Education and Actions for a Sustainable Future:

Resources, Networks and Strategies

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• Part I  What is Sustainability and Education for Sustainability?
• Part II  Challenges and Trends
• Part III  Networks, Resources and Opportunities
• Part IV  Strategies and Next Steps
Sustainable Development is often defined as:

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

Triple Bottom Line of Sustainability
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.”
KEY THRUST

Change norms so all students and the community become:

- environmentally responsible
- socially responsible
- economically responsible

Creating sustainable abundance and higher quality of life
Why is green and sustainable such a high priority?

- Freshwater withdrawal has almost doubled since 1960 and nearly half the world’s major rivers are going dry or are badly polluted (New Internationalist, no. 329)
- 11 of the world’s 15 major fishing areas and 69% of the world’s major fish species are in decline (State of the World, Worldwatch Institute)
- Economic ill health when sustainable business practices aren’t in place.
- Climate change (global warming) exists, a major culprit is fossil fuels, and impacts are very serious. (Intergovernmental Panel on Climate Change report: Summary for Policymakers: The Science of Climate Change)
- 1 in 2 children living in poverty
Effects - Climate Change
The decisions of this generation are crucial.

◆ Disruption of food production and the food chain
◆ More extreme weather events, outside of the normal variability
◆ Disruptions of ecosystems, including water supplies
◆ Disease spread e.g. West Nile, Malaria, Dengue Fever
◆ Submersion of land masses – sea level rise
  50% of world’s population lives on the coasts
  = Civilization Disruption and National Security Threat

Sources: Intergovernmental Panel on Climate Change, NASA, Pentagon, and National Defense University
Why environmental issues are so important

1. Unprecedented growth in population and consumption
2. All ecosystems are stressed or in long term decline at unprecedented and accelerating rate

Our decisions will create:
more scarcity and suffering, or a future of greater abundance and higher quality of life
Global Perspective

Life supporting resources declining

Consumption of life supporting resources rising
Plan B: Mobilizing to Save Civilization

by Lester Brown

Founder of Worldwatch Institute

Downloadable at www.earth-policy.org
Why is Education For a Sustainable Future such a high priority?

1. Much of the U.S. public and our students don’t know that we are exceeding the carrying capacity of the planet. ([www.myfootprint.org](http://www.myfootprint.org)) and that the U.S., with under 5% of global population, consumes 25% of the world’s resources.

2. Public and students don’t know we can reduce human suffering, environmental degradation and social ills now while building stronger economies.

3. A rapid shift in mindset is needed and **education to action is the key.**
Solutions:

• All of us engaged as **effective change agents** to create a sustainable future

• From apathy/overwhelmed to caring, effective involvement.

• Education helping business, government and non-profits go green and sustainable. You will tap into the economic activity.
• Part III  Resources and Networks
U.S. Partnership for Education for Sustainable Development (www.uspartnership.org):

Convene, Catalyze and Communicate

Sector Teams: Business, Higher Education, K-12, Communities, Faith, Youth…
Trends in sectors – some examples

- **Business** – LOHAS - Japan, SOL Sustainability Consortium, 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** – U.S. Summit and collaboration, national webinars and resources, superintendents, standards
- **Faith** - Religious Partnership and Interfaith Alliance, Regeneration Project
- **Youth** – 36 national youth organizations, Climate Challenge, Reduce Your Impact, Action Campaigns, Powershift, 350.org, National Teach-in...
Higher education is taking a leadership role to prepare students and provide the information and knowledge to achieve a sustainable society.

What does it look like?
For higher education, Sustainable Development is being integrated into:

- Curricula
- Research
- Operations
- Mission and Planning
- Community Outreach and Partnerships
- Student Life
- Purchasing
- Professional Development

plus legislation and public awareness
• **Systemic integration (many more)**
  – University of Florida
  – Georgia Tech
  – University of North Carolina
  – Lane Community College
  – Miami Dade Comm. College

• **Stellar energy examples – 100% renewables and conservation**
  – Univ. of Minn.- Morris and LACCD and cost effective!

• **Institutionalization in job descriptions and performance reviews, increasingly for all**
  – Cornell
  – Arizona State University
Internationally, a taste...

- In Sweden, it is a law that all students from youth through graduate school be educated about sustainability
- High priority in higher education principles in European Union
- U.N. Global Compact PRME
- U.N. Decade and other ESD international conferences in Mexico
- Vision from Earth Charter and Bonn Declaration
- Association of Canadian Community Colleges
- Affinity Group, World Federation of Colleges and Polytechnics (http://wfcp.accc.ca/)
- Global Sustainability Group out of MIT, Chalmers,...
GREAT NEWS!!!
Growing National Trend in U.S.:

Many national HE associations and over twenty national disciplinary associations are creating initiatives on Education for Sustainable Development.
Committed to the advancement of sustainability throughout higher education
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Name</th>
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<tbody>
<tr>
<td>AACC</td>
<td>American Association of Community Colleges</td>
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<tr>
<td>AASCU</td>
<td>American Association of State Colleges &amp; Universities</td>
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<tr>
<td>AASHE</td>
<td>Association for the Advancement of Sustainability in Higher Education</td>
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<td>ACCED-I</td>
<td>Association of Collegiate Conference &amp; Events Directors - International</td>
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<td>ACE</td>
<td>American Council on Education</td>
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<td>ACPA</td>
<td>College Student Educators International</td>
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<td>ACUHO-I</td>
<td>Association of College &amp; University Housing Officers International</td>
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<tr>
<td>AGB</td>
<td>Association of Governing Boards of Universities &amp; Colleges</td>
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<tr>
<td>APPA</td>
<td>Association of Higher Education Facilities Officers</td>
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<td>CCCU</td>
<td>Council of Christian Colleges &amp; Universities</td>
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<td>NACA</td>
<td>National Association for Campus Activities</td>
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<td>NACUBO</td>
<td>National Association of College &amp; University Business Officers</td>
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<td>NAEP</td>
<td>National Association of Educational Procurement</td>
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<td>NAICU</td>
<td>National Association of Independent Colleges &amp; Universities</td>
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<tr>
<td>NIRSA</td>
<td>National Intramural-Recreational Sports Association</td>
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<td>SCUP</td>
<td>Society for College &amp; University Planning</td>
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Higher Education Associations Sustainability Consortium www.aashe.org/heasc

1. ACE—Am. Council on Ed.
2. NAICU – Independent Colleges and Universities
3. AACC – Am. Ass. of Community Colleges
4. AASCU – State Institutions
5. AGB – Ass. of Governing Boards
6. ACPA – Student Life
7. ACUHO-I – Housing
8. NACA – Campus Activities
9. APPA – Facilities
10. NACUBO – Business
11. SCUP – College and University Planners
12. AASHE – Sustainability
13. ACCED-I – Events and Conference Directors
14. CCCU – Christian Colleges and Universities
15. NIRSA – Recreation
16. NAEP – Educational Buyers
17. More!
Resources

- Higher Education Sustainability Fellows Programs
- Campus Sustainability Day
- HEASC News Digest
- HEASC Resource Center
- Media Strategies for Sustainability
- Campus Sustainability Planning Network
- 2008 HEASC Annual Report
- Publications, professional development, modeling for society
- Development of assessments such as AASHE STARS Rating system
- Socially, economically and environmentally responsible procurement, operations, planning, leadership
- Learning Outcomes in sustainability for all students
Higher Education Associations Sustainability Consortium
www.aashe.org/heasc

See the resources page there
DANS – the Disciplinary Associations Network for Sustainability [www.aashe.org/dans] - click on Resources

- American Psychological Association
- Sociology
- Religion
- Philosophy
- Math
- Broadcasting
- Architecture
- Engineering (civil, mechanical, eng. ed.)
- Business - AACSB
- Marketing - AMA

- Ecological Economics
- Chemistry
- Biology
- American Association for the Advancement of Science
- Computer Research
- Humanities
- Women’s Studies
- Political Science
- Anthropology
- More...
Academic Disciplines and U. S. Partnership created DANS, infusing sustainability into:

1. Curricula
2. Promotion and tenure and accreditation to include sustainability
3. Informing legislation and policy
4. Informing the public
5. Professional identity as an academic
Resources used for the following slides:

• AASHE Bulletin (weekly, free)

• AASHE Digest (annual digest of news stories by topic)
Curriculum
Curricular Initiatives

• 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
  – More very day, minors, S in schedule

• Creating Positive Futures – Penn State (coal), Scenario Building and Fairs
Curricular Initiatives – the big ones!

• In General Education Core
  – Ex: Univ of Wisc (Oshkosh) – “Knowledge of Sustainability and its Applications” as one of the Essential Learning Outcomes
    – Ex: Oakland CC
    – Ex: Minnesota Colleges & Universities
    – Ex: CSU - Chico

• Infused Throughout Curriculum
  – Ex: Northern Arizona University - Ponderosa
  – Ex: Emory U – Piedmont Project
  – Ex: Miami Dade College

• Interdisciplinary Assignments
Key EFS Ideas

- Making *invisible* impacts *visible*
- Practicing sustainability on campus and in external communities, connected to student learning, and focusing on how to be systems thinkers and effective change agents
- Involve all areas of the college – Each area has a unique contribution to make to a sustainable future.
Curriculum & Academics
Sustainability can be integrated into any course and every program.

Learning outcomes and sample assignments in the next session!
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), $$$$ savings

- Ex: City of Grand Rapids
  - Community Sustainability Partnership - colleges, universities, K-12, mayor, business working on sustainability projects
Student Life
Campaigns

- Campus Climate Challenge
  - 30+ youth organizations for clean energy
  - MTV/ThinkMTV Break the Addiction campaign
- 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)
Competitions, Awards and National Activities

- Recyclemania - 200+ campuses
- NWF Chill-out annual video competition and Campus Ecology Fellows
- Campus Sustainability Day
- AASHE Student Award
- National Teach In
- Powershift
ACPA main sustainability page, student flyer, primer, list of possible campus activities, and chart of learning outcomes! – www.aashe.org/heasc under resources
The American College & University Presidents’ Climate Commitment

Climate Leadership in Higher Education
Resources just from the Presidents’ Climate Commitment

- **2008 ACUPCC Annual Report**
- **Education for Climate Neutrality** – has many models!
- **Energy Performance Contracting Toolkit**
- **ACUPCC Voluntary Carbon Offset Protocol**
- **ACUPCC Climate Action Planning Wiki**
- **ACUPCC Reporting Tool**
- **ACUPCC Implementation Guide**
- **ACUPCC GHG Inventory Brief**
- **ACUPCC Webinar Series**
- **ACUPCC Solutions Page** (includes links to further resources)
Your Role
Challenges and Answers

Challenges

• Already busy
• Don’t know all this stuff
• Putting out fires, don’t have time to do the right thing

Solutions

• Don’t have to create the answers. Just keep asking the sustainability questions and share the information already available. AASHE, HEASC, DANS, CEL, ACUPCC, EFS-ACAD, Green Schools can assist you.
• Sustainability is everyone’s job. Doing nothing is not benign – it is a destructive decision for society.
• This is good business – for you, for your institution, for higher education and for society
• You have a unique and important role to play – others cannot do this without you!
Core Questions for Next Steps

1. What can we implement immediately?
2. What are the key strategic actions we can take to shift to a sustainable institution and society?
3. What are the multiple ways you can empower others and create a culture of sustainability?
4. How can you institutionalize these efforts?

Changing the norms!
The Power of What You Do

- We can choose a sustainable future
Conclusions

1. The public is not educated enough about the energy and sustainability issues before us.

2. We need sustainability literacy and engagement in solutions for ALL.

3. You are in a unique and important role to create a sustainable future.

4. Successful precedents/materials can assist you in the sustainability path you choose as a private person, as higher education leaders, and as a community member.

5. Congratulations for all you have done and all you will do!

6. Let us assist you – Debra Rowe
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