

*Sustainability Curriculum in  
Higher Education*

# A Call to Action



*AASHE, the Association for the Advancement of Sustainability in Higher Education, is an association of colleges and universities that are working to create a sustainable future. Our mission is to empower higher education to lead the sustainability transformation. We do this by providing resources, professional development, and a network of support to enable institutions of higher education to model and advance sustainability in everything they do, from governance and operations to education and research.*

© 2010 Association for the Advancement of Sustainability in Higher Education

1536 Wynkoop Street Suite B500, Denver, CO 80202 • Phone: 303.605.3537 • [www.aashe.org](http://www.aashe.org)

# Sustainability Curriculum in Higher Education:

## *A Call to Action*

### *Background*

Growing concerns about the impact humans are having on our planet, and the implications of those impacts for future generations have led many to argue that higher education has a key role to play in helping us move to a future characterized by an ability to meet the needs of the present without impeding the ability of future generations to meet their own needs. Over the last twenty years, scholars, activists, and others have noted that through the research they conduct, the engagement they experience with the broader community, and the operations they oversee, colleges and universities can serve as test sites and models for sustainable practices and societies. Where colleges and universities may have the largest impact, however, is with the students they educate. As David Orr has argued, the real challenge we face in embracing a more sustainable future rests with our ability to educate students differently.

Acknowledging the urgency with which changes must be addressed and the scale of the challenges faced by higher education, the Association for the Advancement of Sustainability in Higher Education (AASHE) hosted a *Summit on Sustainability in the Curriculum* in San Diego, CA on February 25-27, 2010. This meeting brought together faculty from public and private four-year colleges and universities, two-year community colleges, representatives from higher education organizations, and others to address how institutions of higher education can build on past initiatives in order to infuse sustainability topics into college and university curricula. The goal of the summit was to (1) identify key challenges for infusing sustainability successfully and quickly into higher education, (2) acknowledge initiatives already underway, (3) describe opportunities for building on, extending, and developing further strategies, and to (4) present recommendations for broad national strategies for meeting these challenges.

### *Challenges*

Today, there are more than 18 million students in colleges and universities in the United States alone, and if they graduate with the skills to help societies develop more sustainably, higher education will have indeed played a key role in leading us in a new direction. Thus, if we seek to create conditions that will ensure a more sustainable future, higher education will have to provide college and university graduates with the skills, background, knowledge, and habits of mind that will prepare them to meet the challenges presented by climate change, loss of biodiversity, a world population of 9 billion in 2050, limited water resources, global health issues, and extreme poverty.

The scale of this challenge, of integrating sustainability into college and university curricula, is significant. First, unlike many issues related to sustainability, curriculum change is not something that can be legislated or achieved through policy decisions. Instead, it is going to depend on the expertise and ability of approximately 1.2 million faculty in the United States who write course syllabi, sit on curriculum committees, develop student learning outcomes, and create new academic programs to integrate sustainability into their teaching as they see fit.

Second, deciding how to change the curriculum is complicated by the fact that there are multi-curricula within any institution. Sustainability, because of its complexity and richness, can inform any and all of the following:

- Workforce development;
- General education;
- Education within the major or discipline;
- Graduate education;
- Stand alone programs - certificates, minors, majors, graduate degrees - in sustainability; and
- Co-curricular education.

One of the challenges we have had in terms of identifying learning outcomes has been that we have not fully understood the complexity of our own curricula. If the aim were to ensure that all students in a general education program are introduced through a variety of courses to sustainability, we would expect different outcomes than those developed for, say, students graduating with a degree in chemistry, or English, or political science. Sorting through the curricula may also help clarify, for example, how a topic like climate change gets introduced to students. Presumably, it will be introduced differently, and the learning outcomes will be different, in a course in general education and in a course in a major such as biology, geography, or political science.

Third, sustainability is inherently interdisciplinary and the organization of our institutions around departments and disciplines does not always support the kind of curriculum innovation that is needed. Additionally, particularly at large institutions, the very scale of campuses can lead to silos that hamper efforts to build significant curriculum change across a campus.

Fourth, institutions in the United States are extremely diverse and represent small, faith-based institutions, large research-focused, state supported campuses with more than 50,000 students, private schools (large and small), proprietary institutions (the University of Phoenix currently serves about 400,000 students), and two-year community colleges that in aggregate represent almost half the 18 million students in the country.

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.

### *Current Initiatives*

Current efforts to provide faculty with the knowledge, tools and resources to develop education for sustainability (EFS) curricula include the Curriculum Leadership Workshops provided by the Association for the Advancement of Sustainability in Higher Education (AASHE). These workshops, held twice a year, have involved more than 340 individuals representing more than 200 campuses. Many participants in these workshops have returned to their campuses to provide leadership and support for various campus initiatives that provide faculty development opportunities for the development of sustainability curriculum. Nonetheless, the number of faculty impacted by this program is small, compared to the number of faculty who are ready for this work. These workshops are consistently oversubscribed and there is clearly a need to increase capacity.

There are also successful regional efforts focused on faculty development and curriculum for sustainability. The Curriculum for the Bioregion Initiative at the Evergreen State College and the Washington Center for Improving the Quality of Undergraduate Education is one such project that involves 32 campuses. This multi-institutional effort is guided by two main principles: local environmental knowledge and global change. Faculty taking part in the project develop integrative assignments in their disciplines through which students integrate local, global, and environmental knowledge.

In addition to the growing interest among faculty for professional development opportunities related to EFS, nearly 700 college and university leaders have signed the American College and University Presidents' Climate Commitment and thus have agreed to make "sustainability a part of the educational experience for all students." There has also been progress in engaging the federal government in recognizing the importance of EFS. In the process of reauthorizing the Higher Education Opportunity Act (HEOA) the previous Higher Education Act was amended to include sustainability education as one of the nation's priorities. Among the provisions of the HEOA is the establishment of a University Sustainability Program and a call

for a summit on sustainability education by the end of September 2010.

Other efforts supporting sustainability education are also critical. The Higher Education Associations Sustainability Consortium (HEASC) has sixteen national higher education associations as members, including four of the associations for college and university presidents (AASCU, AACC, NAICU and ACE.) These presidential associations share information about sustainability curricular trends with presidents and chief academic officers through articles, taskforce initiatives, targeted professional development workshops, and presentations.

The Disciplinary Associations Network for Sustainability (DANS) has more than twenty academic disciplinary associations focusing on (1) sustainability curricula in each of the disciplines, (2) tenure and promotion requirements to include sustainability teaching/learning and research, (3) sustainability in accreditation; informing legislation and increasing public awareness about sustainability, and (4) sustainability in interdisciplinary curricula and the general education core.

Other organizations, some with direct ties to higher education and others focused on sustainability efforts more broadly, have also addressed issues related to student learning. The National Wildlife Federation, the U.S. Green Building Council, the American Association for the Advancement of Science, the National Council on Science and the Environment, Second Nature, the Council of Environmental Deans and Directors, and the U.S. Partnership for Education for Sustainable Development, have been working on identifying sustainability learning outcomes or resources to support sustainability education. Other organizations, such as the Association of American Colleges and Universities and the Association of Governing Boards, while not focused specifically on sustainability have supported and offered symposia and conference presentations addressing the issue in higher education.

### *Opportunities & Leverage Points*

Although faculty have responsibility for the curriculum, their work is part of a larger network that includes students, staff, administrators, employers, accreditation agencies, government agencies, foundations, and non-government organizations. As a consequence, one of the key opportunities for curriculum change involves collaboration among these stakeholders. Many individuals within these stakeholder groups are committed to sustainability and those commitments can be leveraged to establish partnerships and collaborations that support curricular change.

Opportunities also exist through the alignment of what is needed for sustainability education and other educational commitments. While EfS represents a paradigm shift, it does not represent a break from all existing initiatives and commitments, but a realignment and extension of those initiatives in ways that support further work. High impact educational practices identified through research and featured in the National Survey of Student Engagement are consistent with the pedagogy of sustainability education.

As noted already, the scale of the challenge facing higher education regarding a clearer focus on the knowledge, skills, and abilities students will need to address sustainability as they graduate and enter the workforce is vast. Setting a goal, as AASHE has done, that by the end of 2011 10% of all the courses offered in the United States will “help students understand the interaction between social, environmental, and economic forces, and to apply that understanding to a real world problem,” means that more than 100,000 faculty will have to integrate this kind of teaching into their courses. For others, however, the sense remains that the impact really necessary will be achieved when the number of faculty involved is closer to 300,000.

Clearly, however, a number of opportunities can be explored as mechanisms for furthering sustainability education. One of the most important leverage points is evidenced by students themselves and by their demonstrated interest in sustainability efforts on campuses nationwide. Perhaps most importantly, the greatest opportunity lies in establishing active partnerships among students, staff, faculty, administrators, employers, and others to call for and support the changes that are necessary. Additionally, there are partnerships that link research, teaching, residential life, high impact educational practices, and other campus activities that can foster, support, encourage, and help initiate curriculum development.

# *The Call to Action:*

## Critical Actions Identified at the Sustainability Curriculum Summit

The purpose of the AASHE Sustainability Curriculum Summit was to develop strategies for ensuring that all students in higher education have access to education for sustainability and opportunities to learn how to participate in and to lead the sustainability transformation. For this to happen, tens of thousands of faculty will need to change what they do. Any efforts to increase the scale of sustainability education will rest in the hands of the faculty and thus it is clear that strategies for “scaling up” EfS have to be aimed at providing faculty with incentives, support, resources, knowledge, and skills for changing their practice.

The scale of the support and level of change needed will require that many organizations be involved and the changes necessary will be achieved through the collaboration and work of many stakeholders. Among these stakeholders, participants attending the Summit identified several as critical:

1. Campus administrators, faculty, staff, and students;
2. Higher education and sustainability NGOs;
3. State and federal agencies; and
4. Private foundations.

Thus, while the campus community (particularly the campus faculty) must be the focus for many of these activities, other parties are essential sources of support for campus efforts. A number of overarching commitments will be necessary to reach the tens of thousands of faculty members who can, in turn, influence millions of students to engage in sustainability issues. These activities include:

1. Increasing the capacity for providing faculty with the necessary professional development, resources, incentives, recognition, and support for developing and implementing EfS curricula.
2. Developing and implementing strategies for using existing leverage points of educational reform to expand the opportunities for students to develop the knowledge, skills, and inclinations to become leaders of the sustainability transformation.
3. Engaging in conversations that clarify the goals, objectives, student learning outcomes, underpinnings, and nomenclature surrounding EfS and develop and implement strategies for communicating to policy makers and the general public the purpose and principles of EfS.
4. Developing and implementing strategies to integrate EfS throughout the campus by engaging faculty and students with administrators and staff in using the campus and the community as the context for EfS.
5. Establishing public and private funding mechanisms that will provide adequate funding for ongoing EfS efforts.

Summit participants identified many additional strategies and activities (as noted in the Recommendations for Action that follow) that these groups and others can undertake to help support efforts to make sustainability education a key part of

what students learn as they graduate from colleges and universities. To conduct these activities will require the development of appropriate mechanisms and structures to organize and implement the various plans that will be generated. Four additional mechanisms and structures supporting activities related to EfS were identified by participants as those that, taken together, hold the greatest promise for large scale significant change. These initiatives are as follows:

### *Faculty Fellows Program*

An AASHE Faculty Fellows program could provide a number of opportunities for supporting faculty as they work to create and implement the EfS curriculum. The fellows program could address the following issues:

- *Provide recognition and renewal opportunities for faculty who have been working in this area for many years.* Over the past decade and half, a number of faculty have engaged in a variety of practices to further sustainability education on their campuses and the beyond. The AASHE Faculty Fellows program could provide recognition as well as renewal activities to these veterans of sustainability education and provide opportunities for networking. This program would also make it possible to create a new cadre of EfS faculty leaders and provide opportunities to bring new faculty into EfS leadership roles with mentoring from veteran faculty.
- *Establish a social network of sustainability education faculty.* All faculty involved in EfS can benefit from greater opportunities to interact with one another. An electronic social network with face-to-face opportunities at the AASHE conference would allow greater sharing of lessons learned as well as a support network through which Fellows could facilitate discussions on the network.
- *Create content for a web-based collection of faculty resources and experiences.* An electronic database would provide faculty who have developed resources for teaching EfS - including learning outcomes, texts, rubrics, authentic assessments, successful activities, and other materials - a repository for their work, and serve as a source for innovative ideas for faculty developing sustainability courses. Fellows would serve as major contributors to the collection.

### *Regional Centers for Sustainability*

It is clear that a coordinating function for large-scale activities is needed at some level. The most productive level of coordination could emerge from a set of regional centers networked to support not only their regional constituents but each other. These centers would serve the campuses in their region with a variety of functions including the following:

- *Provide faculty development workshops.* To teach sustainability, faculty will need opportunities to learn more about sustainability and EfS. One strategy that has been widely successful has been campus faculty development workshops modeled on the successes of the Ponderosa and Piedmont Projects.<sup>1</sup> These approaches have been successfully replicated and adapted to a variety of campuses throughout North America.
- *Provide ongoing support for faculty.* Regions (particularly bioregions) have unique characteristics that are part of the context of education in that region. A Regional Center can provide a support network that serves the faculty in ways that are consistent with their cultural and environmental context. That support may be a mix of electronic and face-to-face encounters among the faculty in the region.

---

<sup>1</sup> The Ponderosa Project was initiated at Northern Arizona University in 1994. Over the next six years, until 2001, 100 faculty took part and revised more than 120 courses across the curriculum to include some aspect of sustainability education. The Piedmont Project, established on the Ponderosa Project model, was initiated at Emory University in 2001 and continues to work with 20 faculty annually to integrate sustainability into the curriculum.

## *Focus on Assessment, Accountability & Accreditation*

At the campus level, but also at other levels, a variety of mechanisms have been developed to support assessment, accountability, and accreditation. These mechanisms have been underutilized in furthering sustainability education initiatives. A few of the possible ways to leverage these existing higher education structures include the following:

- *Develop/adopt student learning outcomes for sustainability.* An important way to recognize the importance of EfS is to commit to having students develop the knowledge, skills, and dispositions for living sustainably through student learning outcomes. Whether they are developed for a single course or for a whole institution, sustainability student learning outcomes make it clear that sustainability counts and is important and that it will be addressed in the curriculum. Ongoing efforts of the AASHE Curriculum Working Group, AAAS, and NCSE have provided frameworks for this discussion. Future efforts can be supported by the regional centers and the faculty fellows described above.
- *Leverage the accreditation processes to create a sustainability focus.* Accreditation agencies provide institutions and programs with opportunities to frame the accreditation process through the selection of themes or conceptual frameworks that state the focus of the institution. During the early part of the accreditation cycle, campus sustainability leaders should work to establish through appropriate channels a focus of the institution around sustainability. Such a focus can drive student learning outcomes, allocation of resources, and rewards and recognitions.
- *Develop local National Survey of Student Engagement/Community College Survey of Student Engagement questions for sustainability assessment.* For those institutions that participate in the NSSE or CCSSE, it is important that the instrument reflect the institutional priorities. If EfS is an important part of an institution, the institution needs mechanisms for assessing its progress. These instruments provide the option for an institution to add questions that are important to the institution. EfS questions should be included to create nationally consistent assessments.

## *Collaborative for Sustainability Curriculum Change*

An important lesson learned from the summit was the value of bringing together leaders of national organizations (both higher education and sustainability) with faculty from a variety of campuses. This mix of individuals provided a grounding in campus realities and in the possibilities and problems of launching large-scale reform efforts. Summit participants thus highlighted the importance of developing a mechanism for continuing conversations among individuals from diverse backgrounds. A Collaborative for Sustainability Curriculum Change could achieve these goals by:

- Facilitating critical conversations around the goals, objectives, student learning outcomes, underpinnings, and nomenclature surrounding EfS;
- Developing partnership opportunities for collaborations to develop focused initiatives supporting sustainability education;
- Sharing opportunities for collaboration on ongoing projects and programs;
- Helping funding agencies and foundations better understand sustainability education and its significant role in improving higher education;
- Convening academic leaders for EfS discussion; and
- Identifying additional leverage points for forwarding the sustainability education agenda.

The summit discussions produced a large number of recommendations at a variety of levels needing to be addressed by a number of stakeholders. Some of these recommendations are captured in the four initiatives described above, however there are many others and they are included in the Recommendations for Action where they are classified by the key party responsible. As noted earlier, these activities are not the sole responsibility of any one entity; indeed most of them will only be possible if there is significant collaboration among all the stakeholders.



# Recommendations

## for Action

Various strategies emerged from the discussions at the summit and these have been organized in this call by the sector most directly responsible for enacting the strategy. While no one group will undertake all the strategies noted below, they are presented here to provide a set of possibilities for action. These recommendations for action are grouped under (1) colleges and universities, (2) non-government organizations, (3) state and federal agencies, and (4) foundations.

In addition to the suggestions that follow, participants attending the summit noted two overarching goals that must be addressed and that will require the efforts of all organizations and individuals interested in creating a sustainable society. These are:

- *Develop a better public understanding of sustainability.* Many discussions of EfS entail protracted conversations about the meaning of sustainability. Although such discussions can be fruitful, they often lead discussants away from action. It will be important in moving forward to develop clearer messages regarding sustainability and reaching out to the public who are less familiar in order to move the conversation forward.
- *Set clearer targets and goals.* It is critical for organizations to ask themselves what they expect to accomplish. As a community committed to sustainability, we need to establish clear goals that can be communicated to others.

### Recommendations for Colleges & Universities

Because efforts to increase EfS on our campuses depend upon what faculty do, it is clear that many efforts must be made at the campus level. These efforts should be based on the collaborative and integrated work of faculty, staff, students, administrators, and where appropriate, community members.

- *Bring faculty together with sustainability oriented staff.* There is a need to use campus resources as a part of the educational experiences of students. The college campus is clearly a part of the learning context and campus staff understand that context and how it works. There is a need for campuses to develop better mechanisms for encouraging faculty to work with staff:
  - As resources,
  - As collaborators,
  - For service learning opportunities, and
  - For co-curricular connections.
- *Recognize sustainability curriculum efforts.* Although it is critical to provide support and recognition to faculty to begin the process of developing the EfS curriculum, it is also essential to provide continuing recognition to those faculty who continue to engage in developing and supporting others in the development of sustainability curricula. Each campus has a culture of recognition and these efforts should become embedded within that culture. At the very least, recognitions should be reflected within the promotion and tenure systems.
- *Provide mechanisms for recognizing and addressing barriers to EfS.* Some faculty are reluctant to engage in EfS because there are barriers to their personal careers if they do so. Administrators and faculty should provide venues for identifying such barriers and developing processes and policies for eliminating them.

- *Provide Leadership opportunities* . On many campuses, we now have individuals who have provided leadership and support to others in developing the EFS curriculum. In many cases that leadership has been informal and typically more noticed outside the campus than within it. Appropriate entities on the campus should recognize, formalize, and reward those individuals who have provided this leadership so that they have incentives to continue.
- *Share resources*. Faculty should be encouraged to share their experiences and the resources they have found or developed with others on campus. This can be done through relatively informal mechanisms (like brown bag lunches) or through more formal approaches (such as symposia). Sharing of resources through electronic means can also be developed at the campus level so that it brings together the faculty with the operations staff in developing an understanding of local resources for teaching sustainability.
- *Bring together high impact educational practices and sustainability education*. For Efs to become widely accepted it will have to include other efforts to improve higher education. There is a natural fit between the pedagogy of EFS and those instructional practices that have been identified through research as part of a high quality education. Project-based learning, first-year experience, service learning, and interdisciplinary connections are all as much a part of sustainability education as they are highly effective instructional practices. It is important that sustainability education become seen as an avenue to effective education.
- *Include sustainability in strategic documents*. Many important efforts on campuses are guided by the language in the institution's mission statement and strategic plan. Campus sustainability leadership should explore how they can bring sustainability into these documents so that they can become leverage points for future discussions about sustainability curricula and the resources needed to enact it.
- *Develop language for hiring practices that would attract "sustainability faculty."* Many institutions have template language that is used in hiring faculty. Language that promotes both the idea that the institution values Efs and that it expects its faculty to engage in Efs would send messages to individuals and to their graduate programs that Efs is a serious commitment of employers.
- *Examine the ACUPCC commitment related to Efs*. Institutions that are signatories to the ACUPCC should review the commitment that they have made to "actions to make climate neutrality and sustainability a part of the curriculum and other educational experience for all students." These institutions need to determine how the activities described in this document can be used as part of their "institutional action plan for becoming climate neutral."
- *Bring together campus leadership with business and community leaders to seek collaboration and funding*. Campus leaders should enlist the moral and fiscal support of the business leadership of their communities to develop sustainability curricula. Through donations and in-kind support businesses (especially those populated with alumni) should be asked to support campus sustainability efforts in curricular change.
- *Educate trustees/regents and solicit their support*. All decision-making bodies involved in higher education (including for state institutions their legislatures) should develop an understanding of Efs and its importance. Campus leaders have a responsibility to educate those decision-makers in Efs and its implications for the future.
- *Encourage the submission of proposals for funding sustainability education*. Faculty and staff should be encouraged to develop and submit proposals for grants that fund Efs activities. For some faculty this will require significant personnel support and the removal of barriers (such as internally required exorbitant indirect costs) that often thwart novice proposal writers.
- *Participate in relevant state and federal policy making that furthers Efs*. Faculty and administrators should engage policy-makers in conversations about how relevant policy can support Efs and should provide their expertise in those discussions.

## Recommendations for Non-Governmental Organizations

The non-government organizations (NGOs) or non-profit sector serves to support the activities of its clients or members. In many cases, NGOs play a critical role in providing ways for colleges and universities to work across the campus boundaries. Most of the items described above as campus responsibilities can be and should be supported by the appropriate NGOs. That support can be in several forms: providing opportunities and mechanisms to share information, providing background materials to assist the development of new actions, recognizing individual and campus efforts to implement EfS, and providing access to additional resources and contacts.

In addition to their support roles, these national and regional organizations have the capacity to address additional charges. These include:

- *Develop and disseminate publications.* Despite the allure of web-based resources, some faculty prefer printed materials that can be reviewed, marked up, and physically passed around. A wide variety of publications should be developed to a) provide support materials for faculty developing new or revised courses, programs or initiatives; or b) provide faculty with opportunities to share their lessons learned, indeed their scholarship of teaching, with others. NGOs can provide ready access to an appropriate audience relatively quickly.
- *Facilitate the development of partnerships among institutions.* There are a variety of ways in which institutions can work together to advance EfS. One role for NGOs could be to assist institutions in finding partners for a variety of activities including seeking funding for projects, coordination of projects, sharing resources, forming consortia, or creating state or regional bodies.

## Recommendations for State & Federal Agencies

State and Federal agencies are typically looked at as promulgators of rules and sources of funding. In fact, they can be of value to EfS efforts in both ways. It is important to note that efforts at both levels can be of value and provide important support.

- *Ensure that EfS is a federal and state priority.* The inclusion of sustainability education in the Higher Education Act (as the result of amending the Act with language from the Higher Education Sustainability Act) has provided leverage for funding EfS activities in Department of Education grants, specifically the comprehensive FIPSE grants. Further efforts at both the federal and state levels to include sustainability language is important as it provides leverage for a variety of activities ranging from inclusion in teacher education requirements to opening and encouraging funding of sustainability education.
- *Provide funding for EfS.* Language efforts, as noted above, are important but more important are the funds that are appropriated to carrying out the intent of the language. Although there is a University Sustainability Program in the Department of Education it is currently unfunded and it is important that the funds be made available to ensure this program is enacted.
- *Coordinate EfS efforts across agencies.* At both the state and federal levels, EfS is frequently located or related to a variety of agencies. Agencies should create interagency agreements that allow personnel to work across boundaries to ensure that the resources needed for EfS are made available in effective ways.
- *Engage campus administrators, faculty, and staff in developing policies that support EfS.* Agencies should use campus expertise in developing EfS policies and funding for them.

## *Recommendations for Foundations*

Foundations provide funding for a variety of activities on campuses as well as to NGOs. Their responsibilities lie in the area of understanding the role of sustainability in higher education and how sustainability education is an integral part of improving higher education.

- *Develop an understanding of EfS and how it fits into education reform.*
- *Develop an understanding of their own capacity to support educational change by supporting EfS.*
- *Support projects that can create better educational opportunities that ensure a healthy, prosperous, sustainable future for all.*



# Summary

## *and Next Steps*

The discussions at the summit helped create a substantive (and extensive) list of action items for moving Efs forward. Although the list does not provide assignments to specific organizations or individuals it does establish a set of activities that should be undertaken in the process of scaling up Efs efforts. Organizations and individuals should examine this list to decide what they can do to move this agenda forward. Having developed this list through conversations among a diverse group of stakeholders, it is helpful to recognize that those conversations have provided the opportunity to create new

partnerships for Efs. These recommendations should be looked at in terms of, not only, "What should I do?" but also, "Who else can I collaborate and work with?"

### **K**ey Recommendations

- **Establish a Sustainability Faculty Fellows Program to recognize accomplishments and develop resources.**
- **Develop Regional Centers for Sustainability that can provide professional development and support for faculty.**
- **Focus on Assessment, Accountability, and Accreditation leverage points.**
- **Create a Collaborative for Sustainability Curriculum Change that can continue and deepen the conversations.**

Participants attending the summit favored small-scale regional approaches as opposed to a large national approach. This is an important finding in that it directs the national organizations to look for mechanisms for providing services regionally. Although this approach creates challenges, it is clear that there is an affinity to that which is most closely available, that which will promote real world problem-solving, and that which recognizes "the place." Additionally, such an approach builds on the strengths and diversity that characterize different regions and make it possible for grass roots faculty change to occur without having to travel significant distances.

Finally, it is clear that the conversation needs to continue. Following the summit, 100 individuals interested in sustainability curriculum met at Wake Forest University to take part in a conference titled, Taking It to the Next Level: Strategies for Adaptation across the Sustainability Curriculum.

This meeting has led to a call for papers that can be found at <http://sustainability.wfu.edu/conference/proceedings>.

There is also an opportunity to continue the conversation about sustainability curricula at the

AASHE 2010 conference. AASHE will facilitate moving forward on the key recommendations in this call during a Sustainability Curriculum Convocation that will bring together faculty, staff and administrators at the conference. Information about the convocation can be found at <http://conf2010.aashe.org/specialevents/curriculum>.

For more information about AASHE, contact Paul Rowland, Executive Director (Paul.Rowland@aashe.org), or visit the AASHE web site ([www.aashe.org](http://www.aashe.org)). AASHE welcomes questions, comments or ideas about transforming higher education in ways that lead to sustainable societies worldwide.

# Participants

Susan Albertine  
*Association of American Colleges &  
Universities*

Peter Bardaglio  
*Second Nature*

Peggy Barlett  
*Emory University*

Lindy Biggs  
*Auburn University*

Geoff Chase  
*San Diego State University*

Anthony Cortese  
*Second Nature*

Dedee DeLongpre Johnston  
*Wake Forest University*

Mary Jo Dondlinger  
*Richland College*

Michelle Dyer  
*Second Nature*

James Elder  
*Campaign for Environmental Literacy*

Susan Elrod  
*Association of American Colleges &  
Universities*

John Farnsworth  
*Santa Clara University*

James Farrell  
*St. Olaf College*

Julia Feder  
*U.S. Green Building Council*

Amy Fuller  
*American Association for the  
Advancement of Science*

John Hammang  
*American Association of State Colleges  
& Universities*

Monty Hempel  
*Redlands University*

Kevin Hovland  
*Association of American Colleges &  
Universities*

Jon Jensen  
*Luther College*

Jacqueline Johnson  
*University of Minnesota Morris*

Julian Keniry  
*National Wildlife Foundation*

Jillian Kinzie  
*National Survey of Student  
Engagement Institute*

Jean MacGregor  
*Evergreen State College*

Mark S. McCaffrey  
*University of Colorado Boulder*

Yolanda Moses  
*University of California Riverside*

Rich Novak  
*Association of Governance Boards*

Carolyn Richmond Teich  
*American Association of Community  
Colleges*

Debra Rowe  
*Higher Education Associations  
Sustainability Consortium*

Paul Rowland  
*Association for the Advancement of  
Sustainability in Higher Education*

Don Ryan  
*Second Nature*

Peter Saundry  
*National Council for Science & the  
Environment*

Dan Sherman  
*University of Puget Sound*

Bill Sullivan  
*Council of Environmental Deans &  
Directors*

Bill Throop  
*Green Mountain College*

Jaime Van Mourik  
*U.S. Green Building Council*

Sandra Wachholz  
*University of Southern Maine*

Ralph Wolff  
*Western Association of Schools &  
Colleges*

Jim Zaffiro  
*Central College*

Jane Zimmer Daniels  
*The Henry Luce Foundation*

*Funding for this publication provided by:*



*Printed with soy-based ink.*