

# Environmental Peer Education Project

Lucy Kurtz  
Steven Eick

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Dr. Harold Glasser

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## I. Executive Summary

Our project focuses on informing students about environmental and sustainability issues. We analyzed student survey data collected by the General Education Curriculum Change group, and we found that the students felt that Western Michigan University hasn't adequately informed them about sustainability and environmental issues and that they would take a class focusing on these ideas. Since employers are searching for graduates educated in sustainability concepts, students should be receiving a strong sustainability and environmental background so that they are more likely to receive a job.

A quick solution to the need for an educational class that can inform students of sustainability and environmental issues is a peer education group. A peer education group is a way for students to be informed on the subjects they will be required to know and implement in their future professions. Our peer education group focuses on educating students about the basic concepts of sustainability, biomimicry, carbon footprints, natural resources, pollution, and actions that they can take to lessen their impact on the environment. It is designed to be an interactive presentation, so that the students are involved and can have any questions that arise in their minds answered as soon as they think of them. This helps to make the presentation stay with them long after it is over.

Research suggests that students respond to their peers because their peers have credibility. When people believe that a speaker or teacher can relate to and understand the world they live in, they are more able and willing to personalize the message being presented, therefore they are more likely to change their destructive attitudes and practices.

Student run environmental organizations on and off campus serve as inspiration and support for the subject we are teaching. Although we did not find information on any environmental peer education groups, farms-to-K, EnvOrg, Students for a Sustainable Earth, Fair Food Matters, and the Kalamazoo Environmental Council are all local Kalamazoo groups that support our cause and work to educate students and the community with their own programs.

Despite the lack of environmental peer education groups, we did find that there are many successful peer education groups of other varieties all over the country. One particular conference in Anaheim California has a general focus on peer education that would be appropriate and beneficial to our fledgling group.

In general, our project will fulfill the need to educate students on the important issues related to sustainability and the environment. Our program is short, to the point, and informational; this will keep students' attention while teaching them a lot about the issues. We would like the full support of the administration in the implementation of this program, because their support would greatly assist the program during its fledgling presentations while the details and issues are worked out. We hope that the interest in our program will spur students into wanting to learn more about the environment and sustainability, perhaps leading to a curriculum change at Western Michigan University.

## II. Introduction

In recent times, sustainability has become a buzzword, global warming is an imminent threat, and environmental issues are quickly climbing political agendas. How many incoming college students truly grasp the concepts of modern environmentalism as it relates to the Earth's various adversities? How many young people can define sustainability or can explain the difference between "organic" food and "natural" food? Do they understand what a carbon footprint is? Although some will have some prior knowledge, there are large gaps in the education provided to students on environmental issues; there is an incredible need for creative integration of sustainability into the general education curriculum. Businesses and organizations are searching for employees that understand sustainability, and by providing students with a basic understanding of sustainability and environmental issues they will be more marketable to businesses and organizations that are looking to hire them.

Our project is intended to address this knowledge gap and provide a way to infuse environmental sustainability into the general education curriculum. By providing undergraduates with sustainability knowledge, they may be more aware of their role in the environment, boosting their educational experience at Western Michigan University as well as adding to their qualifications while searching for a position after graduation.

The goal of our project is to develop an interactive presentation that informs students of the interconnectedness of man and nature, their lifestyle and its effects, problems caused by a lack of sustainability and misuse of nature, as well as existing ideas and technologies that can help students make changes to increase the sustainability of their lives. Once developed, the peer education group will fine-tune the information presented, methods of interacting with the students, and other pertinent details relating to the presentation so that it will be as effective as possible. Another goal of this project is to perform a pilot presentation and be provided some feedback on the script, PowerPoint slides, how well the educators interacted with the students, and applicability of the information provided.

If the students' need for a class that teaches the information necessary to understand sustainability and environmental issues is not addressed, there may be some unfortunate consequences. It can affect student retention rates, because students may choose to switch schools due to the lacking curriculum. It also affects students because they are not getting the maximum preparation for the real world as more and more employers are searching for people with knowledge of sustainability and environmental issues. Students graduating would lack the information to help stop environmental degradation from happening, adding to the amount of damage done to environmental systems that are necessary for human life.

### III. Methodology and Data

In order to see if there was a need to educate students in the ways of sustainability, we decided that we would use survey data to get the general idea of what students thought. This would provide us with a quick look at how students feel about the education they are receiving at Western Michigan University, as well as their feelings of adding a course that focuses on environmental and sustainability issues. The survey could also test their current knowledge of environmental facts; this would give us the knowledge of how well they have been informed on specific issues. Fortunately, another group in Dr. Glasser's Appropriate Technology and Sustainability – Campus as a Living Laboratory class, the General Education Sustainability Class Project, was already in the process of gathering this information from students through a survey. They generously allowed us to interpret the data that they had collected so that we could get a feel for students' feelings on environmental issues and environmental information taught to them, and their receptiveness to a new class or program that teaches about sustainability and environmental issues.

After looking through their data, we found a few pertinent facts. The data indicated that 51% of the 110 students surveyed feel that Western Michigan University has not taught them sufficient information about environmental issues. This shows the dissatisfaction students feel about the general education they are receiving. Responses to another question from the same survey states that 63% of students would be interested in taking a class at Western Michigan University that focuses on environmental and sustainability issues. This means that the student body would be willing to participate in the environmental peer education presentation. In addition, the survey had seven questions on environmental facts. When comparing the answers given by the students to the correct answers, the students had an average of 62% correct with a standard deviation of 18%. This means that there was a wide variance among the scores. The lowest score were 14.3%, and the highest was 100%, but the median was a measly 57%. In general the percent that the students got correct was much lower than it should have been. The analysis of this data was performed using MiniTab, a statistical analysis program. These survey results show how little students know about these issues, as well as present the students' request for a class that will increase their knowledge of environmental and sustainability issues.

Knowing that the student body is not properly educated in the area of sustainability and environmental issues, we decided that a peer education group could address the issue. One alternative solution included adding a course to the class list and making it a requirement for students to take. Another alternative solution was to infuse sustainability concepts into the existing course curriculum. Since we knew that the General Education Sustainability Class Project was preparing to get a general education curriculum change, it eliminated the alternative project of adding a class because we would be competing with their group to try to get the administration's attention. We could have attempted to infuse the sustainability information into the existing curriculum, but that process would be very difficult, would cost a lot of money, and would have to deal with a lot of

resistance from professors and administrators. Thus the educational peer education group seemed the perfect first step towards educating the student body at Western Michigan University on sustainability and environmental issues.

This idea stemmed from the Sexual Health Peer Education Program that already exists on campus. The Sexual Health Peer Educators work out of the office of Health Promotion and Education at Sindecuse Health Center. The director, Linda Lumley, wrote the scripts for three presentations focusing on sexually transmitted infections, contraceptives, and a residence hall script that incorporates information on responsible drinking and relationships.

The peer educators are chosen by an application process, which includes an interview. There are about 230 peer educators in all, and they are required to attend class once a week and participate in a practice session once a week. As well as attend a one on one session with an experience peer educator to practice their scripts and ask any questions they may have.

The program involves a two semester commitment, the first of which is used to train new educators and the second gives them many opportunities to present to local high schools, college classes, sororities, fraternities, and residence halls.

There are three paid positions involved in the program; the director, and two student coordinators.

This program and set up has been very successful thus far in educating students on sexual health issues, and for that reason the Environmental Peer Educators have chosen to format their presentation style after the Sexual Health Peer Educators.

## IV. Examples of Best Practices on Campus

At Western Michigan University the registered student organization, Students for a Sustainable Earth, works to promote attitudes and practices in the university and the surrounding community that are ecologically and culturally sustainable. This entirely student run group brings in presenters to speak on subjects ranging from sustainable food systems to how to incorporate environmental practices into a business. Although they do not have a set presentation, all SSE events are focused on educating the student population on environmental stewardship.

Students for a Sustainable Earth has also agreed to provide the first set of Environmental Peer Educations for next year to help get the program off the ground. Whether or not the Environmental Peer Educators stays an SSE project for the long term is yet to be determined.

The Western Student Association also has a campus Concerns Committee that focuses on campus environmental issues. This committee has collaborated with SSE to pursue projects that are in the best interest of all Western Students. WSA recently passed a resolution stating that they opposed further bus cuts by the university.

The WMU Environmental Studies program also serves to educate the general student body. Dr. Harold Glasser has organized an educational speaker series in the past, and Dr. Lynne Heasley was the leading organizer in the 2006 “Shared Waters” Great Lakes Symposium.

## V. Examples of Best Practices on Other Campuses

There are many peer education programs in existence, ranging from gay/lesbian/ally peer education and outreach groups, to sexual health peer education, to alcohol abuse peer education. However, there are few environmental peer education groups around the country, and we found little information on the programs that do exist.

Instead we focused on the local groups that promote sustainable practices at Kalamazoo College and Kalamazoo Valley Community College. The work they do serves as inspiration for the things taught in the environmental peer education presentation.

Kalamazoo College has a number of groups that promote sustainability. Farms-to-K is a group that works closely with the local organization Fair Food Matters to bring local foods to the Cafeteria on Kalamazoo's Campus.

EnvOrg at Kalamazoo College, or Environmental Organization, is similar to Students for a Sustainable Earth in that they work to educate students on environmental issues. EnvOrg is highly involved in the school's successful recycling program. Their mission is "to promote environmental awareness in ourselves and on campus, and to provide opportunities for student, campus and community involvement with environmental issues, initiatives, and the environment itself."

Kalamazoo Valley Community College also does their part to bring speakers and organize events for their students and the Kalamazoo community. This year they held an Alternative Energy Fair that provided information on some of the leading alternative fuels being researched today.

## VI. Discussion

Research has been done to support the theory that people are more apt to hear and personalize messages if they feel that the messenger faces the same concerns, pressures and dilemmas that they do. By personalizing the message they have a greater chance of changing their destructive attitudes and behaviors.

Many studies have shown that their peers influence youth's health behaviors in regard to sexuality, violence and substance use and abuse. We believe that the same is true for environmental education. If a student is shown by another student that the way they live is destructive, and that there are feasible alternatives, they are more likely to change their lifestyle in favor of a more sustainable one.

Young people have credibility with their peers, and peer education draws on the leverage and power of role modeling. It is flexible, feasible, and helps to meet the diverse needs of today's youth (Mason, p. 1).

That young people gain more from an experience when they are actively involved is a core premise of peer education and youth development. Direct youth involvement offers potential benefits to the young people, both those who help to develop the program and those served by the program (Peer Education, Youth Development, and Youth-Adult Partnerships, p. 1-3).

Peer education is based on the social learning theory asserts that people serve as models of human behaviour, and some people (significant others) are capable of eliciting behavioural change in certain individuals, based on the individual's value and interpretation system (Bandura, 1986).

Many advocates of peer education claim that this horizontal process of peers (equals) talking among themselves and determining a course of action is key to the impact of peer education on behavioral change (Module 1 Peer Education, p. 1-2).

Because peer education has been shown to be an effective alternative way to reach young people, Western will pioneer a movement of environmental peer education programs that focus on the next leading generation in environmental policy and active participation in working to find alternative energy sources, decrease our nation's carbon footprint, and use our resources in a way that is viable for the long term. The torch has been passed, and now we are borrowing the Earth from future generations, as our parents and grandparents borrowed the Earth from us.

## VII. Limitations of Analysis & Future Work

Some of the limitations we encountered while working on this project include the lack of large population size for the survey. The surveyors collected responses from only 110 students on campus. This somewhat limits our analysis of this data, because the student population at Western is significantly larger, meaning that it is somewhat difficult to say with any accuracy that the results of the survey fully represent the feelings and thoughts of the entire student population. If given the chance, we would prefer to give the survey to a significant number of students that vary in age, educational status, major, and interests.

Another major limitation to our analysis was time restraints. The amount of time needed to perform all the required work for this project as well as all the other unrelated tasks was monumental. We often found ourselves slowly falling behind our timeline. In addition, the survey results were only recently compiled; the analysis of the data is not fully completed and more information may be awaiting us within the data.

We also found it difficult to perform numerous pilot presentations. Because of the time restraints and the depth of information that needed to be organized into an interactive presentation, the pilot presentation was scheduled to be completed during the last week of classes of the spring 2007 semester. The pilot gave us valuable information on what changes might be made, as well as what topics should be emphasized and which should be minimized. The information from pilot presentations will allow the development of the Educational Peer Education Group to continue to its maximum potential, but more than one presentation is necessary for that to happen, and time will be needed in order to make the changes to the script, slides, and general presentation.

Preparations have yet to be made to prepare future peer educators for performing this presentation. Although the script has been written, and the slides have been made, there is no architecture to support incoming educators except that they learn directly from previous educators, which may be difficult. Though it is just a minor limitation, it can cause complications in the near future.

Our pilot presentation was performed in the residence halls, specifically Valley II. Originally we planned on presenting the pilot to the general lecture of the courses that fulfill Area VIII, Health and Well Being. Lack of communication from the faculty, most likely due to busy schedules, caused this avenue to be closed to us for this semester. We would like to try to get our peer education group a class period within these classes during the Fall 2007 and/or Spring 2008 semesters. This would give us a larger audience and allow us to reach many students of many different majors.

After this semester is over, this project will need a group to take it over so that it can be extended past this semester. Our solution to this problem is to hand our project over to the Students for a Sustainable Earth, so that they will continue to pursue the environmental education of the student population. They will take the accomplishments we have made to date and continue to improve the presentation.

## VIII. Conclusions and Recommendations

We found that there was a definitive gap in knowledge of environmental issues among students at Western Michigan University. This was found from the data gathered in a survey of the student body. It supports the idea of utilizing a peer education group, because a peer education group would fulfill the need for a class that would teach students the basics of environmental and sustainability issues.

We recommend the full support of the administration in the implementation of an environmental peer education program. The peer education group would benefit students, by preparing them for the real world, as well as professors, by providing their students with more knowledge so that they will be able to learn more difficult material easily, and even administrators, because a better environmental education may increase student retention rates.

Funding from the Administration for 2-3 peer educators to attend the annual Bacchus Network “Search Among the Stars” peer education conference in Anaheim California next November would significantly help the group learn the best techniques for organizing and running a student initiated peer education group.

<u>Description</u>	<u>Individual Cost</u>	<u>Number</u>	<u>Cost</u>
Conference Cost	\$250	2-3 Students	\$500-\$750
Plane Ticket	\$380	2-3 Students	\$760- \$1,140
Hotel	\$129/night	4 nights	\$516
<b>Total</b>		<b>\$1,776-\$2,406</b>	

Additional help would be appreciated in helping the Environmental Health Peer Educators locate a projector for their use on a regular basis. Also, a stipend for the group coordinator of \$2000 for two semesters of work would help make the time commitment to teaching and improving the script more realistic, as both initiators of the project are working students. A budget for the first year of the program may look like this:

<u>Item</u>	<u>Description</u>	<u>Cost</u>
Student Stipend	\$2000 for a two semester commitment to running the peer education program	\$2000
Projector	A simple digital projector for powerpoint presentations. Used at least 3 times a week for practice and real presentations	\$649.99
<b>Total</b>		<b>\$4425.99</b>

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## X. Appendices

### Appendix 1: Current Contact List

<b>Name</b>	<b>Phone Number</b>	<b>E-mail</b>
Lucy J. Kurtz	(906) 281-1595	Lucy.j.Kurtz@wmich.edu
Steven T. Eick	(586) 549-3039	Steven.t.eick@wmich.edu

### Appendix 2: Contact List and Logs

Name	Phone Number	E-mail
Steve Greenberg	N/A	steve@greenberg-art.com
Kourtney Collum	734-625-0794	kourtney.k.kollum@wmich.edu
Dominique Brown	313-283-9532	dominique.d.brown@wmich.edu
Dr. Carol Weideman	N/A	carol.weideman@wmich.edu
Linda Lumley	269-387-2995	linda.lumley@wmich.edu
Dr. Steve Bertman	N/A	steven.bertman@wmich.edu

### Appendix 3: Script and PowerPoint Slide Show

The finalized script and finalized PowerPoint slide show are attached.