



sustainability
AT PURCHASE COLLEGE

Sustainable Literacy

Curricular and Co-curricular Enhancements

Academic Affairs

Academic Affairs Office

Lindsay Randall
Sustainability Coordinator



Presidents' Climate Commitment and curriculum

Presidents Climate Commitment

Section 1.c.iii

“Within two years of signing this document, develop an institutional action plan for becoming climate neutral, which will include...

- iii. Actions to make climate neutrality and sustainability a part of the curriculum and other educational experience for all students.*

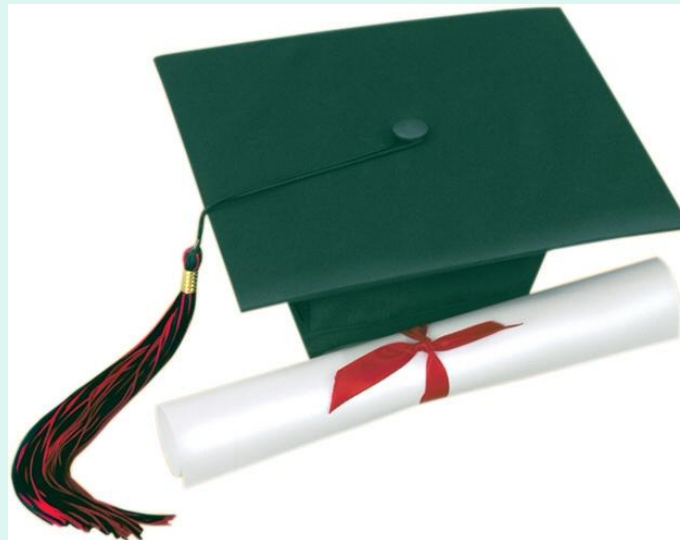




Curriculum and sustainability at Purchase

Our Goal:

To help all Purchase College graduates to be environmentally and sustainably literate no matter what field they plan to enter.






What is Sustainable Literacy?

- Campaign For Environmental Literacy

Tests individual understanding of how *people* and *societies* relate to each other and to natural systems **sustainably**

Five Components of environmental literacy:



- General awareness of the relationship between the environment and human life

- Knowledge and understanding of human and natural systems and processes

- Attitudes of appreciation and concern for the environment

- Problem solving and critical thinking skills

- Capacity for personal and collective action and civic participation



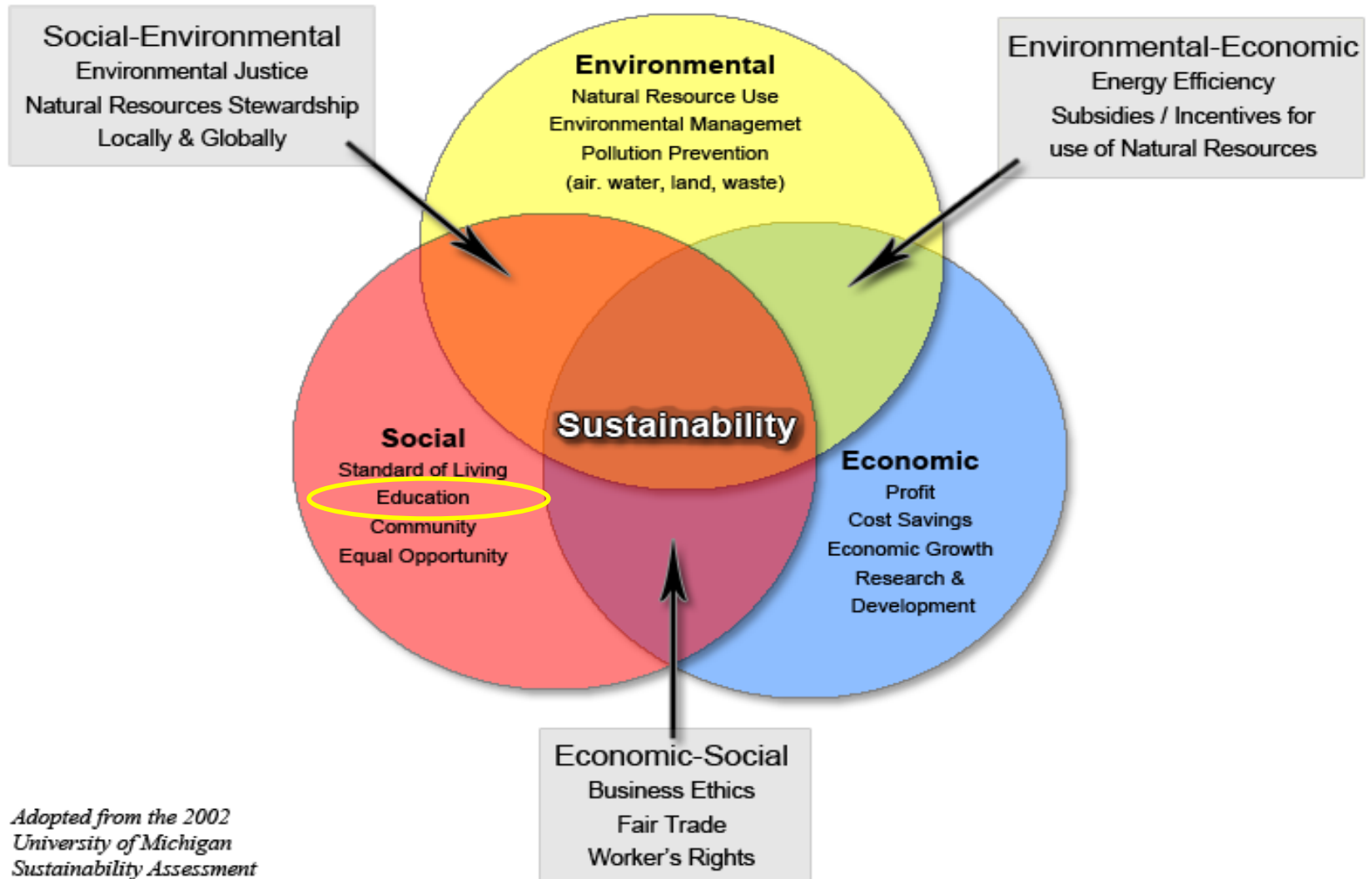
Why is sustainable literacy important?

“We believe colleges and universities must exercise leadership in their communities and throughout society by modeling ways to minimize global warming emissions, and by **providing the knowledge and the educated graduates to achieve climate neutrality**. Campuses that address the climate challenge by reducing global warming emissions and by integrating sustainability into their curriculum **will better serve their students and meet their social mandate to help create a thriving, ethical and civil society**. These colleges and universities will be **providing students with the knowledge and skills needed to address the critical, systemic challenges faced by the world in this new century and enable them to benefit from the economic opportunities that will arise as a result of solutions they develop...**”

(From President's Climate Commitment)



The Three Spheres of Sustainability



*Adopted from the 2002
University of Michigan
Sustainability Assessment*



2005 Study on Environmental Literacy in America

Figure 1-2: Percentage Answering Basic Knowledge Questions Correctly

Subject: Environmental Knowledge • Student: The American Public

Content of Environmental Knowledge Question	2000	1997
The most common source of water pollution	28	23
How most electricity in the United States is generated	33	33
Definition of biodiversity	41	40
The primary benefit of wetlands	53	53
Protection provided by ozone in Upper Atmosphere	54	57
Disposal of nuclear waste in the United States	57	58
Recognition of a renewable resource	65	66
The largest source of carbon monoxide (air pollution) in United States	65	69
Knowledge about materials considered hazardous waste	67	67
Name of the primary federal agency that works to protect the environment	72	74
The most common reason for extinction of animal and plant species	74	73
Where most household garbage ends up	85	83

Please see Appendix 1 for the exact wording of the questions.

Source: NEETF & Roper, 1997 and 2001



2005 Study on Environmental Literacy in America

NEETF/Roper Study Findings

High-knowledge respondents, when compared to low-knowledge respondents, were:

- 10% more likely to save electricity in the home
- 50% more likely to recycle
- 10% more likely to purchase environmentally safe products
- 50% more likely to avoid using chemicals in yard care



Current ways we are educating our students about sustainability:

- *Environmental Studies Program*
- *Science in the Modern World class and lecture series*
- *Cross-disciplinary collaboration:*
 - *Environmental Sociology Class*
 - Garbage Audit (Mugs at Chartwells!)
 - Green Share focus group
 - *Community Design class*
 - Designed Office of Sustainability logo
- *Office of Sustainability Interns*
 - campus garden
 - greenhouse gas emissions audit
 - Recycling outreach and education.
- *Campus Garden*
- *Presentations to Freshman Seminar*





Sustainable Literacy on Campus- Possibilities

1. *Immediate Enhancements*

- The most simple process with the quickest results

2. *Upcoming Enhancements*

- Procedures that require more planning but have more significant results

3. *Long Term Goals*

- Plans that require time and materials to develop, but we hope to see in the future.





Immediate Enhancement Possibilities

- *Freshman Seminar:*
 - Could require community service volunteer hours
 - Campus Garden
 - Trash pick-up on campus
 - Required hike, led by Environmental Studies student
 - Sustainability Handout with information about campus efforts
 - Available Courses/Clubs
 - What students can do to be sustainable on campus
 - Conservation efforts (GHG plan) on campus
 - Give Green mugs to the Peer Advisor (trend setting)
 - Select sustainability focused books and encourage small group discussion
- *Student Engagement:*
 - Encourage independent studies on environmental topics
 - Provide grants for projects on campus
 - Finance interns of Sustainability Office (increase participation)



Potential future enhancements

- *Partnerships between ENV and LSCE*
 - *Certificate Program*
 - Energy Efficiency Certificate
 - Home Energy Audits
- ***Faculty Sustainability Education***
 - Empower faculty to explore how sustainability and climate change are related to their own field
 - Give priority and competition for funding for including sustainability in course work
 - Could result in more team taught courses
- *Team Teaching/ Interdisciplinary classes*
 - Environmental Art
 - Environmental Journalism



“Big Possibilities”

- *“Arts and Social Activism” concentration or major*
 - Allows socially engaged artists on campus to create a more sustainable and socially just future through creative activism
 - Projects could range from documentary films focusing on environmental justice issues to art installations to bring attention to different issues.
 - Uses the artistic talent on campus to promote social awareness both on campus and in the world they enter upon graduating



Sustainable Literacy Beyond the Curriculum

- *Encourage participation in existing activities*

- Arbor Day/Fall bulb planting
 - More student involvement
 - Purchase T-shirts
- Senior Week/Graduation Pledge
- Culture Shock
 - Bio-Bus with sustainability workshops
 - Offset the emissions?



- *SPARC Resource Center*

- Collaborate with the SPARC center to have a gathering space for environmental and social activism

- *Infuse awareness to support preexisting programs*

- Farmers market



Sustainable Literacy on Other Campuses



Sustainability Course

The course is specifically designed to explore the wide range of institutionally related environmental impacts and the associated roles of individuals within these settings.

Environmental Resource Center



- Holds electronic materials and information
- Houses discussions and workshops on important topics
- encourages educators at all levels to consider the impact and significance of environmental literacy in students



Sustainable Literacy on other Campuses Cont.

the piedmont project



GOAL: a broad, university-wide awakening to environmental and sustainability concerns.

Focuses on curricular change to support faculty intellectual development to address urgent societal issues.

I. Faculty Workshop:

- faculty from diverse fields learn about environmental issues and sustainability.
- two-day introductory workshop with presentations by faculty and resource experts on:
 - ecology
 - environmental justice
 - campus environmental efforts
 - public health
- two follow-up meetings in which participants report on their progress and share their learning experiences.

II. New Courses

- Interdisciplinary Courses highlight sustainability and environmental awareness within course
- *Science and the Sound of Water (Biology, Environmental Studies, Music)*



Certificate Programs on other Campuses

University of Colorado at Boulder

Certificate on Environment, Policy and Society

- interdisciplinary inquiry
- social dimensions of environmental issues
- apply experiences to a "real-world" issue



University of Georgia

Environmental Ethics Certificate Program

- non-degree program
- provides an interdisciplinary forum to discuss social and scientific responsibilities toward our environment.

UMASS
AMHERST

Sustainability Certificate



SUSTAINABILITY is within our
to keep up or keep going, as an action or process



**Open for comments,
suggestions, discussion**