

# Building Sustainability on Campus

Findings From Student Research on Education for Sustainable Development at Delta State University



Environment and Society  
SOC 422/522 COD 522

# United Nations Decade of Education for Sustainable Development (2005 – 2014)

“The overall goal of the Decade of Education for Sustainable Development (DESD) is to integrate the principles, values, and practices of sustainable development into all aspects of education and learning. This educational effort will encourage changes in behavior that will create a more sustainable future in terms of environmental integrity, economic viability, and a just society for present and future generations.”

~U.N. General Assembly/UNESCO

# DESD Objectives

The basic vision of the DESD is a world where everyone has the opportunity to benefit from education and learn the values, behavior and lifestyles required for a sustainable future and for positive societal transformation. This translates into four objectives, to

- (1) Facilitate networking, linkages, exchange and interaction among stakeholders in ESD;
- (2) Foster an increased quality of teaching and learning in education for sustainable development;
- (3) Help countries make progress towards and attain Millennium Development Goals through ESD efforts;
- (4) Provide countries with new opportunities to incorporate ESD into education reform efforts

# Policy Initiatives

- State of Mississippi Media Pollution Prevention Act purpose:
  - Promote pollution prevention
  - Require state agency recycling programs,
  - Encourage the recycling industry
  - Promote public education on waste management issues
  - To reduce the quantity of waste generated within Mississippi by a minimum of twenty-five percent

§ 49-31-5, 1994

# Overview of Presentation

- Research Methods
- Define Sustainability
- Knowledge of Sustainability
- Current Efforts on Campus
- Financial and Organizational Barriers
- Future Sustainable Efforts
- Education for Sustainable Development
- Questions



# Sustainability Defined

- “Sustainability is meeting the needs of present generations without comprising the needs of future generations”
  - United Nations World Commission on Environment and Development
- “Sustainability in an instance is not an end point, not resting, but a process”
  - Bartlett and Chase, 2004



# Sustainable University

- Since 1990 more than 300 college leaders have signed onto the Talloires Declaration, which commits them to the pursuit of a sustainable future.
- There is a wide variety of actions that higher-education institutions are implementing across the United States.



-Chronicle of Higher Education 2006  
vol. 53 issue 9

# Sustainable Efforts at Other Universities

- Cornell University's president has identified sustainability as one of three global challenges the university must address.

([www.sustainablecampus.cornell.edu](http://www.sustainablecampus.cornell.edu))

- Harvard University is a leading name with a leading program, Harvard's approach combines student action with facilities management.

([www.greencampus.harvard.edu](http://www.greencampus.harvard.edu))

- Lewis and Clark College is the first to meet Kyoto Treaty carbon emission reductions. Students support and pay for broad-based sustainability initiatives.

([www.lclark.edu](http://www.lclark.edu))



# Research Methods

- Administration: Campus administrators and physical plant personnel were interviewed in order to find what efforts were in place already and the possibility of future efforts. (6)
- Faculty: Key informants and faculty members were interviewed regarding the presence of sustainability in the curriculum. (5)
- Staff: DSU staff members were interviewed to gather their knowledge of sustainability as well as what their department is doing to help promote sustainability. (10)
- Student Groups: Focus groups were conducted to gauge on-campus participation in sustainable efforts and gather recommendations for the future. (36)

# Student Survey Methods

- Electronic Mail
- Random sample of DSU undergraduates and graduate students (500)
- 50 responses received
  
- Consisted of 26 questions
  - Knowledge of sustainability
    - *Ex. “Do you know what environmental sustainability is?” yes or no*
  - Contingency questions
  - Demographic questions
    - Age, ethnicity, gender, current major



# Is Sustainability a Priority at DSU?

“I think sustainability is really important...not enough is done. We (all) have to work to save the environment. Everybody needs to work together.”

- There was a consensus from all administration that environmental sustainability was not high on the priority list at DSU.
- Many expressed that it should be on the front burner rather than the backburner.
- Student groups felt that the overall beautification of the campus would be a great start to implementing sustainability.
- Students stressed that the campus would be more environmentally friendly if there were more benches, trees, water fountains, and recyclable trash bins.
- *“Without measure, there can be no management.”*

# Knowledge of Sustainability

- “It’s about redirecting society in fundamental ways, solving problems in higher education, where you break things apart into their component pieces and you get at the essence of things by getting at the smallest piece.”
- “Without ***accountability*** there is no ***sustainability***.”
- “Here at DSU the infrastructure that we already have in place is very important in the sustainability of the campus. The policies, rules and regulations of DSU are designed for sustainability.”

# Knowledge of Sustainability

Do Students Know What Sustainability Is?

“I know what environmental sustainability is.”

- Students enrolled in the College of Education at DSU
- Students enrolled in the College of Business at DSU

Above the entrance to the College of Business:

“Enter by this gateway and seek the way of honor, the light of truth, the will to work for man.”

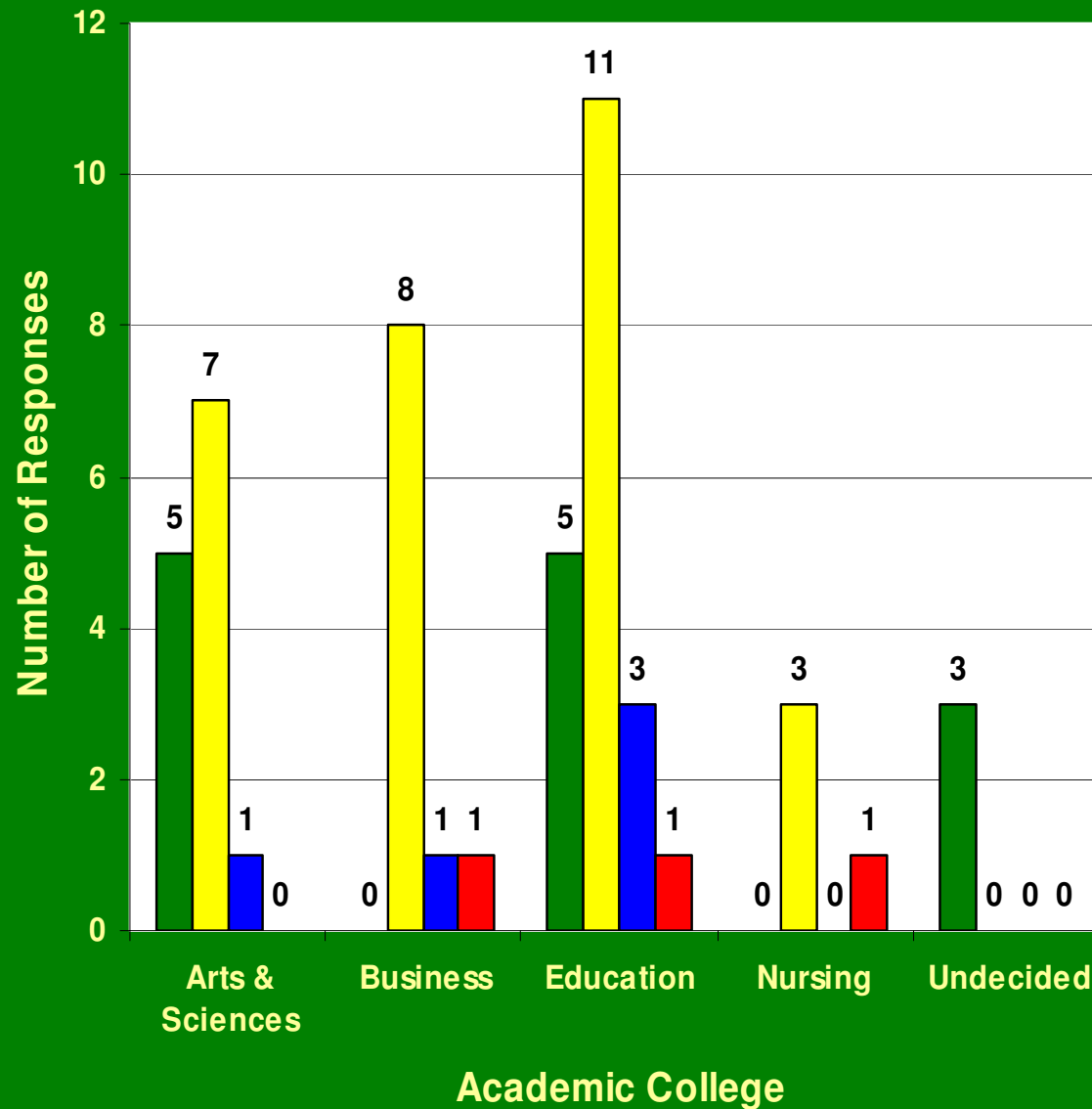
# Knowledge of Sustainability

## “Treadmill of Production”

- “Which of the following most closely matches your opinion on ecological resource issues?”
  - We need to utilize resources more carefully (28)
  - Global consumption already exceeds planetary capacity; we must use less (13)
  - There might be a problem but there is nothing we can do about it (5)
  - There is no problem (3)
- Results show that most people in our sample believe that we have a global overconsumption problem.



## Perceptions of Ecological Resource Issues by Academic School



- Global consumption already exceeds planetary capacity; we must use less
- We need to utilize resources more carefully
- There might be a problem but there is nothing we can do about it
- There is no problem

# Current Efforts

## What is Being Done?

- Who is primarily promoting a sustainable DSU campus?
  - 56% students, 19% staff, 15% faculty, 10% other
- Housing
  - Dorm programs highlighting environmental awareness, some having recycling canisters located in their lobbies.
  - Hosting Clean Your Own Campuses
  - Bicycle rack located in front of dorms.
- Campus Bookstore
  - BuyBack efforts to buy back used books from students, that in turn, if not sold, are boxed up and sent back to the company for recycling efforts
  - Boxes are broken down and are set aside for other departments to use for moving purposes.
  - Interested in a campus wide recycling effort, maybe even hosting a drop site for unwanted products.
- Athletics
  - Following the guidelines set forth by the Bureau of Buildings and Ground and the Institution of Higher Learning.
  - In the process of building a walking trail and conducting an environmental impact study.





# Current Efforts

## What is Being Done?



### •Physical Plant

- Recycling office paper and cardboard (18,000 lbs / month)
- Recycling motor oil and properly disposing of wastes produced on campus
- Renovating building to make more energy efficient with cooling tubes within buildings

### •Department of Arts and Sciences

- Sculpture Garden to be located in front of the BPAC-will enhance the campus.
- Students in Biological and Physical Sciences and the Madison Center in Social Sciences collect cans and donate the money to charities

### •Food Services

- Separate cardboard from scrap. we have a compactor that breaks the cardboard down to a small size. [at this point, the interviewee made a shape with his hand showing that the size would fit in his hand]

### •Library Services

- In the past, Library Services has participated in a campus recycling paper program and attempts to be mindful of electrical conservation.

# Organizational Barriers

- One of the common threads that came up was that we should keep our campus clean.

“It is everyone’s responsibility to keep our campus clean and safe.”

“People litter on campus because they know it will be picked up.”

“Students should come together organizationally and treat campus as their front yard.”



# Organizational Barriers

- Organizations should try to incorporate sustainability as part of their group activities to promote awareness.
- There are too many different committees. People are already so involved it will be hard to get them to buy into another committee.
- There is not one clearly defined unit on campus to deal with sustainability.
- Staff is here year-round so they might be a good place to start.

# Financial Barriers

- Money is a problem
  - The legislature has not granted any additional funds in the last six years other than for salary.
- Alternative suggestions
  - Donations from alumni.
  - Student organizations should do more to get the ball rolling.
  - Offer incentives to get students to practice sustainability.
  - Have fundraisers.
  - Apply for grants.
  - Severe punishments and fines to get the attention of the students.



<http://www.4-makingmoney.com/images/money.jpg>

# Suggestions for Future Sustainability

“People just don’t realize the importance of it.”

“We start by preserving what we have and take all necessary measures to keep things nice as it is or to make it better for our children.”

“Each person on campus should develop a strong commitment for sustainability, this is our world, we must keep in mind sustainable practices everyday.”



# Suggestions for Future Sustainability

- Create an Office of Sustainable Practices to oversee projects like the ongoing Energy Audit.
- This could serve as a model for the other Universities in the State System – “We like to do things before the Big Three.”
- Get students, campus staff, and faculty more involved in sustainability through collaborative efforts.
- Incorporation of environmental sustainability into curriculum.
- Create an Environmental Awareness Day which integrates students and local community members.



# Suggestions for Future Sustainability

- “The highest energy cost at DSU is the cost of lighting the buildings”
  - New automated systems (like those already in the Union) are becoming cheaper.
- An activity students are most likely to do to conserve energy
  - 80% said turn the lights off when they leave a room
- Temperature Control
  - Current central control for temperature settings only reaches 40% of the campus, this needs to be higher.
  - Setting the thermostat lower (winter) or higher (summer) when the buildings are not in use over holidays and weekends.
  - Improve the insulation in existing buildings to better regulate temperature.



# Suggestions for Future Sustainability

- **Increasing Current Recycling Efforts**

“People should take pride in recycling efforts on campus. It serves their own self-interest: A clean campus equals a safe campus”

“Recycling, especially paper and cans, should be made more visible and easy. Centrally located bins clearly marked for paper and aluminum in every department.”

- **Computers**

- Computers are left idling overnight in most offices on campus.
- Monitors should also be turned off when not in use.

- **Other Ideas**

- Encourage “paperless” practices in all departments (online assignments, email, WebCT,)
- Charge more for printing on campus.
- Put all night classes in as few buildings as possible.





# Sustainable Development in the Curriculum

- **Suggestions for implementation:**
  - Policymakers, administrators, and teachers will have to make changes, experiment, and take risks to accomplish new educational and sustainability goals in the classroom settings.
  - Policymakers need to develop and implement policy procedures to ensure administrators and educators at all levels have the right to introduce new topics and pedagogical methods.
  - These issues should be addressed at every level, especially the national level, to ensure consistent implementation of sustainability into the curriculum across the country.
- **Positive perceptions:**
  - Adding sustainability to the curriculum would allow students to learn about environmental sustainability through their different programs.
  - This would encourage and educate everyone to be more aware of the environment.
  - Currently, students only learn what is being applied to their field of study.
- **Negative perceptions:**
  - Students may be reluctant about learning if it is forced upon them.
  - This would cause professors to take focus away from curriculum already in place

# Summary of Findings

- Knowledge of sustainability varied amongst participants as a whole, however, most participated in some sort of sustainable practice.
- Overall, recycling was the most provided answer given when asked what could be tackled individually and by a group.
- Financial barriers and organizational barriers need to be addressed for expansion of sustainable efforts to occur
- Many participants stated they would be willing to work to help further promote sustainability on the DSU campus.
- Integrating sustainability into the curriculum is seen as a generally positive idea that may require a position to oversee the process and implementation



**ESD@DSU**

Education for Sustainable Development  
at Delta State University



“Universities are public institutions, which must assume a leading role in creating environmental awareness and in promoting possible solutions to existing problems. This can be achieved by changing their management practices as well as curriculum content. Universities can become model centres for sustainable practice and set an example to other public and private institutions.”

~S. Calvo Roy, J. Benayas and J. Gutiérrez Pérez

in D. Tilbury, R.B. Stevenson, J. Fien and D. Schreuder, *Education and Sustainability: Responding to the Global Challenge*. IUCN Commission on Education and Communication, Gland, Switzerland and Cambridge, UK. 2002.



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The ESD@DSU Project is a group of concerned faculty, students, staff, administrators and community members at Delta State University in Cleveland, MS, who are committed to putting sustainable development in place on the DSU campus.

The ESD@DSU initiative has five components:

- Public Education
- Curriculum Development
- Facilities Management
- Student Organizations
- Sustainability Inventory.



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For more information:

**[http://ntweb.deltastate.edu/vp\\_academic/abarton](http://ntweb.deltastate.edu/vp_academic/abarton)**

Click on “Education for Sustainable Development”

# Questions / Comments

Thank you for attending.

