


Greening the Curriculum: *Addressing Challenges Inherent in Sustainability Courses*



*Education is the process of
preparing our children in
advance for the task of
renewing a common world.*
- H. Arendt, 1961

FOCUS ON FACULTY
Center for Academic Excellence



Portland State
UNIVERSITY

September 22, 2011

Definition: Civic Engagement

Civic engagement means working to make a difference in the civic life of our communities and developing the combination of knowledge, skills, values and motivation to make that difference.

Thomas Ehrlich, et. al.,
Civic Responsibility and Higher Education (2000)

Characteristics of Experiential Learning

- Learning is grounded in experience.
- Learning is best conceived as a continuous process.
- Learning involves transactions between the person and the world.
- Learning is a holistic process of adaptation to the world.
- Learning is the process whereby knowledge is created through the transformation of experience.

Sustainable development means meeting the needs of the present without compromising the ability of future generations to meet their own needs

The Possibility!

- Over 4,300 institutions of higher learning in the US.
- 17.3 million college students in the U.S.
- Annual operating budgets totaling \$300 billion in 2003 = greater than the GDP of all but 25 countries in the world

– Cortese (2006); Beere et al (2011)

The Reality – An Uphill Climb



The university has become more of a bureaucracy than a community—"a mechanism held together by administrative rules and powered by money...a series of individual faculty entrepreneurs held together by a common grievance over parking."

- *Clark Kerr, 1963*

A Problem

“Although the sustainability movement in higher education has made considerable headway in research, campus operations...it has been much less successful in greening the classroom. In fact, the National Wildlife Federation reported in 2008 that efforts to integrate sustainability into teaching and learning on colleges campus were losing ground.”

- Bardaglio and Putman,
Boldly Sustainable, p. 71

“At the heart of the problem is the extent to which sustainability as a way of thinking cuts against the grain of the dominant paradigm in academe. While sustainability encourages whole-systems thinking...the tendency in HE toward specialization leads to an approach that draws boundaries and creates divisions. The prevailing model of education also focuses on the transmission of knowledge and treats the student as a passive consumer.”

- Bardaglio and Putman,
Boldly Sustainable, p. 71

Deep Learning

- 1st Order Learning – “education about sustainability”
- 2nd Order Learning – “education for sustainability”
- 3rd Order Learning – “education as sustainability”

- Steven Sterling, Sustainable Education: Re-Visioning Learning and Change, 2001

Not “what” but “how”...

...How do we promote (ensure) “deep learning” in our students about:

- Systems thinking
- Mutual interdependence
- Synergies
- Adaptive behavior
- Evolution
- Participation
- Exploration
- Interrelatedness
- Equity, Ethics, and values
- Community

(Sterling, 2001)

“EDUCATION AS
SUSTAINABILITY”

Think Big



PSU's Community-engaged Research Scholars Program



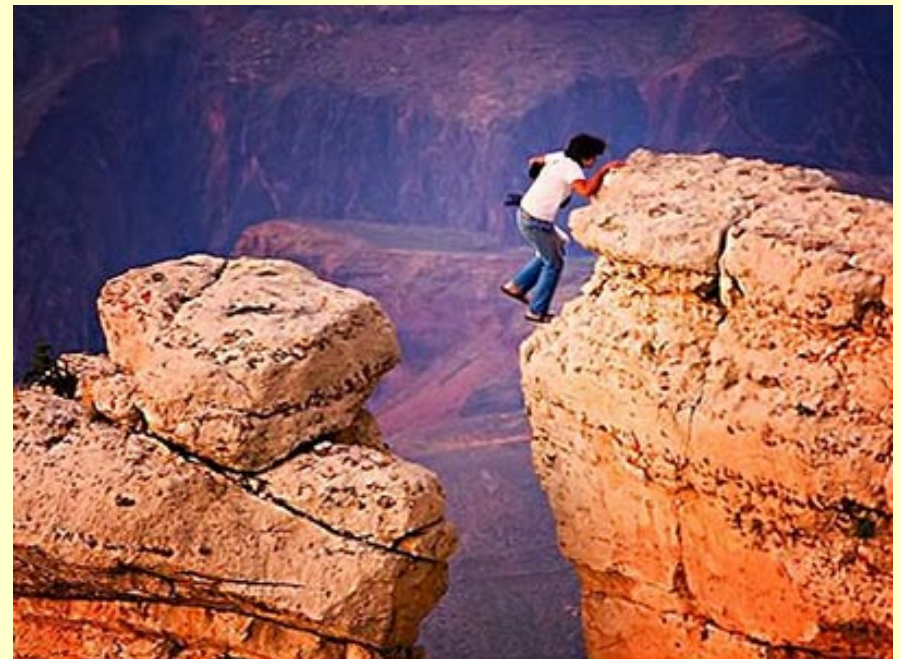
- 12 projects
- One year long
- Focus on reflection, insight, and writing
- Edited book of collected stories and insights
- More: <http://www.pdx.edu/cae/community-engaged-research-scholars>
- 4 main insights:



Crossing the “expertise” divide

Teaching/Research ON, FOR,
and/or WITH the community?

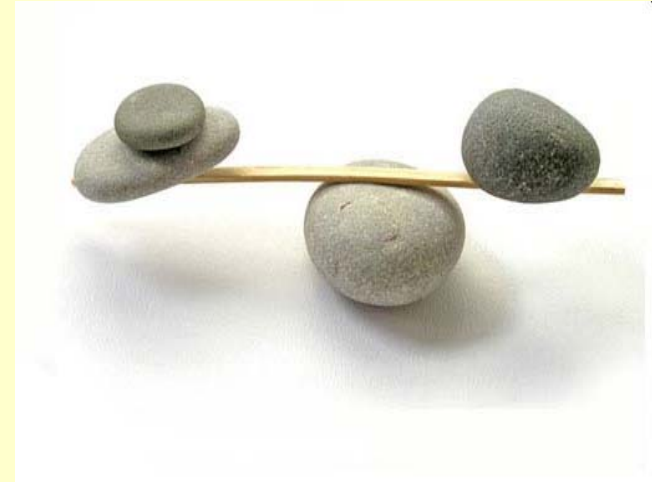
Whose knowledge “counts”?



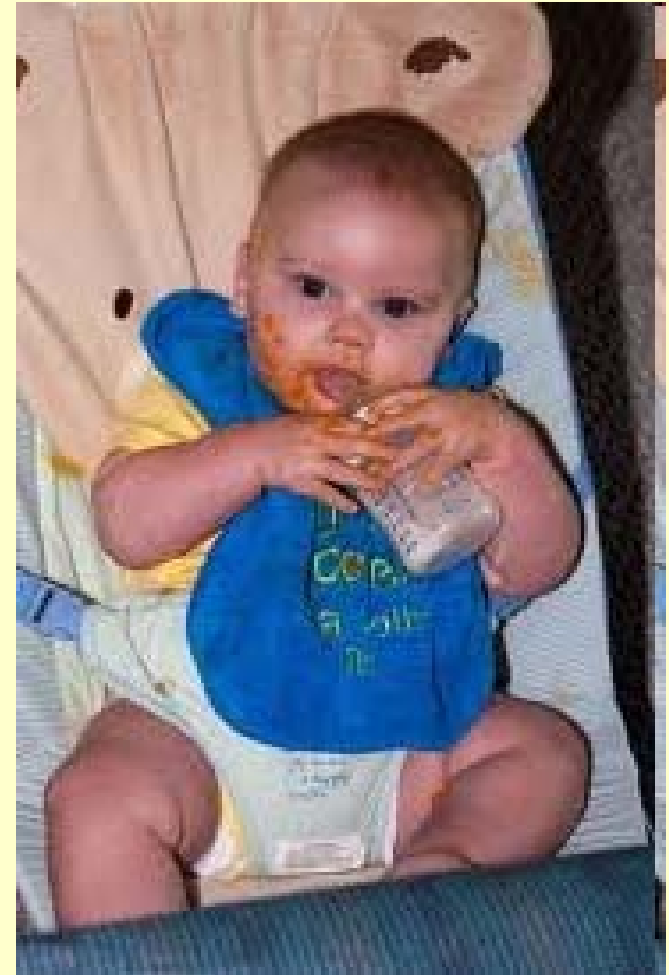
1. Building TRUST is essential



2. BALANCE can be hard to maintain



3. The work is likely to get MESSY



4. POWER needs to be addressed



In short: Teaching and Learning and Research conducted WITH the community:

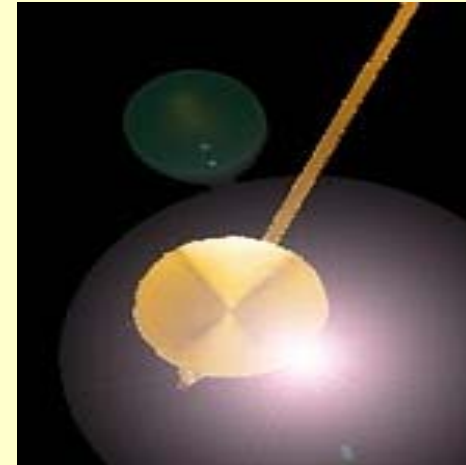
- Is collaborative and participatory
- Draws on many sources of distributed knowledge
- Is based on partnerships
- Is shaped by multiple perspectives and expectations
- Deals with difficult and evolving questions-complex issues that may shift constantly
- Is long-term, in both effort and impact, often with episodic bursts of progress
- Requires diverse strategies and approaches
- Crosses disciplinary lines-a challenge for institutions organized around disciplines

- Holland, 2005

Examples and Opportunities for Co-creation



John Rueter, Environmental Sci
Liz Charman, Graphic Design



HOW do we (do YOU) ensure “deep learning” in students about...?

Systems thinking
Mutual interdependence
Synergies
Adaptive behavior
Evolution
Participation
Exploration
Interrelatedness
Equity, Ethics, and values
Community

**“EDUCATON AS
SUSTAINABILITY”**