

The background of the slide is a dark, almost black, image of green ferns. The ferns are densely packed and their fronds are clearly visible, creating a textured, naturalistic backdrop. The lighting is somewhat dramatic, with some areas of the ferns appearing brighter than others, giving it a sense of depth and texture.

Higher Education for Sustainable Development in the U.S. – Recent Developments and Future Perspectives

*Thanks to Anthony Cortese of Second Nature,
and ACUHO-I for some slides used in this program.*





Debra Rowe
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U.S. Partnership for Education for Sustainable Development



US PARTNERSHIP
DECADE OF EDUCATION FOR SUSTAINABLE DEVELOPMENT
UNITED NATIONS DECADE (2005-2014)



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Today's Topics

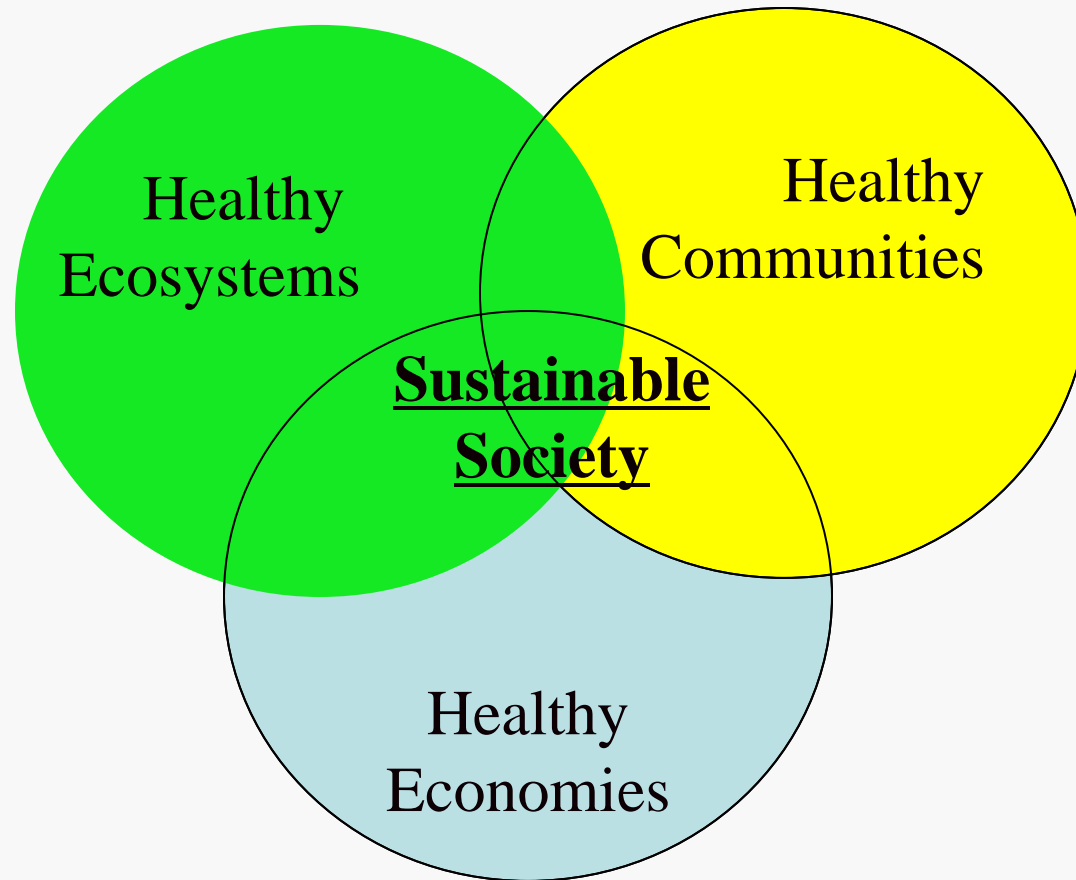
- Part I **What is Sustainable Development?**
- Part II **National Trends**
- Part III **Examples**
- Part IV **Resources and Next Steps**
- Part V **Questions and Answers**



Sustainable Development is often defined as:

“meeting the needs of the present
without compromising the ability of
future generations to
meet their own needs”

*World Commission on Env. and Development. (1987).
Our Common Future. England: Oxford University Press.*



The Three Components of Sustainable Development
What Businesses call “The Triple Bottom Line”

The United Nations
Decade of Education for
Sustainable Development

Leverage for action!



Education for a Sustainable Society:

“enables people to develop the knowledge, values and skills to participate in decisions ..., that will improve the quality of life now without damaging the planet for the future.”



Ecosystem

Ecosystem

Sustainable Communities

**Public Choices and
Behaviors-Laws**

**Applied
Knowledge/
Technological
Skills**

**Private Choices and
Behaviors-Habits**

Sustainable Economies

Ecosystem

Ecosystem

Why Sustainability Now?

We are the first generation capable of determining the habitability of the planet for humans and other species.



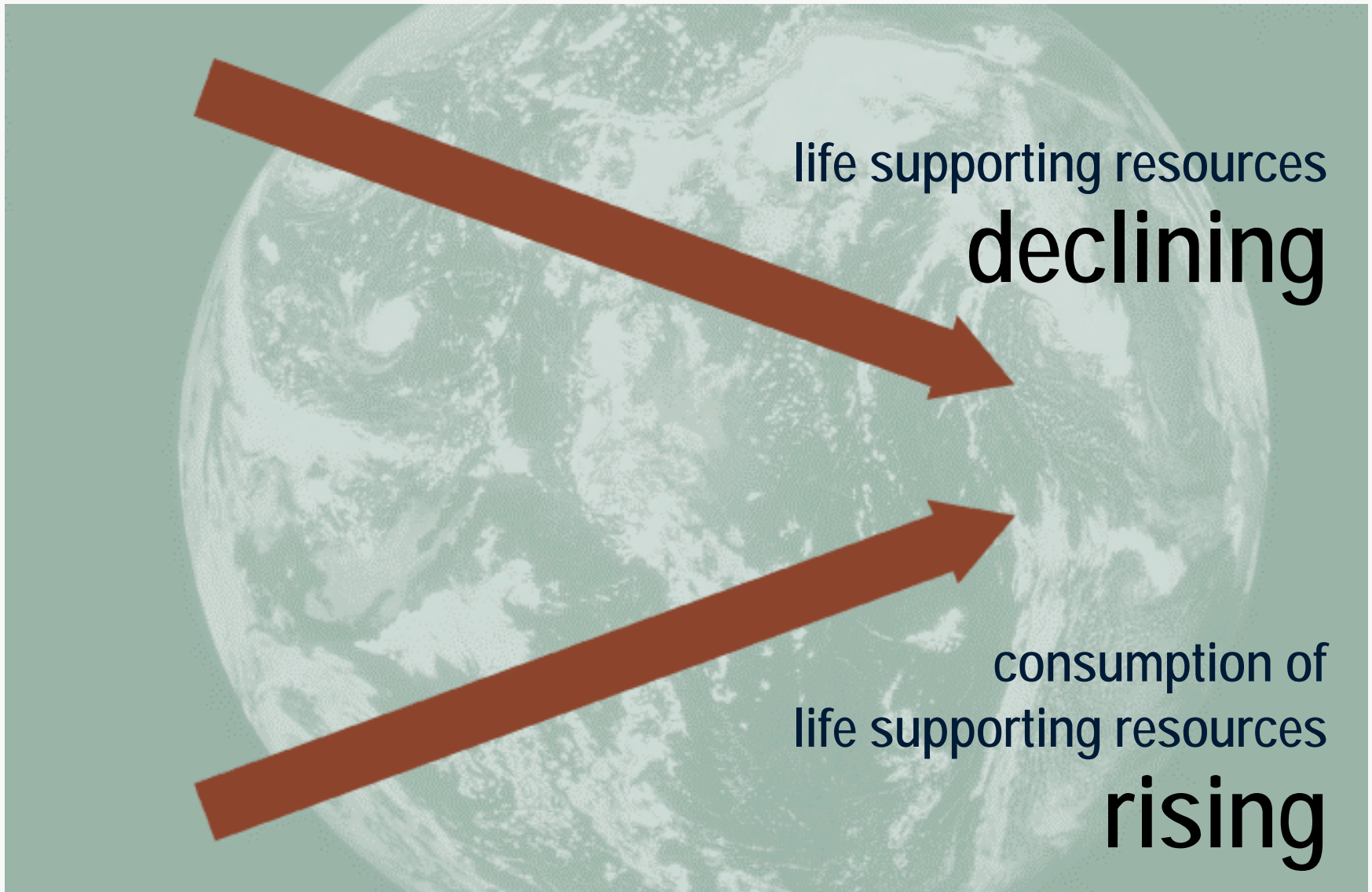
Why Sustainability & Why Now?

“There is no longer any doubt that every ecosystem that life depends on is compromised and in danger.”



U.N. Millennium Ecosystem Assessment, 2005

Global Perspective

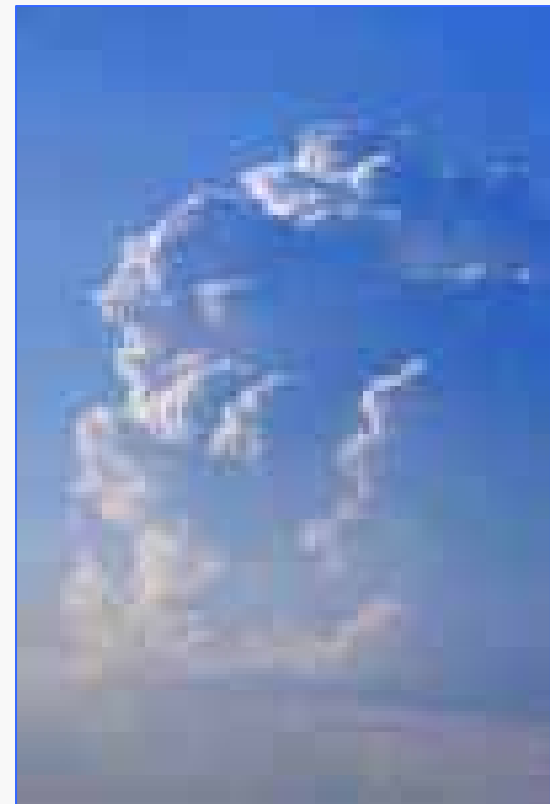




Why Sustainability & Why Now?

"Climate change is for real.
We have just a small
window of opportunity and
there is not a moment to
lose."

*Dr. Rajendra Pachavri, Chairman,
Intergovernmental Panel on
Climate Change, January, 2005*





Effects in Our Lifetime

- ◆ **Disruption of food production and the food chain**
- ◆ More extreme weather events
- ◆ Disruptions of ecosystems, including water supplies
- ◆ Spread of disease e.g. West Nile, Malaria
- ◆ **Submersion of land masses –**
was 1 to 4 foot sea level rise - **now up to 48 feet**
50% of world's population lives on the coasts
- ◆ = **Civilization Disruption**

Sources: Intergovernmental Panel on Climate Change, EPA



Why is EFS so Important?

- Public unaware that we are exceeding the carrying capacity of the planet.
- The U.S. has approximately 5% of the world's population and is consuming 25% of the world's resources.
- Public unaware that we can build stronger economies that will produce higher quality of life and reduce human suffering, environmental degradation and social injustice now.
- A rapid shift in mindset is needed and **education to action is the key.**

- Outcome of education and action for sustainable development – a more just, healthy and prosperous society for all.
- “You have unique and important contributions to make to a sustainable future. We can’t imagine doing this without you!”

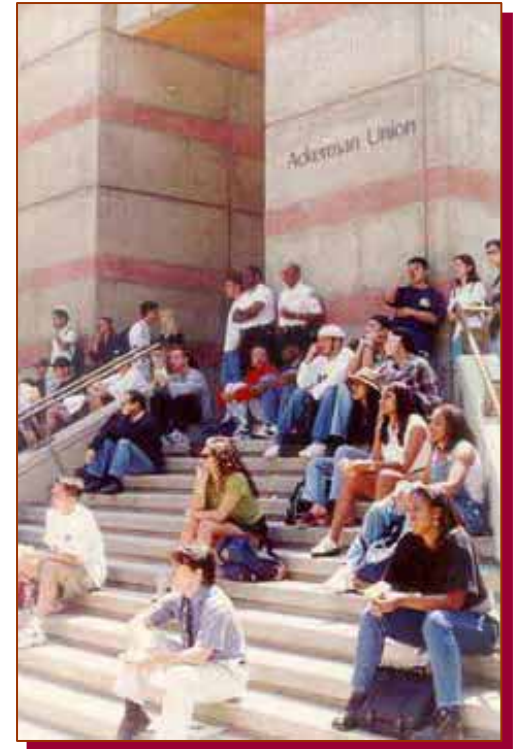




KEY THRUST

Change norms so all students and the community become:

- environmentally responsible
- socially responsible
- economically responsible
- active citizens in a global economy



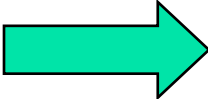


Skills for Staff, Educators and Students:

- 1) Teach/learn sustainable development literacy
- 2) Teach/learn optimism skills (Seligman)
- 3) Teach/learn efficacy; tell and post stories of “normal” people making a difference (Nike)
- 4) Teach/learn interpersonal and intrapersonal intelligences – e.g. civil discourse, conflict resolution, emotional intelligence
- 5) Teach/learn systems thinking, futurist skills and change agent skills



Goals:

- All students and staff are engaged as **effective change agents** in our sustainability challenges
- From apathy  caring involvement.
- Students and staff know that their daily decisions affect the quality of life of people around the globe.
- Students and staff have the skills to engage in the complexity of sustainability problems and solutions

Part II **National Trends**



U.S. Partnership for Education for Sustainable Development: Convene, Catalyze and Communicate

Sector Teams: Business, Higher Education,
K-12, Communities, Faith, Youth...





Business principles of sustainability:

- Cradle to Cradle (McDonough)
- Biomimicry (Benyas – Like nature, efficient and not toxic)
- World Business Council for Sustainable Development (www.wbcsd.org)
- Natural Step (Sweden and U.S.)
- Natural Capitalism (Lovins, Harvard Business Review)
- Ethical Markets – Hazel Henderson

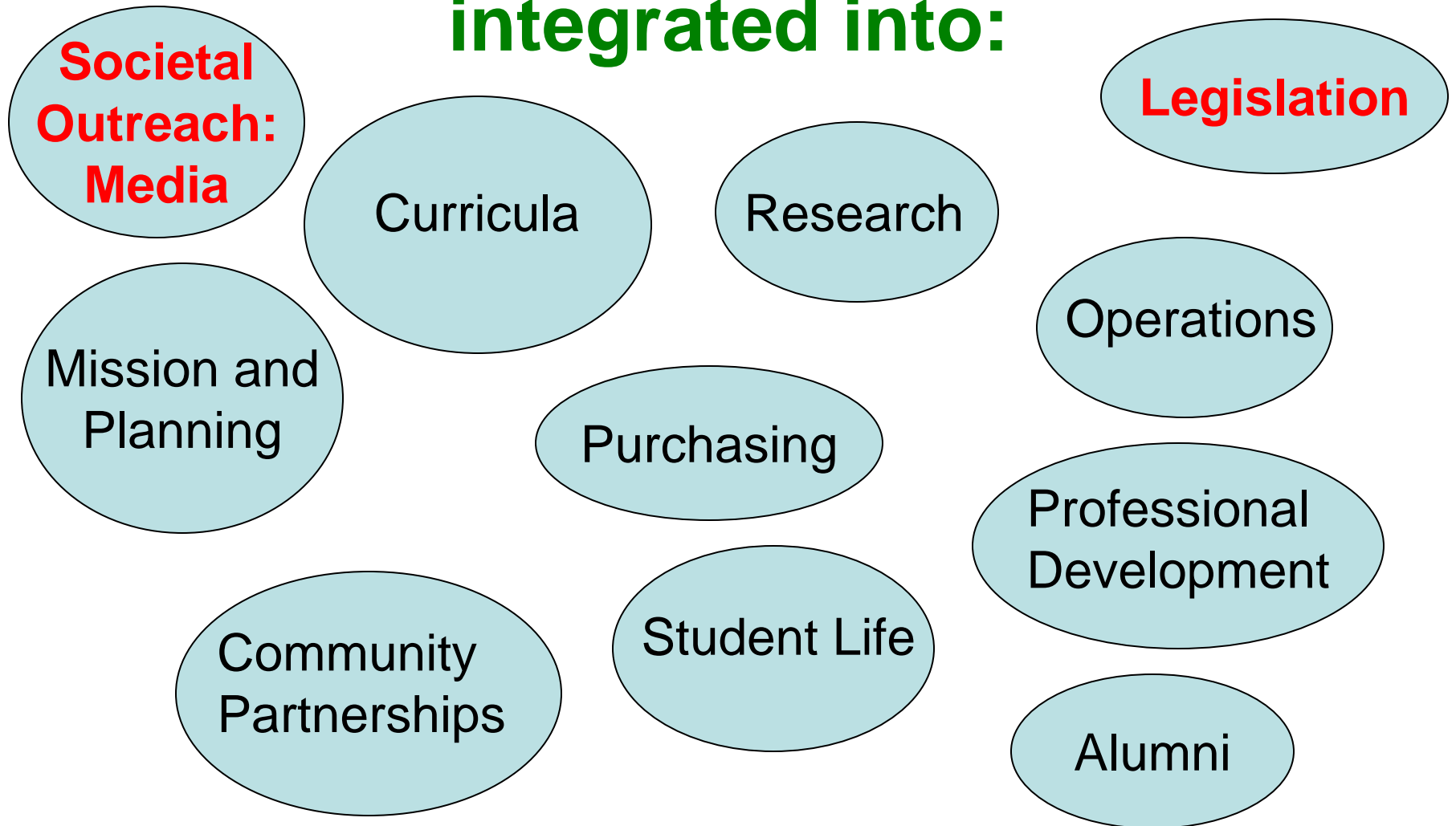


Trends and resources in sectors – some examples

- **Business** - LOHAS, SOL Sustainability Consortium, CERES, Businesses for Social Responsibility, Shareholders, Investors (e.g. Goldman Sachs and Swiss RE)
- **Communities** - Mayors Climate Protection and Smart Growth, Grand Rapids model
- **K-12** – Nat. Assoc. of Independent Schools, U.S. Partnership resources
- **Faith** - National Religious Partnership and Interfaith Alliance, Regeneration Project
- **Youth** – Climate Challenge, Reduce Your Impact, Action Campaigns...

A lot – but not yet the critical mass needed to shift societal norms and systems

For higher education, Sustainable Development and hope integrated into:





GREAT NEWS!!! Growing National Trend:

Over 12 national higher education associations and 20 national academic disciplinary associations have initiatives in education for sustainable development!

Engaged National Associations

1. ACE—Am. Council on Ed.
 2. AAC&U – Assoc. of American Colleges and Universities
 3. AACCC – Am. Ass. of Community Colleges
 4. AASCU – State Colleges and Universities
 5. AGB – Governing Boards
 6. NACA – Campus Activities
 7. NAEB – Educational Buyers
 8. APPA – Facilities Officers
 9. NACUBO – Business Officers
 10. SCUP – College and University Planners
 11. ACUI – Student Unions
 12. ACPA – Student Affairs
 13. NACUFS – Food
 14. ACEED-I – Events and Conference Directors
 15. NACS – Campus Stores
- AND MORE*

Higher Education Associations Sustainability Consortium (HEASC)

Resources for you:

- Professional development – webinar 11/27, Campus Sustainability Day 10/24
- Publications to help your staff
- Greening of offices and conferences
- Helping you inform the public about higher education's commitment to sustainability

www.heasc.net



Disciplinary Associations Network for Sustainability – DANS

www.aashe.org/dans

- American Psychological Association
- Sociology
- Religion
- Philosophy
- Math
- Broadcasting
- Architecture
- Engineering (civil, mechanical, eng. ed.)
- Ecological Economics
- Chemistry
- Biology
- American Association for the Advancement of Science
- Computer Research
- Humanities
- Women's Studies
- Political Science
- Anthropology
- More...

DANS – Infusing sustainability into:

1. Curricula
2. Promotion, tenure and accreditation
3. Cross-disciplinary approaches
4. Funding
5. Professional identity as an academic
6. Legislative briefings
7. Informing the public

Resources for your faculty at www.aashe.org/dans

Very exciting!



www.playagreaterpart.org

Imagine a country where all college students get credit for helping to solve our societal problems through their academic assignments.



**Building self-concepts in yourself
and others:
You can help change society!!**

Imagine students literate in the real world
sustainability challenges and engaged in the
solutions

Provide the models and opportunities for practicing the
changing of behaviors and policies



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Part III Examples

Part IV Resources

Sustainability Initiatives on Campus and National Resources

All of the information (with links to relevant URLs) is to available at:

**www.heasc.net and click on
Professional Development**

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Resources Used

- AASHE Bulletin (weekly, free)
- AASHE Digest 2006 (annual digest of news stories by topic)

1. Institutional Leadership and Planning





Pledges & Declarations

- American College & University Presidents Climate Commitment
 - 400 signatories
 - Middlebury – climate neutral by 2016
- Talloires Declaration
 - International, 350+ signatories (40% U.S. & Canada)
- Other Pledges, Targets, Resolutions
 - Freshman and Graduation Pledges - social and environmental responsibility



Sustainability in Guiding Documents & Reports

- In Vision, Values, or Mission Statement
 - Ex: Lane CC – core value
 - Ex: Warren Wilson – mission statement
 - City College of San Francisco - trustees resolution
- In Institution's Strategic Plan (35+)
 - Ex: Dickinson; Oberlin; Georgia Tech
- In Campus Master Plan (40+)
 - Ex: CSU Chico; U Vermont; Carnegie Mellon; Green River CC



Sustainability in Guiding Documents & Reports (continued)

- Sustainability Plan or Report
 - Ex: UC Santa Barbara; Mount Wachusett CC; Furman U
- Policies (Sustainability, Procurement, Investment, Energy, Building, etc.)
 - Ex: Western Carolina U - energy conservation
 - Ex: Houston CC – green procurement
 - Ex: Duke – socially responsible investing
 - Ex: Bemidji State U – environmental policy



Sustainability in Guiding Documents & Reports (continued)

- Sustainability Assessments & Reports
 - Ex: NYU, Grand Valley State U
 - Frameworks for Assessment – AASHE, W. Mich Assessment Project (online database), ULSF
- Websites (260+)
 - AASHE design guidelines
 - New sites in 2005-2006 - CSU Chico, Broward CC, Duke, Cornell, Colorado State



Sustainability Staff & Structure

- Committee, Task Force, Green Teams
 - UNC Chapel Hill – reports to vice chancellor
 - Keene State College – Presidents Council for a Sustainable Future
- Office of Sustainability
 - U New Hampshire
- Coordinator, Director, Officer (70+)
 - 11 new hires in 2006
 - AASHE – online directory, job descriptions, guide to hiring, salary survey

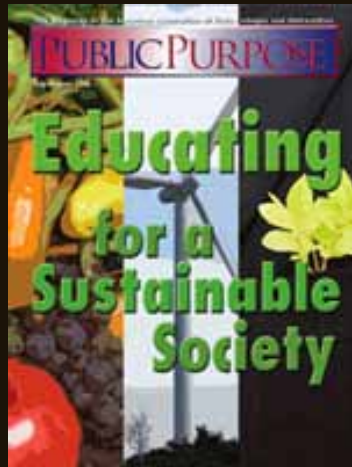


Awards, Recognition, Celebration

- Campus Sustainability Day in fall;
Earth Day in spring
- Campus Theme for Year (or Month)
 - Ex: St. Olaf College (2005-6)
 - Ex: Willamette U – Sustainability Month
- Internal Awards & Recognition
- External Awards
 - AASHE Leadership Awards. 2006 winners: Lane CC, Warren Wilson, Berea, U British Columbia
 - State & locality awards

Governance & Management Presidents & Trustees

AASCU's *Public Purpose* Magazine; Sustainability Article in ACE's *The Presidency* Magazine; Sustainability Panel at AGB Conference; AACC's Education for Sustainable Development Website



Governance & Management Planning & Management

Association Publications:
*Business Officer, Facilities
Manager, Planning for
Higher Education, and
many more*



Green Schools listserv!!

Governance & Management Planning & Management Collaboration – HEASC & More



Business Case for Renewable Energies from APPA, SCUP & NACUBO

2nd Annual Smart and Sustainable Campus Conference

April 17-19, 2007
University of Maryland
Student Union Building
College Park, MD (USA)

Registration for this conference is being handled by NACUBO. For further information and links to registration, please visit:
www.nacubo.org/SCSC13.asp

[Download a copy of the Final Program \(PDF\)](#)

Conference Partners:

- AASHE: Association for the Advancement of Sustainability in Higher Education
- APPA: The Association of Higher Education Facilities Officers
- C2EE: Campus Consortium for Environmental Excellence
- CSHEMA: Campus Safety, Health, and Environmental Management Association
- NACUBO: National Association of College and University Business Officers
- SCUP: Society for College and University Planning
- EPA: United States Environmental Protection Agency, and
- the University of Maryland, College Park

On April 17-19, 2007, NACUBO will join with the Environmental Protection Agency (EPA), the Association for the Advancement of Sustainability in Higher Education (AASHE), the Association of Higher Education Facilities Officers (APPA), the Campus Safety, Health, and Environmental Management Association (CSHEMA), the Campus Consortium for Environmental Excellence (C2EE), the Society for College and University Planning (SCUP), and the University of Maryland College Park to deliver a comprehensive symposium on smart growth and sustainable practices that serve the economy, the community, and the environment. Sessions and workshops will be offered in the areas of campus planning, engaging the campus in sustainability, facility construction and operations, and assessment and measurement.

Who Should Attend:

- Sustainability Coordinators
- Facilities Managers
- Finance and Administrative Officers



2. Incorporating Sustainability into Facilities





Green Buildings

- Green Building Policies (70+)
 - New, Remodeled, and Existing Buildings
 - Ex: Mesa CC – Sustainable Bldg Remodel Program
 - Green Buildings
 - Ex: Berea College – Ecovillage
 - Ex: Cape Cod CC – Applied Tech Bldg (LEED Gold, 85% less water; 35% less energy)
 - Ex: Haverford College – Athletic Facility (LEED Gold, 1st certified athletic facility)
- U.S. Green Building Council establishing norms



Sustainable Dining

- Farm-to-Cafeteria Movement (200+ campuses)
- Sustainable Dining Initiatives
 - Ex: Oberlin College – Social Responsibility (Bon Appétit)
 - Ex: Yale – Sustainable Food Project (Aramark)
 - Ex: Colby College – Community Service (Sodexo)
 - Ex: UC Berkeley – Environment & Community (self-operated) 1st certified organic kitchen.
- Sustainable Gardens, Farms, Dairies
 - Ex: CSU Chico – Organic Dairy Teaching Facility
 - Ex: St Olaf College – Organic Garden (student-run, supplies all cafeteria's produce)



Fuel & Energy

- Biofueled Fleets
 - Ex: Rice U, Appalachian State U - biodiesel
 - Ex: U. Arizona motor pool - ethanol (E85)
- Bicycles
 - Ex: Texas Christian U. – “purple bike” program
- Renewable Energy & Energy Conservation
 - Ex: Carleton – wind turbine
 - Ex: Central Oregon CC – student fee increase for renewable energy (75% of total energy)
 - Ex: Los Angeles CCD – solar initiative
 - Ex: SUNY and U Buffalo – conservation saves \$4 mil/yr.




Water & Waste

- Water Conservation and Quality
 - Ex: Portland State U – “salmon safe” certification
 - Ex: U. Idaho – reclaimed water (90% of irrigation)
 - Ex: Lane CC – aerators save 1/3 of building’s water (student-led project)
- Waste Reduction
 - *Reduce* - ex: U. Northern Colorado - pay-for-printing program
 - *Reuse* - ex: Youngstown State – composting kitchen scraps
 - *Recycle* - ex: U Washington – e-media recycling

3. Residential Living, Student Life





Student Affairs - Presidential Taskforce on Sustainability – ACPA – Creating a Culture of Sustainability

- **sustainability primer,**
- **change agent skills,**
- **campus activities list and poster,**
- **learning outcomes and competencies,**
- **first year experience, orientation,**
- **film series and sustainability media festivals...**



Campaigns

- Campus Climate Challenge
 - 30+ youth organizations for clean energy
 - Think.MTV.com
- Sustainable Living
 - Eco-Reps, peer-to-peer sustainability outreach campaigns
- Student Green Fees
 - Renewable energy; sustainability projects
- Fair Trade (coffee, tea, sugar, choc.)
- Divestment (ex: Sudan)

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Competitions & Awards

- Recyclemania - 200+ campuses in 2007
- NWF Chill-out – annual video competition
- Focus the Nation Student Award
- AASHE Student Award
- EPA P3 Award (People, Planet, Prosperity)
- Sustainable Building / Design Competitions

4. Curriculum





Curricular Initiatives

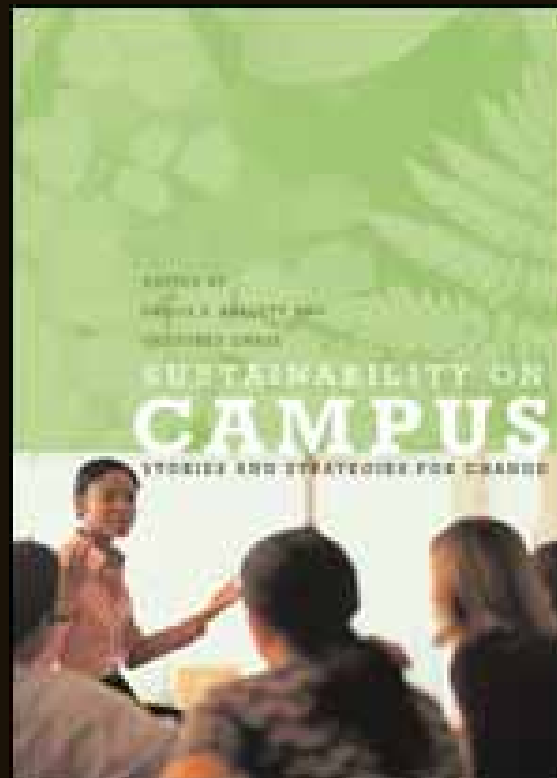
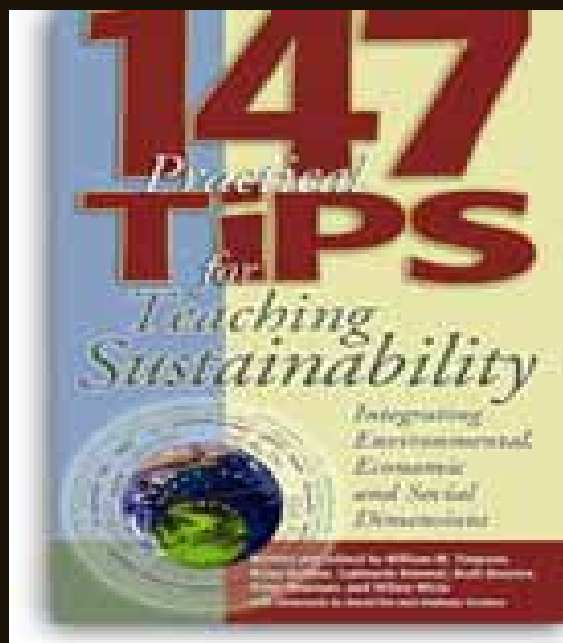
- In General Education Core
 - Ex: Oakland and Broward and Miami Dade Comm. Colleges – Article at AACCC site/sustainable
 - Ex: Minnesota Colleges & Universities
- Infused Throughout Curriculum
 - Ex: Chandler-Gilbert CC
 - Ex: Emory U – Piedmont Project
 - Ex: Miami Dade College – Earth Ethics Institute



Curricular Initiatives (continued)

- Programs, Degrees, Institutes, Centers
 - Ex: Arizona State U – PhD in Sustainability
 - Ex: Duquesne U – MBA in Sustainability
 - Ex: Washington State U – B.A. in Organic Agriculture
 - Ex: U Minnesota – Minor in Sustainability
 - Ex: Coastal Carolina U – Center for Campus & Community Sustainability
 - Renewable Energies – www.ceret.us – online courses available to all community colleges

Curriculum & Academics



Curriculum & Academics

Curriculum Success Stories

Use international resources

Earth Charter!

www.earthcharter.org

Alicia Jimenez!

2007amworlds... Google Docs & ... 2007 PDGA Pro... Sustainable Fu... DebraR

88%

**ENVIRONMENTAL LITERACY AND SUSTAINABILITY
AS CORE REQUIREMENTS:
SUCCESS STORIES AND MODELS**

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Reprinted from Teaching Sustainability at Universities,
2002, Walter Leal Filho, editor, Peter Lang, New York

Keywords Civic Engagement, Environment, General Education, Literacy, Social Responsibility, Sustainability

Abstract At a number of colleges and universities, the core General Education requirements for all degrees include an in depth exposure to environmental literacy. Many colleges are also including a degree requirement in the area of social responsibility and/or civic engagement. Colleges include sustainability curricula using a variety of models. The first baseline national surveys have collected information about the percentage of institutions incorporating sustainability into curricula, course design and content, faculty development and outcomes. What does the data to date describe in terms of the models for inclusion of environmental literacy, social responsibility and sustainability in higher education?

For many colleges, it is politically difficult to add additional courses for degree requirements. Some higher education institutions have solved this dilemma by integrating environmental literacy, social responsibility and sustainability course materials into existing liberal arts and specialty courses. Models have been developed that are flexible, inexpensive and fun to implement within a variety of disciplines or as part of an interdisciplinary learning community. According to research, for both teachers and students, these models reduce apathy, and instill attitudes and skills required to be positive change agents for the society.

Research results support students using these models developed an:
increased caring about the future of society.

1 of 17

Next Previous Highlight all Match case

5. Community Partnerships





Community Partnerships

- Ex: Santa Fe CC (NM)
 - Center for Community Sustainability – partnership w/industry, training students
- Ex: U. Louisville
 - Energy Conservation Partnership w/city & public schools (DOE-funded), \$65,000 savings
- Ex: City of Grand Rapids
 - Community Sustainability Partnership - colleges, universities, K-12, mayor, business working on sustainability projects



Key places to place sustainability and institutionalize it:

- Mission
- Strategic Plan
- Budget
- Orientation
- Campus Map and Signage
- Student Activities
- Operations and Purchasing Policies
- Career Services
- Multicultural Affairs
- Student Affairs
- Recreation Services
- Infused throughout curricula
- First Year Experience
- Gen Ed Core
- Curricula Review
- Community Partnerships
- Learning Communities
- The Arts



Comm. College specific resources:

- AACCC resolution and web page
- Monthly conference calls for comm. college people on sustainability – contact Jennifer Hayward - haywardj@lanecc.edu
- Upcoming resources at AASHE
- Outcomes of Wingspread conference



General Higher Education Sustainability Resources Meta-Sites

Longstanding sites with substantive resource lists:

- AASHE
- ULSF
- Second Nature
- NWF's Campus Ecology Project
(very student-focused)

Next Steps to Shift Society
Two major initiatives:


- 1. Collaborative Media Project**
- 2. Legislation for Sustainability**



1. Collaborative Media Project – controlling the language, using the joint voices of Higher Education, Communities and Youth Sector

Email me any good PR officers you have!! We will help them get their stories out!

2. Legislative Efforts – www.fundee.org – Higher Education Sustainability Act now, Climate Change Legislation soon.



Key strategies to build the perceived critical mass on campus

- 1. Professional Development for campus staff and faculty**
- 2. Connect diversity, global learning, international ed, service learning, civic engagement, economic development, student life, facilities and environmental learning constituencies, business office and build a critical mass by inviting all and describe (multiple times) how they are all part of creating a more sustainable future**
- 3. Weave together the efforts in facilities, operations, purchasing, student life, academics, creating real world learning opportunities for the students...**
- 4. Make sustainability “cool” and part of the campus culture**

The Power of What You Do



*We can choose a
sustainable future*





Emphasize the benefits -

Embracing esd can:

- Improved teaching and learning
- Students prepared for citizenship and career
- Attraction of students, faculty and funding
- Save \$ and other resources for the institution and society
- Improve the institution's reputation
- Improve cooperation and satisfaction across institution
- Help improve town/gown relationships
- Fulfill moral and social responsibility
- Improve strategic positioning



Conclusions

1. The U.S. public is not educated enough about sustainability issues and solutions.
2. We need sustainability literacy and engagement for ALL. We all need skills to change consumption, investment and civic behaviors and to support appropriate market modifications (legislation).
3. It is important to be a systems change agent.
4. Some exciting developments, too many to report, but much more needs to be done to shift the norms. The League is in a key position to catalyze this.
5. There are many resources and strategies to assist you.
6. Document all you do and share – you are creating national and international precedents.

Core Questions for Next Steps

As an college -

As the League – a unique and important
role to play

1. What multiple possibilities can you implement immediately?
2. What are the key strategic actions you can take to help shift the higher education and societal norms?





Questions or Comments?



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Let your enthusiasm show!