizations to participate in sustainability- based projects.

3. Creation of the SUNY Oneonta Sustainability Fund (SOS-Fund)

As an incentive to promote sustainable action among SUNY Oneonta students, we believe it would be effective to create the SUNY Oneonta Sustainability Fund (SOSF). This would be based on the highly successful Northwestern Sustainability Fund (<http://northwesternsustainabilityfund.com/index.htm>), which seeks to create a source of capital to fund sustainability projects. The bulk of funding for the NSF comes from capital that is

saved in the form of gaining energy efficiencies and thus utility savings at the college. For example, if students identify and create alternative energy sources, such as solar panels and wind energy, the energy cost savings that the college sees could be passed in to the SOSF. At Northwestern, the university has committed to becoming carbon neutral and has seen huge energy savings in the manner outlined here. We could adopt many of the same ideas and measures used by the NSF Executive Summary:

The goal of the Northwestern Sustainability Fund (NSF) is to create a revolving source of capital for projects that reduce Northwestern's environmental impact. It will provide the university with an excellent opportunity to promote sustainability, reduce energy and resource consumption, limit project-inhibiting up-front costs, and encourage student entrepreneurship and innovation. Utility savings from the projects it finances will replenish the NSF. A board comprised of three students, one alumni representative, one Facilities Management representative, one Presidential appointment, one Business Chair, and two faculty members will govern the NSF. The board will review project proposals, which must adhere to strict application guidelines, interview the proposal teams, and grant loans based on specific criteria.

In developing their fund, Northwestern consulted with a Non-Profit Organization, Sparkseed (<http://www.sparkseed.org/>). SUNY Oneonta might benefit from consultation with this NPO.

As an alternative measure to increase start-up funds, a portion of student fees devoted to student association dues could be re-directed to the SOS-Fund

4. Green Dragon Floors in Residence Halls

We believe that the idea of a Green Floor in the residence hall would be a simple and cost-effective initiative to engage students in learning about sustainability and creating projects that would benefit other resident and the rest of the campus community.

Some of the educational benefits include:

- Networking between students who have similar ideas and interests in-line with sustainability.
- Collaborate on classroom projects specifically related to the environment and sustainability.
- Build a community of like-minded people who would play an inherent role in the development of sustainability education on the campus.
- Provide a space where culture of sustainability can be nourished, and where ideas for sustainable activities can be voiced.

5. Study abroad program with a Sustainability Focus

In line with the mission, vision and strategic plan for the college, we would like to continue the growth of our college and connectedness of our students to the global community by offering specific sustainability focus study abroad programs. In an effort to enlarge educational sustainability options to our students, we believe that we need to partner with targeted organizations that focus on the development of sustainable projects around the globe. Students would have the possibility of gaining college credits, while focusing on sustainability through their studies abroad.

This can be done without large resources, simply by researching, recognizing and making accessible these programs to our students. Examples of these programs that are already being used by other universities are: a) Living Routes (www.livingroutes.org), b) AustraLearn (www.australearn.org), c) International Sustainable Development Studies Institute (www.isdsi.org). The list of programs and universities that offer sustainable study program is constantly growing, and we believe that SUNY Oneonta has the opportunity to become a

successful player in this area. Further, while programs like the ones mentioned above are one option, departments can create their own programs, in conjunction with the Office of International Education, making sustainable education part of the growth of our campus community.

6. Collaboration with the Center for Economic and Community Development

The Oneonta area has a unique asset to help people learn and act. The Center for Economic & Community Development (CECD) is an analysis and problem-solving resource to enhance the SUNY College at Oneonta and the surrounding region. The CECD does this by applying College resources to create mutually beneficial partnerships for community analysis, strategic planning and leadership development. The best College resources are our faculty and students who bring examples from local issues into their lectures and discussions or, further, involve themselves in sustainability efforts outside the classroom. The CECD can assist by building those bridges to new studies of sustainability in a local environment and by helping to maintain important outside relationships.

As the college strives to create new ties with organizations and institutions with a sustainability focus, the CECD can play an important role. It can be instrumental in identifying resources and can be an advisory body when it comes to sustainability research conducted by students. Finally, it can continue to find resources to help fund the SUNY Oneonta Sustainability Fund (SOS-Fund), discussed earlier.

Experiential Campus

Vision

To infuse sustainability education throughout the daily experiences of SUNY College at Oneonta students, be it through learning and/or living on campus.

Experiential learning at SUNY Oneonta for sustainability is developed through discourse, directed reflection, and personal action. By placing students at the center of teaching and learning to explore sustainability, they will develop a vested interest that ultimately culminates in deeper understanding.

There are probably hundreds of ways that we can transform the buildings and grounds of SUNY Oneonta into learning opportunities. Scott Barton recently reported that pilot projects for a rain garden and living roof are in process. Wind turbines, edible landscaping, permaculture design principles, alternative lawn maintenance (i.e., sheep or goats), and composting, are just the tip of the iceberg. Even things that we do that are not particularly 'green' might still provide an opportunity for discussion and reflection of how it might be done in a more sustainable way. Any changes to buildings and grounds directly involve the professionals from Maintenance and Facilities. We have been encouraged thus far and are excited about further developing a close working relationship between the academic and professional staff in this regard. Some of the more immediate and promising possibilities seem to us to be the following:

Initiatives/Recommendations

1. Green Sign

Mount a low cost solar powered LED sign on IRC that advertises environmental events and promotes green actions. Student regularly mention the lack of evidence that this campus is embarking on more sustainable forms of energies. While some efforts have been made by various facilities, students are looking for visual signs that this is really happening. This simple step is one way to do so.

2. Power House

Build a power docking station in the middle of the quad that receives energy via hydropower, solar panels and wind. Students could use the outlets and charge anything from laptops to iPods at the station. High gradient Silver Creek might provide the water power to turn the turbine necessary to generate electricity. A highly visible use might include charging a super vending structure that could supply refreshments and other goods (preferably local produce) 24 hours a day to all students, faculty, and staff. In the future, such a structure could be enlarged to include related activities, such as a climbing wall and social area.

3. GreenWalk

Develop a low impact trail between Physical Science I and Chase that promotes the use of alternative ground covers and native species. The pathway must be highly visible and have a garden feel (e.g., herb planting), attractive to students. The trail, paved with a permeable material, would pass through the garden with "learning" stops along the way via signs. Collectively the signage would weave a narrative about sustainability.

In the long term, we should develop a plan that reduces the amount of lawns and impermeable surfaces. Demonstration plots could be developed to educate the campus community about such options both for our own campus and ways such alternative landscaping could apply to the wider world.

This could be taken even further with gardens and orchards that grow produce. Such local food could possibly be used in the dining halls and as an educational tool for students majoring in dietetics and other majors on campus. At least some of these gardens or orchards should be in a public place, where all students can see them.

4. First Year Green Experience

Integrate sustainability into the First Year Experience of all college students. Among other green experiences, have them learn through interacting with the garden and hydroelectricity station.

-Students who are unsure of their major, could be given opportunities for interdisciplinary orientation programs. An example of this would be to take new students kayaking with lessons on the ecosystem of the river visited.

5. Admission Tours

Make sustainability topics part of the admissions tours. Prospective students will know that this campus values environmental sustainability and that they may be a part of the initiative by selecting SUNY. Having visual green initiatives on campus will make this process more experiential for future visitors.

6. Local food

SUNY Oneonta is surrounded by various local farmers who produce amazing vegetables, fruits, dairy and meat products. Educating our students about sustainability must start within their living environments, and students can only benefit from being made aware of the provenance of their food. An effort should be made by Sodexo and other entities that enter into business relationships with entities such as **Pure Catskills** to provide food to students, staff, and faculty to promote sustainable agriculture, soil conservation, water quality, and the consumption of local produce. Other campuses such as Emory University in Atlanta, Georgia have had success renegotiating food supply with Sodexo to support the local and regional economy and protect environmental standards.

In a recent discussion with a group of outdoor education students in regards to sustainability initiatives on campus, several students mentioned the importance of green buildings, including teaching and studying areas that reflect that. For example, Matthew Weeks explained how natural light and the presence of plants in his study area reflects how he feels about creating attachment to environmental context and his campus as a greener entity.

Faculty, Student, and Staff Incentives

Vision

Promote the development of sustainability on campus through meaningful incentives for faculty, staff, and students, directly linked to initiatives promoting sustainability.

Initiatives/Recommendations

1. Enhanced faculty development funds and grants directed toward sustainability activities.
 - Renew funding of STEM disciplines covered by the Fund for Science & Technology.
 - Provide dedicated funding for faculty development in areas of sustainability and the environment through deans and provost.
 - Break down institutional barriers (e.g. rigid FTEs) for team-taught interdisciplinary courses. Provide funding where necessary to accomplish this goal.

2. Dedicated research funding (see item #1, above).

3. Compile, maintain, and publish a listing of faculty with research and/or teaching interests in sustainability and the environment, and make this list accessible on the university website.

4. Recognition and awards for faculty and students working in this area (like Technology Award for faculty or more awards like John New award for students).
 - Establishment of a yearly award (like those for outstanding adjunct, advisor & mentor, etc.) for faculty, staff, and/or students working in this area.

5. Dedicated scholarships in sustainability related areas.

6. Student recruitment.

Dedicated sustainability scholarships and strong sustainability programs would aid recruitment of strong and energetic students who could become state and national leaders in this area.

7. Faculty workshops and training
 - Implement Sustainable Susquehanna Initiative (see Celebration of Teaching Proceedings (2011) for overview of this AASHE endorsed model and proposed for implementation at SUNY Oneonta in 2009).
 - Teaching breakfasts and other workshops for faculty that discuss how to integrate sustainability and environmental issues into the curriculum.

8. Grass-root incentives

Offer incentives that will promote small changes with large impact throughout campus, such as reducing electricity consumption in building, reducing water consumption in the dorms, increase recycling in their building, using public transportation, etc.

When asked about this, students mentioned the successful event on campus: Do It In The Dark. The general consensus was that this initiative was rewarded, but the prizes were not linked to sustainability, such as a pizza party for the winning dorm. Students want to participate in these initiatives, but they also want to see their efforts rewarded appropriately. Ideas for incentives could range from purchasing of more green products for the dorms to building a green house for the winning dorm. Another example of incentives to students include giving a percentage of the money saved to students, who then vote on a sustainable project for their dorm (Pomona College; <http://www.pomona.edu/administration/sustainability/programs/powerdown.aspx>)

<<http://footprint.mit.edu/energy/dorms.html>>

Web Presence and Communications

Vision

Sustainability should have a more prominent place on the college's web sites and public communication strategy. Part of increased visibility would be to simply make known our intent to make sustainability a greater part of our mission, and would thus serve a public relations function. Part of the increased presence would be informational. Students, staff, and the community could better learn about what events and programs related to sustainability are taking place at SUNY Oneonta. Various web sites and links would lead the viewer to content rich sites that would serve as educational resources for learning more about sustainability related topics.

Initiatives/Recommendations

1. Dedicated sustainability pages on the College website

At the minimum, we would see the college having a gateway page about sustainability and a link to it from the main page and perhaps the My Oneonta portal page. This main page would lead to two main descending sets of pages. One set would have to do with sustainability on campus, and would give information about efforts to reduce greenhouse gases, improve recycling, limit water pollution, and reduce wastes. The second set would have to do with sustainability education, and would give information about ways to learn about sustainability at SUNY Oneonta. It could highlight various courses and majors, co-curricular opportunities, scholarships, upcoming lectures and events, research projects, etc.

The issue with any website is not its creation but its maintenance. There needs to be a continuous flow of material to keep it fresh, and someone has to do the work of collecting, formatting and posting that information. We suggest that this be part of the responsibilities of the proposed sustainability coordinator position.

2. Build intra-organizational, inter-organizational, community, regional, statewide, and national image and reputation for SUNY Oneonta's sustainability commitments and achievements

Milne Library

Vision

Given adequate funding and priority, Milne Library could play an important role in greening the educational experience for SUNY College at Oneonta students.

Initiatives/Recommendations

1. Build a collection of print and electronic resources to support the multidisciplinary sustainability curriculum.
2. Create web-based library research guides on sustainability issues.
3. Conduct hands-on instruction sessions on the use of library research materials related to sustainability.
4. Mount exhibits on environmental themes (the central campus location of Milne Library makes it an ideal place).
5. Promote programs and collections built around the theme of sustainability on the Milne Library website.

References

- Association for the Advancement of Sustainability in Higher Education. (2011). "Certificate Programs in Sustainability". Retrieved March 1, 2011, from: <<http://www.aashe.org/resources/certificate-programssustainability>>.
- Campus Consortium for Environmental Excellence and The Environmental Association for Universities and Colleges. (2006). A Practical Guide to Hiring a Sustainability Professional for Universities and Colleges. Retrieved March 13, 2011, from <http://www.c2e2.org/sustainability_guide.pdf>
- Erickson, C. (2010). *Peer to Peer Sustainability Outreach Programs: The Interface of Education and Behavior Change*. Unpublished doctoral dissertation, University of Vermont, Burlington.
- Holway, J. G., & John, G. N., editors. (with a forward by Governor Nelson A. Rockefeller). *Search for the Quality of Life: The Challenge of the '70's*. A State University College at Oneonta Publication 1972
- Jones, P., Selby, D., & Sterling, S. R. (2010). *Sustainability Education: Perspectives and Practice Across Higher Education*. London: Earthscan.
- Lipscombe, B. P. (2008). "Exploring the role of the extra-curricular sphere in higher education for sustainable development in the United Kingdom." *Environmental Education Research* 14(4): 455-468.
- Northwestern Sustainability Fund. (2011). Retrieved February, 28, 2011 from: <<http://northwesternsustainabilityfund.com/index.htm>>.
- Robinson, J. W., & Green, G. P. (2011). *Introduction to Community Development: Theory, Practice, and Service-Learning*. Thousand Oaks, CA: Sage.