Greening Our Pedagogy – Sustainability Resources and Ideas
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CAMPUS PROJECTS & POTENTIAL DATA

STARS
Comprehensive Campus Sustainability Assessment designed by the American Association for Sustainability in Higher Education covering Education, Operations and Administration. Data compiled for Muhlenberg College in 6/2010 and update in 6/2012. Numerous ideas for class projects can be developed from this information.

Water/ Just Tap It
By 2010, the College installed approximately 35 filtered water stations in response to a student initiative to reduce bottled water sales on campus. The idea was developed by Lora Taub-Pervizpour’s Environmental Communications class. Information on filling station counts of bottles of water diverted from the landfill and decrease in sales available to evaluate effectiveness of program.

Recycling Awareness
The College has recently switched to a new waste hauler that prioritizes recycling. We have class-obtained “dumpster dive” data for the last several years showing contamination rates of recycling waste and participation rates showing presence of recyclables in trash dumpsters.

Green Roof
A green roof was installed on a portion of roof in Seegers (visible from 2nd floor dining). Data on temperature, wind, building energy usage before and after installation will shortly be available. Photography or monitoring of plant growth and health could be obtained.

Climate Inventory & Reduction Plan
We have a detailed Climate Inventory created in 2008 and updated most recently in 2010. The inventory might be useful in illustrating where energy is used and where Muhlenberg College emissions come from.

Dashboard/ Watts Your Bergtricity
The College has installed electricity meters in most buildings on campus. Hourly, weekly, monthly, and yearly data is available.

Solar Panels (Seegers) Solar Hot Water (Memorial Hall)
We have two solar panels on the roof of Seegers. The panels collect data on current, electricity generation, ambient air temperature, panel heat and wind speed. Our software calculates how much money we save by using solar power from these two panels. A solar hot water heater is
being installed on Memorial Hall to heat the pool and showers. Some data will be available from that system.

**LEED Building**
The New Science Building is LEED certified. Data is available on its design and how it fulfills LEED building criteria.

**Rain Gardens**
We have several rain gardens on campus, which are filtering our rainwater before it goes into the sewer. Water quality could be tested.

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**PROJECT SUGGESTIONS & WISH LIST**

**Communications Materials** – Develop building and grounds signage highlighting sustainable features of campus. Map or walking tour of campus sustainability features including rain gardens, solar panels, bike rack locations.

**Sustainability House**
Several students will potentially be living in a sustainability-themed house next year. The students welcome collaboration with classes, including experimenting with changing the efficiency of the building, modifying the landscaping to include native or edible flora (in conjunction with the Community Garden), using the house as a model to “green” other buildings on campus and serving as a physical meeting point for initiatives.

**Transportation – ‘Berg Bikes, Car Share, Transportation Alternatives**
Bicycling is becoming a popular and environmentally sound method of transportation. How might EnAcT’s present program be improved? Urban bicycle policy, design of bike-friendly campus and community partnerships could be investigated.

**Water/ Just Tap It** – Evaluate the effectiveness of the Just Tap It program using data, student surveys, and anecdotal evidence.

**Community Garden**
The garden offers an outdoor meeting place, the opportunity to grow something that may be used in classroom projects. Previous class projects incorporating the garden dealt with cuisine, ethnicity, business plans, water systems, painting, policy and permaculture.

**Dining Services**
To what extent is the food consumed on campus food locally grown? Dining Services is looking to add local AND organic/ natural/ humane vendors to our approved vendors. They are doing this incrementally but would welcome research regarding potential local suppliers.
**Composting**
To what extent could Muhlenberg compost a portion of their food waste? How might composting in the Community Garden be expanded?

**Recycling** - Update “dumpster dive” data. Create innovative ways to encourage recycling.

**Dashboard** – Contribute to design or display of data.

**Sustainability Educators Program**
Many campuses have adopted an Eco-Rep program where students design programming for dorms, Greek life, or independent housing. The students receive course credit for their participation and the institution provides an experiential learning opportunity. The students are provided with formal training in how to conduct outreach.

**Sustainability Literacy Assessment**
To what degree are Muhlenberg students literate in basic concepts dealing with sustainability? It would be helpful to gather this information from freshman and seniors to better understand the students’ knowledge base.

**Move- Out**
There has been interest from numerous students in organizing a Move-Out furniture sale or trade to promote re-use of items that would otherwise be thrown away.

**Innovation/ Greening Committee**
The Office of Sustainability is always looking for new ideas for projects and initiatives. If your class addresses one that could be applicable to Muhlenberg, we would be happy to consider it and welcome the input.

**Books and Resources**


Hungry for Change, Choices for Sustainable Living, Menu for the Future, A World of Health, Discovering a Sense of Place Discussion Courses published by the Northwest Earth Institute. [http://www.nwei.org](http://www.nwei.org)
**Library Resources**

Sustainability encyclopedia that is not online yet, but that will soon be available through Credo reference: [http://0-www.credoreference.com.library.muhlenberg.edu/](http://0-www.credoreference.com.library.muhlenberg.edu/)

Sustainability Subject Guide  

NetLibrary environment and sustainability subject set (e-books)  
[http://library.muhlenberg.edu/search~S0?tNetLibrary/tnetlibrary/1%2C5%2C99%2CB/exact&F=F=tnetlibrary+environment+and+sustainability+subject+set&1%2C17%2C](http://library.muhlenberg.edu/search~S0?tNetLibrary/tnetlibrary/1%2C5%2C99%2CB/exact&F=F=tnetlibrary+environment+and+sustainability+subject+set&1%2C17%2C)

E-books focused on environmental issues  
[http://www.epa.gov/sustainability/](http://www.epa.gov/sustainability/)

**NOAA Climate Service Portal**

An interactive "climate dashboard" that lets users see a range of constantly updating climate datasets (e.g., temperature, carbon dioxide concentration, and sea level) over adjustable time scales

**Intergovernmental Panel on Climate Change**

Established by the UN Environment Program and the World Meteorological Organization, the IPCC reviews and assesses worldwide information relevant to climate change.

**Association of University Leaders for a Sustainable Future (ULSF)**

The Secretariat for signatories of the Talloires Declaration (1990), which has been signed by over 400 college and university presidents and chancellors worldwide. ULSF supports sustainability as a critical focus of teaching, research, operations and outreach in higher education through publications, research, and assessment. Muhlenberg has signed the Talloires Declaration.

**Campus Sustainability Discussion Forums**

from AASHE Discussions on topics for creating sustainable campuses.

**National Renewable Energy Laboratory (NREL)**

The National Renewable Energy Laboratory (NREL) is the nation's primary laboratory for renewable energy and energy efficiency research and development (R&D). NREL develops renewable energy and energy efficiency technologies and practices, advances related science and engineering, and transfers knowledge and innovations to address the nation's energy and environmental goals.