

Creating A General Education Sustainability Class

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Executive Summary

The problem that we saw on campus was a lack of knowledge of sustainability and a disconnect between Western's mission statement to "advance responsible environmental stewardship" and action on campus. To help remedy this situation, we worked on a project that was focused on developing a course focused on sustainability and gauging student's interest in taking such a course. To find out student's interest and to access what student's current knowledge was, we created a survey which we distributed to approximately one hundred and ten students. We found that a lot of people had an interest in taking a course on sustainability and some students didn't know basic sustainability information such as U.S. population and information about climate change.

The main point that we wanted to get out of our project was to prove that student's basic sustainability knowledge was lacking, that people would be interested in taking a course, and it would be beneficial to many aspects of Western's campus.

In the future, this project could be taken to a deeper level by distributing the survey again to a larger number of students to get a more representative sample. Along with the Peer Education Group project done by some of our peers in our class, this course could educate a large number of students across campus on sustainability issues.

Introduction

In the rapidly changing economy our nation faces, it is necessary for individuals seeking a higher education to compliment their disciplinary training with expertise in order to learn integrative inter and trans-disciplinary problem solving skills. This notion is reflected in the sustainability reports of many leading companies like Nike, Interface, Steelcase, and Dow Chemical.

Our project goal was to begin initiating university wide conversation on the possibility of WMU offering a general education course on sustainability.

As a group of upper level students who have first hand experience of courses at Western Michigan University, we feel there is a tremendous opportunity to build sustainability/ecological literacy into the General Education Curriculum. We are concerned about adding this course because we feel that environmental and sustainability issues are not thoroughly discussed in courses and the effects will clearly have an impact on our future.

We wanted to evaluate and assess the extent to which WMU has promoted responsible environmental stewardship through a survey and explore the potential of creating a new general education requirement by either modifying current courses or offering new courses to help advance the goal of responsible environmental stewardship.

If WMU would offer and promote a General Education course on sustainability issues it would likely increase recruitment and retention by providing students with such a unique opportunity. Students may show an increased interest in pursuing a double major or minor because they were so intrigued by the course content. This course could foster faculty development through inter and intra college collaboration bringing the University together. Offering a course on sustainability would give WMU recognition for striving to educate students on critical issues while better preparing students for a volatile, dynamic, and increasingly demanding work environment.

The Western Michigan University Mission Statement clearly sets a goal to “advance responsible environmental stewardship”. As students at WMU, we are proud our school has addressed this issue. A General Education course on sustainability issues

could act a leverage devise in further advancing this goal and promoting the practice throughout the university.

Methodology and Data

Our group concluded that in order to make students a sought-out group in the job market today they have to be informed about sustainable and environmental issues. Knowing these topics are a key resource that will aid in their conquest in finding a promising career. The group decided that in order for this to occur, a general education class focusing on sustainability issues needed to be added to the curriculum here at Western. We needed to find out what it takes to change curriculum so the class met with Wendy Ford, and from this meeting our group learned that in order to change curriculum you need four major things:

- 1) Campus-wide dialogue on adding the course
- 2) Faculty support to teach the course
- 3) Administrative support
- 4) Incentives to promote a cross-college, interdisciplinary collaboration and cooperation (faculty development opportunities)

After this meeting we discussed how we were going to effectively make this change on campus. We discovered that the first step in making this change was to research other campuses that had sustainability/environmental studies incorporated into their curriculum and education programs. The campuses researched were the University of British Columbia, Aquinas College in Grand Rapids, and the University of Wisconsin and Wisconsin-Madison.

Once the research was done we created a survey designed to gauge students' basic environmental knowledge and their perception of environmental issues. The survey asked questions on issue such as:

- U.S. and world population
- Climate change
- Human impact on Earth
- Environmental business practices
- Opinion-based questions measuring their concerns and interests in these issues
- Interest in taking a course on sustainability
- How well they thought WMU models environmentally responsible stewardship in its curriculum, operation, and facilities management.

Once the survey was created we had to disperse the survey across campus to a variety of students with different majors and background. Unfortunately we were only able to survey one hundred and ten students and the majority of them were senior business students, so the amount and range of students we were hoping for wasn't met but the results still have significant information.

The results show:

- 50% of the people surveyed didn't know how much of the Earth's resources the U.S. uses in relation to our population
- 41% didn't know what type of energy our region uses
- 83% do not know what the projected world population will be in 2050
- 51% don't feel that WMU has taught them sufficient information about environmental issues
- 84% of students feel that the interests of all living things should be considered when making decisions
- 62% said that they would be interested in taking a course at WMU about environmental and sustainability issues
- 80% strongly feel that we need to protect the environment for future generations
- 85% feel that Western doesn't model environmentally responsible stewardship in its curriculum, operation, and facilities management
- 76% feel that strict environmental regulation, rather than causing businesses to fail, drives innovation, competition, and profit.

After analyzing the data, the interest for a class and sustainability issues is evident and there is no reason other than the finances, that the curriculum change shouldn't have a positive response.

Examples of Best Practice on Campus

Since there is no course concerning sustainability currently in place at Western, there really isn't any "best practice." However, on the survey we conducted, we asked a question where respondents could fill in a current class offering at Western that they felt was beneficial to learning environmental and sustainability issues. There were two different courses that a few respondents wrote down that they felt exemplified these issues. These courses were: Geography 1000 – World Ecological Problems and Geosciences 3200 – Ocean Systems. These two courses might have topics that could be covered in the new general education class that we proposed.

Examples of Best Practice on Other Campuses

Other campuses around the country are getting more involved with environmental issues and sustainability. Our group researched the following universities: the University of British Columbia, University of Wisconsin-Madison, and Aquinas College.

The University of British Columbia (UBC) is a campus which has gained a reputation for paving the way for other sustainable campuses. In 1997, UBC became Canada's first university to adopt a sustainable development policy. A year later they became the first university to open a sustainability office. In 2003 they again became nationally recognized for being the first university in Canada to receive Green Campus Recognition from the U.S.-based National Wildlife Federation.

A member of our group met with Heather Scholefield; Manager, UBC Sustainability Strategy on the campus of UBC. Heather discussed different programs that UBC has implemented and initiated on and around campus. She discussed how well students, faculty, and administrators liked the innovative ideas and how all parties

involved felt taking action to become and promote a sustainable campus was the right choice.

Mission:

The University of British Columbia will provide its students, faculty, and staff with the best possible resources and conditions for learning and research, and create a working environment dedicated to excellence, equity, and mutual respect. It will cooperate with government, business, industry, and the professions, as well as with other educational institutions and the general community, to discover, disseminate, and apply new knowledge, prepare its students for fulfilling careers, and improve the quality of life through leading-edge research. The graduates of UBC will have developed strong analytical, problem-solving and critical thinking abilities; they will have excellent research and communication skills; they will be knowledgeable, flexible, and innovative. As responsible members of society, the graduates of UBC will value diversity, work with and for their communities, and be agents for positive change. They will acknowledge their obligations as global citizens, and strive to secure a sustainable and equitable future for all.

UBC has “branded” themselves as a sustainable campus. They have affectively incorporated sustainability into all aspects of campus life from greening the campus to creating world renowned development programs which has ultimately saved the university millions of dollars, reduced the campus ecological footprint, and improved campus life.

UBC’s most recent initiative is *Inspirations and Aspirations: The Sustainable Strategy*. It is a five-year plan that outlines UBC’s goals, objectives, and action plans for improving the institutions economic, social, and ecological performance. The university aims to improve human health and safety by creating a model sustainable community, and increase the understanding of sustainability inside and outside of the University. UBC aims to ensure ongoing economic viability by maintaining and enhancing the asset base through grant work and government funding. The ecological goals set by UBC include reducing air pollution and the conservation of resources.

The University of Wisconsin (U. of W.) has developed a five option or module approach to sustainable agriculture. These options include a general introduction to sustainable agriculture, field crops in sustainable agriculture, animals in sustainable agriculture, sustainable horticulture, and organic agriculture. The University of Wisconsin-Madison has added this pilot curriculum as a part of their North Central Region Sustainable Agriculture Research and Education Program (SARE). The programs is designed to be taught from five to fifteen hours of class/lecture time, immediately, and with no prerequisites.

U. of W. has also recently named a special institute after a environmentalist and former senator Gaylor Nelson. The institute focuses on a wide variety of environmental issues including renewable energy sources, water quality, sustainability, and the like.

Aquinas College has a course entitled “Environmental Business Management” and also has a Masters of Management Degree with a concentration in Sustainable Business. Aquinas also has a sustainability incentive program that inspires innovation and creativity while concentrating on restoring and protecting the natural beauty surrounding the college, and strengthening the financial stability and social relationships. The incentive program gives students a chance to share their ideas on changes that can be done around campus and the community and gives them the outlet to let their ideas be heard on a wide level and aids in possible implementation of their ideas.

Discussion

After distributing our survey, we analyzed our data and found some interesting trends. We found that fifty one percent of the people surveyed feel that WMU has not taught them sufficient information about environmental issues. We also found that only sixteen percent know what the projected Earth population will be in 2050. Sixty-two percent said that they would be interested in taking a course at WMU that focuses on environmental and sustainability issues. This fact is particularly important for us because the ultimate goal of our project was to implement a General Education Sustainability course. Another fact that we found from our data was that fifty percent didn't know how much of the Earth's resources we use in relation to our population. Finally, we found that forty-one percent of respondents didn't know what kind of energy the Southwest Michigan area uses.

After seeing these results, it shows how a course like the one we are proposing could make a positive impact on Western's campus and could be the start of a more sustainability-focused campus. After meeting with Interim President Haenicke, he agreed that a course focused on sustainability should be offered at Western.

Limitations of our Analysis & Future Work

As a group, we did face some problems with our survey. We were only able to distribute one hundred and ten surveys. Also, the people that we had the easiest access to were primarily seniors and either Business or Environmental Studies majors which makes the sample not representative of the entire campus.

Some problems that we faced with the survey itself was some people seemed apprehensive to fill out a survey with nineteen questions on it and some didn't like the

questions that were based on factual information because they felt like they were being tested.

In the future, this project has the potential to create positive change on Western's campus. A future group of students could use the study that we've already created to get a more representative sample from students around campus. We could also use the response that the Environmental Peer Education project receives to gain further interest in a course on sustainability. With the support of President Haenicke, who has already shown an interest in this course, and whoever is appointed as the new University President, this course could become a reality for the Fall '08 semester.

Conclusions and Recommendations

Western Michigan University should offer a General Education course on sustainability.

One possible strategy is to provide incentives to each college to choose one person who will collaborate in an interdisciplinary, cross college, team-taught class. It could be taught as a large lecture with small break-out sessions. This could bring both faculty and students from the entire university together. A summer workshop to facilitate support this class could be initiated right here on campus by existing faculty.

Northern Arizona University developed a pilot program called the "Ponderosa Project". The Ponderosa Group consists of NAU faculty members from various disciplines who share a common vision of education for environmental sustainability. Participants in the Ponderosa Group have attended an intensive three-day training workshop in which they learned about environmental issues and how to incorporate such

issues into course materials. After their training, participants revised syllabi for selected courses to include environment-oriented content. The Ponderosa Group meets regularly throughout the academic year in support of this ‘greening’ of the curriculum project.

WMU could adopt a similar approach in order to generate the most relevant material for the class and also promote a group learning approach.

Offering this class could be the first step toward creating a sustainable campus for WMU. In order for WMU to be one of the leading learning institutions in our area, we feel it is reasonable to also set the following long term goals: 1) for WMU to make a commitment to reach the goals set forth by the Kyoto Protocol, 2) sign the Talloires Declaration, and 3) develop a sustainability plan for WMU and implement it.

This is a unique opportunity for WMU to better serve current and incoming students. We would like to ask for a summer research opportunity to create a more sophisticated survey, build on the preliminary data, and gain further knowledge about student and faculty awareness and interest.

References

Websites used:

Aquinas College: www.aquinas.edu

University of British Columbia: www.ubc.ca

University of Wisconsin: www.wisc.edu

Appendices

1. Current Contact List

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2. Contact List

Dr. Harold Glasser: Instructor for ENVS 4100

Wendy Ford: Associate Dean for the College of Arts and Science

3. Attached Documents

A copy of our survey that we handed out is attached.