

Vanderbilt University's
**Transdisciplinary Initiative on
Environmental Studies (VU TIES)
Program**

***Educating Students for National Leadership in
Critical Environmental Issues of the 21st Century***



*Kimberly G. Rogers
CSDMS EKT Group Meeting
10 Oct 2008*



VANDERBILT UNIVERSITY

Transdisciplinary Studies, via Wikipedia

- *“An area of research and education that addresses...issues that cannot be solved by one or even a few points-of-view”.*
- *“It brings together academic experts, field practitioners, community members, research scientists, political leaders, and business owners...to solve some of the pressing problems of the world.”*

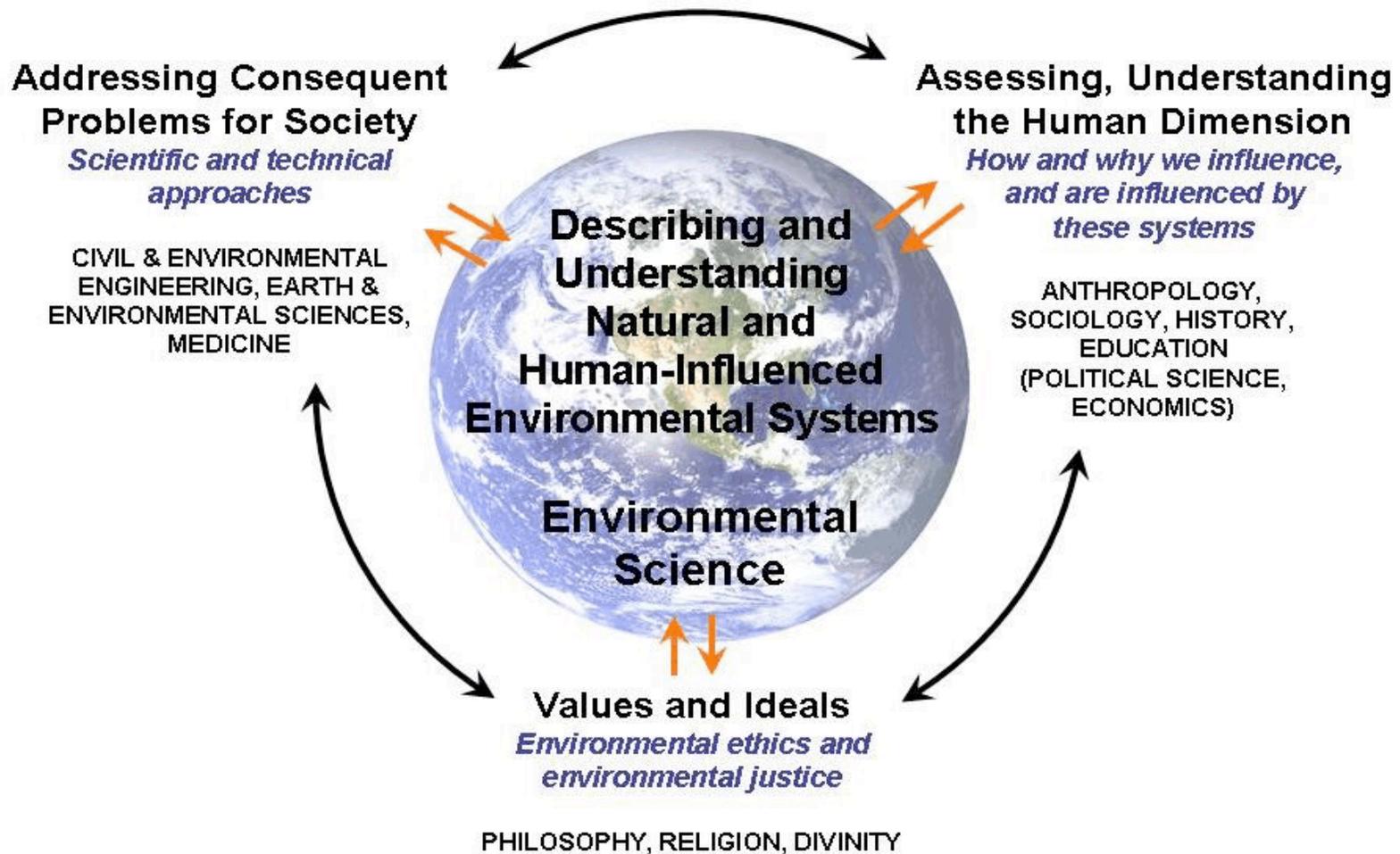


Transdisciplinary Studies, con't

- “[There is a] particular emphasis on engagement, investigation, and participation in addressing present-day issues and problems in a manner that **explicitly destabilizes disciplinary boundaries while respecting disciplinary expertise**”.



Addressing Key Environmental Systems – An Integrated, Transdisciplinary Approach



VU TIES and Environmental Science

Funded by an internal grant to the *VU Program to Enhance Graduate Education*:

1. Enhance visibility and national impact of EnvSci graduate study option
2. Involve faculty and students from the natural sciences and engineering and key social disciplines, including the social sciences, the humanities, law and education
3. Capstone: transdisciplinary course that focuses each year on an environmental issue that is of global significance



VU TIES Components

- Required capstone experience for graduate students in Environmental Science
- Associated courses, seminars and informal discussion groups involving other disciplines
 - Field study
 - Visiting speakers seminar program — public lectures, presentations to classes, informal discussions
 - Outreach beyond Vanderbilt — public lectures, an active website, contact with the media, publications



Goals of VU TIES

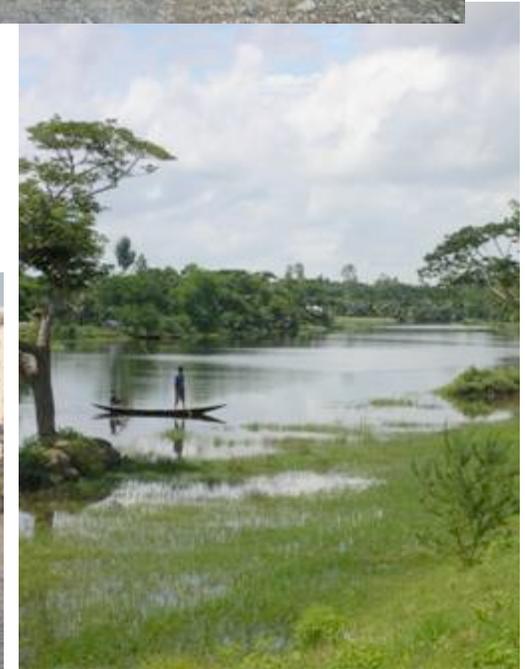
- (i) Create new opportunities for disciplinary and transdisciplinary scholarship in environmental science and related subjects, including external research support for spin-off ideas
- (ii) Motivate enhanced recruiting of world-class faculty and students
- (iii) Enhance career development opportunities for participating graduate students.



Yucca Mountain: *Assessing and Balancing Risks (2007/08)*



Bangladesh: *Risk, Hope and Opportunity* (2009)



Potential Sites/Issues

- Impact of sea level change on coastal environments, North Carolina
- Availability and quality of water resources of the south-central USA
- Volcanic/earthquake hazards, in the western U.S. or central Mexico
- Three Gorges Dam, China, and the consequences of grand-scale water impoundment and management.



TIES Links

- VU TIES (temporary link; permanent link to be added to VU EnvSci page): <http://vuties.weebly.com/>
- Vanderbilt Environmental Sciences: <http://www.vanderbilt.edu/ees/envsci/>
- Vanderbilt Earth & Environmental Sciences: <http://www.vanderbilt.edu/ees/>
- Vanderbilt Civil and Environmental Engineering: <http://www.cee.vanderbilt.edu/>
- Vanderbilt Center for Environmental Management: <http://www.vanderbilt.edu/VCEMS/>

