New England Sustainability Summit 2010: A Climate Change on Campus

Michele Wakin – Associate Professor of Sociology and Co-coordinator Center for Sustainability

Bridgewater State College, Bridgewater, MA
http://www.bridgew.edu/sustainability
Mission: To foster the study and application of sustainable practices both on campus and throughout the region

Goals
(a) Transforming BSC into a flagship institution for sustainability with respect to its educational offerings, operations, student involvement, and research.

(b) Using the college’s experience and expertise to assist local government, industry, agriculture, municipalities, and non-profit organizations to realize a new vision for a healthy economic, environmental, and social base for the region.
2006-07 Primary Objectives

(1) Develop an administrative infrastructure
(2) Establish visibility and credibility
(3) Conduct an inventory of sustainability initiatives
(4) Support faculty, librarian, and student projects
2006-07 Additions

1. Signing of the ACUPCC – Summer 2007

3. CONNECT Partnership – Sustainability Task Force
<table>
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<th>Area</th>
<th>Leader</th>
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<td>Recycling</td>
<td>Dr. Jeff Williams, Physics</td>
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<td>Food Services</td>
<td>Dr. Arthur Lizie, Communications</td>
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<td>Social Justice and Community Outreach</td>
<td>Ann M. Doyle, MCADOC Outreach Education Coordinator</td>
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<td>Faculty/ Librarian Development</td>
<td>Dr. Darcy Boellstorff *Inventory Geography</td>
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<td>Political/ Economic Development</td>
<td>Dr. Deniz Leuenberger, Political Science</td>
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<td>Education</td>
<td>Dr. Mary Connor, Special Ed. and Communication Disorders</td>
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<td>Campus Planning/ Operations</td>
<td>Dr. Robert Sylvester, Elem. and Early Childhood Education</td>
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Inventory of Sustainability Initiatives

I. ACADEMICS: TEACHING AND RESEARCH
II. FACILITIES, MANAGEMENT, & PLANNING – ENERGY, WATER CONSERVATION & BUILDINGS
III. FACILITIES, MANAGEMENT, & PLANNING – RECYCLING
IV. TRANSPORTATION
V. GREENING THE CAMPUS: GROUNDS, HOUSEKEEPING, OFFICE MANAGEMENT
VI. DINING SERVICES
VII. ACADEMIC AND ADMINISTRATIVE CENTERS
VIII. STUDENT INVOLVEMENT
Departments Offering Courses or other initiatives:

SCHOOL OF ARTS and SCIENCES

**Art** (logo contest, sustainability book project)

**Biological Sciences** (Environmental Biology Concentration, Watershed Access Lab)

**Chemical Sciences** (FYS – *Food, Science, Culture, and Chemistry*)

**Communication Studies** (Living classroom project)

**Earth Sciences** (Environmental Geosciences Concentration, FYS *Global Climate Change*)

**Geography** (FYS *Geography of Global Climate Change*)

**History** (Advisory Board Team Member)

**Mathematics and Computer Science** (faculty expressed interest – STEM participants)

**Philosophy** (Advisory Board Team Member)

**Physics** (*Energy and Social Uses, Renewable Energy, SYS Green with Energy, Energy and the Environment*/ Advisory Board Team Leader)

**Sociology** (Co Coordinator – Advisory Board Team Members/ *Sustainable Cities*)
Departments Offering Courses or other initiatives:

**SCHOOL OF EDUCATION AND ALLIED STUDIES**

Elementary and Early Childhood Education (Advisory Board Team Member)
Movement Arts, Health Promotion and Leisure Studies (Child Obesity Conference)
Special Education and Communication Disorders Department (Advisory Board Team Member)

**SCHOOL OF BUSINESS**

Economics (Advisory Board Team Members, *Environmental Economics*)
Management (Concentration: Energy and Environmental Resources Management)
The Bridgewater State College Center for Sustainability

2007-09 Primary Objectives

(1) Oversee Advisory Board Projects
(2) ACUPCC Task Force Members
(3) CONNECT Partnership
(4) Module Project
(5) Student/Faculty Awards
(6) Strategic Planning
Teaching Module Project

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

I. One page outline of what the module covers
II. Annotated links with web sources or citations
III. Power Point Presentation, video, or other media
IV. Lecture notes/PPW talking points
V. Suggestions for assignments (with grading rubrics)
VI. Statement of Applicability: What other courses/disciplines could use this module?
ENGL 101  WTF?: What’s The Food additive?

Draft a 3-4 page essay, using at least 2 secondary sources, that answers the following five questions:

What is it?
Where did it come from?
How is it used? In what foods?
Why is it used?
How long has it been used?

Feel free to consider including in your draft any information that you learn from your research, such as how your findings relate to the texts/films we have read/viewed and discussed.

Include a works cited page that lists your primary and secondary sources. Refer to your class notes and MLA handout for proper formatting. No wiki!
WTF_List of additives:
1. Aspartame
2. Calcium phosphate
3. Carrageen
4. Corn syrup
5. Erythrosine
6. Glycerin
7. Guar gum
8. Hydrochloride
9. Malic acid
10. Methylcellulose
11. MSG
12. Palm oil
13. Palmate
14. Polysorbate
15. Propyl Gallate
16. rGBH
17. Sodium Ascorbate
18. Sodium Nitrite
19. Sorbitol
20. Sulphur Dioxides
21. Tartaric acid
22. Vanillin
What is Aspartame?
Aspartame is a non-carbohydrate artificial sweetener, having virtually no calories. Aspartame is 180 times sweeter than actual sugar, therefore there is less Aspartame used than sugar.

How is it used?
Aspartame is most commonly used in artificial sweeteners and diet sodas. It is also used in many other food products that are considered “diet” such as Instant Coco Mix, Iced Tea, cereals and gum.

Why is it used?
The reason that Aspartame is used is because it is 180 times sweeter than actual sugar and therefore only 1/200 of a teaspoon can be substituted for a teaspoon of sugar. It also has virtually no calories. So, when drinking a diet soda you feel as if you are contributing to your diet because of the low sugar intake.

How long has it been used?
Aspartame has been around since 1965 but was approved by the FDA in 1981 to be used for low-calorie tabletop sweeteners. In 1983 it was approved to be used for carbonated drinks. In 1996 it was approved to be in all foods such as syrups and snack foods and many more.

Where did it come from?
Aspartame was accidently created by James Schlatter, when he was trying to find a medicine for ulcers. Schlatter mixed aspartic acid and phenylalanine and noticed that it was sweet.

When tested on rats, they began to form tumors which were found to be malignant.
Sustainability and the UN Millennium Development Goals (MDGs)

Teaching Module, 2008

Sandra Faiman-Silva, Ph.D.
Professor of Anthropology

For: ANTH 299
Indigenous Peoples and Sustainability
Spring 2008

Tyler Silva (age 7)
What is the Millennium Development Project?

• The Millennium Project
  – commissioned by the United Nations Secretary-General in 2002
  – to develop action plan to achieve
  – Millennium Development Goals and
  – reverse the grinding poverty, hunger and disease affecting billions of people.

• In 2005,
  – recommendations to the Secretary-General
  – *Investing in Development: A Practical Plan to Achieve the Millennium Development Goals.*
  – *Source: www.un.org/millenniumgoals/*
Millennium Development Project, cont.

- Project's work was carried out by 10 thematic Task Forces, each of which also presented its own detailed recommendations in January 2005.

- The Task Forces
  - 250+ experts including:
    - researchers and scientists;
    - policymakers;
    - representatives of NGOs,
    - UN agencies,
    - the World Bank, IMF and the private sector.

- 2006+
  - implementation of the Project's recommendations,
  - Focus:
    - support developing countries efforts to prepare national development strategies aligned with achieving the Millennium Development Goals.
      - http://www.unmillenniumproject.org/
What are the eight “Millennium Development Goals”?

- **AIMS**
  - to be achieved by **2015**
  - agreed to by **all** the world’s countries and **all** the world’s leading development institutions.
  - An **action plan** for the world to achieve to reverse the grinding poverty, hunger and disease affecting billions of people.
Brainstorm:
What would you include as a Millennium Development Goal?
• Goal 1  Eradicate extreme hunger and poverty
• Goal 2  Achieve universal primary education
• Goal 3  Promote gender equality and empower women
• Goal 4  Reduce child mortality
MDGs, cont.

• **Goal 5** Improve maternal health

• **Goal 6** Combat HIV/AIDS, malaria, and other diseases

• **Goal 7** *Ensure environmental sustainability*

• **Goal 8** Develop a global partnership for development.
Brainstorm:
What is sustainable development and how does it relate to the MDGs?
How do we define sustainability?

• "development that meets the needs of the present without compromising the ability of future generations to meet their own needs”
  Bosire, 2006

• “...sustainable development must be based on three pillars:
  – social development
  – economy development and
  – environment protection”
  Michnowski 2007
The United Nations Millennium Development Project as a sustainability model of development:

- **sustainable development** is
  - development without cyclically returning disasters and the ruins of former life-forms.
  - which in a sustained way combines
    - social development with
    - economic development and
    - environmental protection
  - get/create ability to cross/transcend limits to growth in a sustainable developmental way.

- This will require **human coexistence models** (with others, our environment, biosphere) that are qualitatively different from the present ones.
Some MDG websites:

• UN Organizational Chart

• Millennium Development Goals
Readings: MDGs and sustainability

  - This 48-page report assesses the current status of efforts to reach the MDG’s 2015 implementation target date.
  - It contains charts, graphs, and text describing and analyzing the MDGs.
Module Project Status

BSC Departments Represented

Anthropology
Biology (*new)
Economics
English (*new)
Philosophy
Physics
Political Science

CONNECT
Michele Wakin: MWAKIN@bridgew.edu, 508-531-2514

BSC Center for Sustainability http://www.bridgew.edu/sustainability