

3rd National Conference on Science, Policy and the Environment  
Education for a Sustainable and Secure Future

**Undergraduate Education**

*Transforming Undergraduate Education for Environmental Sustainability*

Chair: Elaine Hoagland

**Learning**

- Understanding the four dimensions of sustainability – health, social, economic and ecological dimensions
- University modeling sustainability as a fully integrated community – connecting learning to research, operations, facilities, purchasing and collaboration with local and regional communities
- Sustainability, environmental, social and science literacy, social change skills and values an integral part of all disciplines and majors
- Systems thinking for all majors
- Make environmental, economic and social footprint of students and the college/university visible to all students and also help them understand how to reduce any negative impact
- Interdisciplinary learning should be as strong a part of learning as disciplinary learning – have the same lateral rigor across the disciplines as well as vertical rigor within the disciplines
- Means to help connect different scholarly disciplines and to deal with conflicts among disciplines
- Make visible to students the assumptions of all learning disciplines so students will understand the history of the learning and whether the assumptions are still appropriate.
- Understanding that humans are an integral part of nature and the larger social community and the interdependence of all human and natural system well-being.
- An integral part of the learning experience for all students should be experiential, collaborative learning on campus, local communities and other parts of the world to promote connection to community and citizenship as well as the environment.
- The above is part a good liberal arts education as well as professional education.

Recommended to Accreditation organizations, professional societies, university presidents/administrators, higher education organizations, future employers, trustees, alumni and funders of education and research.

**Faculty Development & Rewards**

- Help professional development for faculty to make sustainability an integral part of their research and education, for example, faculty development programs
- Change tenure and promotion criteria to foster interdisciplinary teaching and research, involvement in public policy and public education.

Recommended to college/university administration, accreditation organizations, professional societies, trustees and funders of education and research

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**Educational Resources**

- Ask Authors and publishers to make sustainability issues a part of mainstream textbooks & educational resources
- Recommend to NSF, Dept. of Education and foundations research on and assessment of the impact/effectiveness of sustainability education, research and operations in higher education

**Institutional Change**

- Bring together external stakeholders - future employers, education & research funders, alumni, professional associations, accreditation organizations and college/university leaders to discuss ways to make sustainability a foundation of learning & practice. It is critical that these external stakeholders create incentives (“demand creation”) for higher education to make sustainability a priority.
- Make sustainability a part of the mission statement of higher education institutions
- Establish a university wide committee across the college to promote sustainability

Recommended to future employers, education & research funders, alumni, professional associations, accreditation organizations and college/university leaders.

**Employment Opportunities**

- Make visible to students the employment opportunities of sustainability learning & practice.
- Change employment classifications in professional associations and higher education to include employment/professional activities related to sustainability

Recommended to professional societies, higher education administrators, future employers.

**HIGHER EDUCATION STAKEHOLDERS**

**Internal**

Students  
Faculty  
Administrators  
Staff  
Trustees

**External**

Future employers  
Alumni  
Education & research funders  
Accreditation Organizations  
Professional associations  
Communities  
Government  
Society

Elaine Hoagland  
Debra Rowe  
Tony Cortese