

**Facilitating Sustainable Agriculture:  
A Participatory National Conference on Post- Secondary Education**

January 24-25, 2006

Asilomar Conference Grounds, Pacific Grove, California

**Responses to Pre-conference Needs and Interest Assessment**

The following is a summary of responses to the previously circulated \*Needs and Interest Assessment. In section I, responses to the thirteen general categories presented in the assessment are ranked according to the aggregate scores (highest to lowest). There were 38 respondents to Section I. In Section II, a total of 25 respondents provided optional write-in responses describing their additional needs and interests.

\*This is a summary of one of two needs and interest assessments conducted prior to the conference. A second needs and interests assessment was conducted exclusively for the student community. Responses to the student survey are not presented here.

**Please note:** Though some subject areas received an overall lower ranking, in some cases a number of respondents identified these topics to be of high interest. The conference structure should make it possible for all participants to pursue the subject matter and topics most relevant to their goals in attending the conference.

**Sustainable Agriculture Education Needs and Interests:**

**Section I: Scored pre-defined needs and interests  
Ranked from Highest Aggregate Score to Lowest**

Items were scored using the following scale:

"0" = no interest; "1" = slight interest; "2" = moderate interest; and, "3" = high interest.

- The roles of experiential learning, hands-on practical learning, student farms, internships & the integration of classroom and applied field work (total score = 90)
- Discussion of existing programs' instructional resources, teaching methods, strategies, and facilities (88)
- Interdisciplinarity, integration of natural & social sciences in courses and curriculum (84)
- Developing and maintaining institutional and faculty support and participation (84)
- Developing inter-personal and inter-institutional collaborations between sustainable agriculture educational programs (83)
- Outreach and student recruitment (76)
- Engaging and responding to internal (campus), and external (public), stakeholders when developing and managing educational programs (72)
- Strategizing to meet program development needs (72)
- Assessment of specific program development needs (69)
- Systems approaches, relating to hard systems (ecosystems, etc.), and soft systems (social learning) (62)
- Exploring the theoretical frameworks of sustainable agriculture and their implications for using specific educational approaches (59)
- Exploring the theoretical frameworks of learning and education that best serve the field of sustainable agriculture (57)
- Critical examination of educational theories of learning, pedagogy, and curriculum (56)

## **Sustainable Agriculture Education Needs and Interests:**

### II. Optional write-in responses

\*Note: some responses have been edited for clarity or brevity.

- Particularly interested in teaching methods and student activities as well as resources available for teaching
- Perhaps also non-agriculture ways to learn about food and sustainability.
- Broadening discussion from sustainable agriculture to sustainable food systems. (Can sustainable agriculture exist without sustainable distribution and consumption?)
- Incorporating sustainability concepts in related disciplines such as food studies, nutrition, dietetics, and health
- I am interested to know what and how other institutions are approaching SA.
- How to best integrate forms of soft-systems learning with the hard-systems' learning that is (still) the hallmark of classroom teaching? How best to use these different modes of teaching and learning, for what and when? What didactical and andragogical theories/frameworks can offer guidance here?
- With the planned creation of a BA/BS program in Sust. Development with the option of a concentration in agroecology. So, what should be offered (course-wise) in such a concentration? And, following issue, how do you meet the program needs?
- What is the right balance between reactive and proactive responses? How do you build resilience in your educational programs to deal with internal/external disturbances from various interest groups?
- Explore ways for student exchange/students getting credit at their home institutions for courses taken elsewhere.
- What are the possibilities of and potentials for integrating formal and informal sources of knowledge and processes of knowledge production in formal education?
- When, where and how to use trans-disciplinary, interdisciplinary, multi-disciplinary or single discipline approaches in solving real-world SA problems and issues, and how to move back-and-forth between them?
- Developing a learning outcomes assessment
- Teaching sustainable/organic agriculture in a CSA framework
- University/high school collaborations
- Convincing university administrators of the value of this work to get additional (land) resources
- Discussions of integration of social/physical science, integrated classroom/field work learning, and practical/experiential activities in the curriculum
- Strategies for launching new sustainable ag. programs at small liberal arts colleges.
- Examples of courses and programs that have successfully integrated natural and social science materials.
- Identification of what specifically is needed by graduates working in sustainable agriculture careers today.
- Discussion of what scientific research data is most helpful to illustrate and teach about the hard systems concepts.
- Discussion with USDA funding program directors and other USDA administrators with insights about budgets and national curriculum enhancement programs & requirements.
- Perhaps people interested in collaborating from an agroecological region could have some focused discussions about potential collaborations.
- Discussion of summer or semester programs that students can cross-register for and what would they learn.
- Creating a comprehensive list of jobs and careers of graduates of sustainable agriculture programs. Quantifying and summarizing their job and lifestyle satisfaction and income. Identifying additional job and career opportunities for students of sustainable agriculture.
- Shared leadership training and or workshops on how to foster interdisciplinary research and collaborative research programs among faculty who often haven't been trained to work together and often aren't rewarded for working together.
- Informational workshops about what agencies fund sustainable agriculture research and educational programs, workshops on grant writing.
- Interdisciplinary subjects that can touch on human-ness, and our other senses.

## *Summary: Needs and Interests Assessment*

- External funding and intra-institutional support for experiential sustainable agriculture education programs.
- Temporary/no-contract adjunct faculty support and training
- Some sort of chat-forum online?
- Funding avenues for farm staff or student employees?
- Learning objectives for students in a sustainable agriculture curriculum. Are there core knowledge and competencies that students should have in sustainable agriculture?
- What are some successful case study and group learning activities for sustainable agriculture education?
- Continuing education and adult education curriculum.
- Preparing future secondary and vocational agriculture teachers in sustainable agriculture education.
- Summer faculty training in developing sustainable agriculture curriculum
- Holistic management
- Student research project identification and implementation processes and how stakeholders are involved throughout;
- How faculty and non-faculty (farmers, community members) participate in or lead student learning processes (incentives, level of interest, skills, etc);
- Ways to increase institutional financial commitment to sust agr education;
- Development of undergraduate programs in sust agr and their institutional value;
- Attracting under-represented students in to sust agr
- How faculty commit to this process of teaching (and learning); institutional incentives for development of interdisciplinary skills and mind-sets
- Curriculum design to incorporate internships, especially international and how to get around the time and money constraints?
- Learning tools that are “student-friendly”
- Current insights from stakeholders, faculty and students--- who is keeping up with the “state of the art” knowledge as society keeps changing; potentials for development of a continuous knowledge base that all programs might tap in to over time?
- Balancing student, faculty and employer needs in curricula and experience; how to integrate sust agr knowledge from various regions and internationally in to curriculum and practical experience
- Developing and maintaining institutional and faculty support and participation and the techniques for strengthening the support of the university power structure, legislators, etc.
- Recruitment of under-represented students, and adult students who are employed and less able to take part in a traditional university campus learning model.
- External funding sources to enhance curriculum, exchange and to recruit students.
- Attracting minorities and under-served groups students to sustainable agriculture and/or courses.
- Undergraduate research and extension programming opportunities as spin offs from the development of farms whose primary purpose is instruction.
- Designing and Instructing Educational programs that serve a broad range of students.
- Acquiring financial support
- Creating the image of a resource not a service
- Discussion of newly-established 4-year undergraduate major and minor in sustainable agriculture, and the recently received a USDA Higher Education Challenge grant for development of new courses.
- Charting career opportunities for undergraduates with majors/minors in sustainable agriculture
- Designing progressive degree plans for agro-ecology and Sustainable Ag undergraduate and graduate students.
- If, and how, other institutions incorporate education for community members.
- Particularly international collaboration, student exchanges, and student internships with less developed countries
- Involving undergraduate students in on-farm research projects
- Job search strategies for those wishing to enter the field of sustainable agriculture teaching in higher education.

### *Summary: Needs and Interests Assessment*

- Coordinating both above and below the college/university level: Creating high school teacher training to enable current instructors to begin integrating sustainable agriculture into existing curriculum and getting sustainable ag in the high school to increase awareness.
- Resolving conflict between experiential and hands-on learning in organic farming/gardening and earning money for school – in the summertime.
- Upgrading the academic knowledge (in organic ag) of professors who are sympathetic to the concepts, but have little or no research in same.
- Should practical, hands-on experiential education be carried out within an academic institution at all – or are real world, commercial practitioners best positioned to provide this opportunity? If the latter, how to integrate and/or compensate them?
- How best to integrate theory and practice?
- Build a coalition of sustainable ag programs in higher ed nationwide to influence policy makers to dedicate resources to these programs.
- Developing educational programs that are participatory and action-oriented, with a very strong change agenda.
- Providing training in the ecological framework of sustainability, with a grounding in agroecology, systems thinking, and co-evolution with culture.
- Building programs that are grounded in the interconnectedness of community, livelihoods, environmental services, and social well-being.
- Discuss the needs which these programs in sustainable agriculture are designed to fulfill, and then examine these intentions/assumptions for “strategic validity”/effectiveness.
- Assessment of present situation of sustainable agriculture education
- The future desired situation for education in the USA and the plans of action to get there.
- Clarification of curricular needs or current status (at participating institutions) at multiple levels – graduate, undergraduate, certificate/extension/outreach.
- Integrating sustainable ag principles into existing courses verses developing separate courses.
- Co-teaching as a method of not just having multiple faculty presenting information sequentially over time, but having multiple faculty with opposing or differing views or expertise in the room at the same time. Co-teaching as a method of not just having multiple faculty presenting information sequentially over time, but having multiple faculty with opposing or differing views or expertise in the room at the same time.
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- Discussion of why a sustainable agriculture is needed and what does it mean to the various participants.

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The written responses (immediately above) were received from the following institutions:

Montana State University; Appalachian State University; New Mexico State University; University of Oregon; The Pennsylvania State University; Santa Rosa Jr. College; University of Illinois; College of Micronesia; California State University, Chico; Iowa State University; University of Georgia; The Evergreen State College; University of Missouri-Columbia; Virgin Islands Sustainable Farm Institute; University of Idaho; Washington State University; The Evergreen State College; Cornell University; Central Carolina Community College; University of Guelph; Cal Poly San Luis Obispo; University of California, Berkeley; Michigan State University; NOVA Program in Agroecology; UC Santa Cruz; The Organic Farming Research Foundation