

Sustainable Seahawks: The Opportunity for St. Mary's Eco-Reps

An Independent Sustainability Project

Submitted for Consideration to Professor Barry Muchnick

For ENST 450: Applied Sustainability Practicum

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Executive Summary:

St. Mary's College of Maryland is a small liberal arts college that is trying to be more sustainable, and although environmental and sustainability focused education is not part of our core curriculum, the St. Mary's campus has an opportunity for great improvement. By taking advantage of peer education, the core principles of sustainability could be made accessible to every student without the addition of more classes to the Core Curriculum. By recruiting students to teach other students via an Eco-Reps program, students can engage in discourse about sustainability, and could do so via hands on learning. Interactive learning can be more effective than in-class teaching and can help to build habits that will stay with them beyond their time at college. Also, by taking advantage of the Eco-Reps disparate fields of study, such a program could help to integrate multiple disciplines such that students are made aware of the importance of all disciplines to the cause of sustainability. The research laid out within this report helps to lay the ground work for an Eco-Reps program that can then be organized and structured over the course of the next academic year. After the proper arrangements have been made, the St. Mary's Eco-Reps program should go into effect fall of 2016.

Introduction:

At St. Mary's College of Maryland, there are many ways that students can learn about the issues that face our environment and the ideas that surround sustainability. Students could take a multitude of environmentally focused classes, contact our sustainability office, or attend one of our many environmentally focused campus activities. Although all these methods are very informative, they require that students are present. However, it can be very difficult to mobilize students, especially those with little interest in sustainability. What this project hopes to do is bring the education to the students. Dormitory building-based peer-to-peer education has the unique opportunity to educate students about sustainable practices and the implication of their actions in the same building they consume the most energy. This type of program, known nationally as Eco-Reps, has the potential to create student educators with a campus presence comparable to orientation leaders and residence advisors. By teaching students in the very place they live, sustainability on the St. Mary's campus becomes more than just part of the curriculum, but also part of the way of life.

An Eco-Reps program is more than just adding a mandatory class to the core curriculum and because of this it could extend well beyond just filling a gap in our education. Eco reps are students educating students, and they do so in the places where sustainability is most needed. They are in the dorm buildings, not only telling students to turn off lights, but teaching them why; They are in the dining hall, showing students just how much of an impact a day without meat can make; They are on campus, harnessing the competitive nature of students so that they will want to be more sustainable. Education that comes from other students could prove very valuable to this campus for a few reasons. Students often do not want to learn when they do not have to, their course load is hectic, and they want their time out of class to be relaxing. Information

learned from Eco-Reps can seem less like lessons; instead, because it is coming from fellow students, it is simply leading by example. Also, because Eco-Reps can be sampled from different disciplines, they can provide different insights into the role of different fields of study in sustainability as well as the overlap between those studies. An Eco-Reps program on the St. Mary's campus could adjust for issues of absence, style, and sources of sustainable education all at the same time.

Context:

Eco-Reps present a valid solution at a significant leverage point in both the college and global communities. College students in residence halls are a captive audience, students sleep, hang out, and bathe in their residence halls, meaning their dorm rooms become their base of operation. Because residence halls serve as students' homes, they also represent the summation of students' actions, such as their water and electricity usage. In fact, half of the energy used in residence halls can be attributed to student behavior (Bloodhart, Swim and Zawadzki 2013). If implemented properly, Eco-Reps programs can contribute to lower energy consumption in the buildings in which they are stationed from 1-13% (Bloodhart, Swim and Zawadzki 2013).

An Eco-Reps program would not only take advantage of location of teaching, but also style. This program could also correct for widespread pedagogical issues seen in sustainability education around world. A study of Australian universities showed that effective sustainable learning requires a specific, wholly different kind of teaching style. Instead of the lectures and lessons commonly seen for sustainability units in non-environmental studies classes, the study showed the merit of hands-on lessons. These more interactive lessons as well as simulations to promote critical thinking are more effective in encouraging "breakthrough moments" in students (Christie et al. 2013). Breakthrough moments are by nature hard to define, but in simple terms it

is the light-bulb moment. It is the instant that sustainability not only begins to make sense, but also becomes relevant in the mind of the person having the breakthrough. These moments, or transformative experiences, happen when some type of hands on learning experience is followed up by reflection (Kokkarinen and Cotgrave 2013). This veritable one-two punch of experience and reflection is not common, but an Eco-rep can facilitate and encourage them.

Hands on experiences via organized service trips, and campus activities and can later be reinforced by reflection through casual discourse and discussion. These reflections do not have to be formal, as Eco-Reps can later engage students within their own residence halls. This helps to contribute to one of the many nuances of an Eco-Reps program, which in turn contributes to a positive feedback loop of education. In a study on sustainability literacy, students who were put through a reflective experience were later surveyed about the nature of their experiences and what they would do with the knowledge they gained. The results showed that those students who felt they had a breakthrough in their conception of sustainability were more likely to want to spread that knowledge (Kokkarinen and Cotgrave 2013). This allows for the influence of an Eco-Rep to stretch further and encourage future recruitment for the Eco-Rep program and sustainability awareness as a whole.

The Eco-Reps program that I hope to implement would also challenge some assumptions of education that are otherwise taken for granted. As David Orr points out in his chapters on the problem of education “education is no guarantee of decency,” (Orr 2004, 8) some of the greatest atrocities of our time were committed by the most educated people. This is not to say that the problems that face the world today are intentional, directed attacks on environmental health by some mastermind. In western education we have an assumption that further education, research and technology will yield the solutions to our problems, and they just might. But the issue is not

that education will not help, but that a “certain kind of education” will bring our salvation (Orr 2004, 7-13).

The way an Eco-Reps program can help this ever growing problem is showing students that “all education is environmental education,” (Orr 2004, 13). This would be accomplished by having students from a variety of majors serve as Eco-Reps, and by making the core values of environmental education available to students that would not otherwise get said insights. Students could be shown how different disciplines can work together, rather than separately, towards the end goal of a sustainable planet. Not every student can take the environmental studies minor, and they should not have to, but every student can frame their own studies in the context of a larger world where their individual discipline will be useless when stacked against rising sea water, droughts, famine and food shortages.

Case Studies:

Ever since the foundation of the first Eco-Reps program on the Tufts University campus in 2000, the idea of peer led environmental education has taken off. As of 2011, over 55 universities across the country had adopted an Eco-Reps program (Heath 2011). Just this past year, 30 schools attended Tuft’s Eco-Rep symposium for schools with an existing program and those looking to start a program (<http://sustainability.tufts.edu/programs/ecorepresentatives/>). Colleges across the country are seeing the lack of connection between sustainable intentions on their campus, and coming up with the same answer, peer-directed environmental education. Those schools that do successfully set up an Eco-Reps program can serve as models of both what, and what not, to do. There are many facets of an Eco-Reps program that we can stand to glean information on from studying others efforts. This includes issues of interaction with other

student bodies, interaction with administrative bodies, campus activities, and issues of visibility of Eco-Reps.

Elon University is an example of a school that addressed the issue of interaction with other student bodies well. In their first year of operation, their Eco-Reps gave 22 sustainability lessons to 319 different students (Durr 2012). Not only did they quickly reach a significant portion of the student body, but their student response was staggering. 79% of students that attended a lesson said that the lesson gave them a better understanding of sustainability, and 80% said that they would use the information from the lesson to help them to “live more sustainably” in the future. On top of that, their Eco-Reps program quickly allied with other groups on campus, including the administrative body of Residence Life, and the student led Greek life, to organize campus wide activities and ensure they were visible from early on. By taking advantage of a campus tradition of Bingo events, they organized a lights out bingo where on and off campus residents were encouraged to turn their lights out and attend a bingo during their annual “POWERless” competition. This proved to be the biggest bingo event of the year, and firmly established their presence on campus.

Other institutions do not handle the issue of visibility quite as well, and in doing so gives us an idea of the pitfalls that have to be avoided. The University of Vermont founded its Eco-Reps program in 2005, but six years after its formation a student by the name of Winter Heath recognized a major crisis regarding who was aware of that program. At a first glance it appeared that their program was taking off because Eco-Rep applications almost tripled in their first three years of their operation (Heath 2011). But it became apparent that this only meant that they were reaching students that would be fervent enough about sustainability to want to become an eco-rep themselves, but not necessarily the rest of campus. Surveys conducted showed that about half

of the students at the university had heard of Eco-Reps, which was staggeringly low in comparison to the ubiquitous presence of residence assistants and orientation leaders (Heath 2011). This arose from the pitfall of trusting the Eco-Reps ability to gauge their own presence. Few of that year's Eco-Reps believed that they needed any more help getting their word out, but this study showed an apparent need for Eco-Reps to be even more involved with Residence Life. Winter Heath used her finding on visibility to design metrics to gauge visibility and to create a booklet to aid in the planning of Eco-Reps events.

In looking for longevity of an Eco-Reps program, it made sense to turn to the longest running eco reps program in the United States, that of Tufts University. They serve as a good example of a program that is no longer addled by issues of visibility. Their program has been so successful on their own campus that they reach out to other campuses with similar programs. They do this not only as a way to help those schools to expand their programs, but also as a way to better their own. They hold a veritable Eco-Reps convention where interested individuals can learn everything from peer-to-peer engagement theory to behavior changing tools and even a special student only community based social marketing lesson (Tufts 2015). They even allow visiting schools to register to hold sessions at the symposium to help spread innovations and ideas that are endemic to their own campus.

The Tufts Eco-Reps also have efforts in place to ensure visibility does not become a problem again. The first most obvious way is a strong web presence. Not only are they tied into all the major social media, but they also have profiles for all of their past and present Eco-Reps, making them significantly more accessible to the student body. They also help to ensure adequate contact and representation with the schools administration by partnering closely with the college staff via their program of Eco-Ambassadors. The Tufts program also lends credence

to the goal of using an Eco-Reps program to promote the intersection of majors. The Eco-Reps from this year, and years past, come from a variety of different disciplines, everything from engineering to economics. These students, whose motivations lay in disparate fields have the ability to frame sustainability in the context of their studies now, and to apply the tools they learn for sustainability to their endeavors in the future.

Association for the Advancement of Sustainability in Higher Education released a guide that serves as both a catalogue of best practices of existing Eco-Reps programs, but also as a step-by-step guide for the planning and implementation of an Eco-Reps program. As part of this guide, they also compiled the profiles and best practices of many colleges and universities across the United States that can be drawn from in order to come up with potential programs and facets of an Eco-Reps program on this campus. This guide breaks down the process of developing an Eco-Reps program into three simple steps, program development, program implementation and program evaluation. Though almost the entirety of this project thus far falls into the category of development, the rest of this guide gives much insight into the steps and directions this project needs to take moving forward. This includes a number of action items involving the training and preparation of Eco-Reps as well as how to set up proper communication and collaboration. Those last two facets are especially important for this program as it will pair as closely as possible with the Sustainability office and Residence Life. Of the best practices, there were many notable examples, too numerous to be discussed individually, so a representative sample is itemized in the following table:

School	Best Practices
Princeton University	First-year focused education, including a recycling based game.

Babson College	Created a sustainability focused class to be included in the first year curriculum
Elon University	Offer lessons to 101 courses upon request
Middlebury College	Sustainable Snack Nights
Bowdoin College	Energy Reduction Competition and Trash Audit
Bentley University	Weekly meetings with Residence Hall Council
Harvard Law School	Maintains library based bike loaning
Lehigh University	Mandatory course specifically designed for Eco-Reps

Many of these practices include campus functions that Eco-Reps can organize. Some of the best program ideas were those that take advantage of college students' competitive nature, and hijack it for the cause of sustainability. Competitions to see who can recycle the most, or use the least water/ electricity are common and successful. Other successful and well attended activities include campus clothes swaps, where students can bring out clothes they would otherwise donate and potentially swap outfits with their classmates, or trash sorting days where eco reps sort through our going refuse in the quad to demonstrate to students how much of their landfill bound waste could be recycled (Erickson 2015). But other examples are more in depth programs that St. Mary's Eco-Reps could look to implement after the program gets past its trial run. Most notably, Eco-Reps providing some sort of class room education is growing in popularity, and as seen in the aforementioned case study from Elon University, it can be very effective. Another possible area to expand into, albeit much farther down the line, would be to

create a class that the Eco-Reps take. Not only would this further incentivize students to become representatives due to class credit, but it would also infuse sustainability further into the curriculum and increase faculty involvement.

Another case study comes from much closer to home. St. Mary's had an Eco-Reps program in the past, but unfortunately it was not able to be sustained. The presence of this program does show receptive administration, and this bodes well for this program currently in development. For the purposes of this project, the original Eco-Reps can serve as a case study to determine what does, and doesn't work on this campus. A few aspects of the 2009 program implemented by Richard Platt, Dana Gittings and Melina Vamas, are similar to what this program seeks to do. They started with a trial implementation in classic residence halls, with the goal of later moving on to non-traditional residences, such as the townhouses and Lewis Quad (Platt et al 2009).

They also set up similar ideas for programs to be implemented, including energy reduction competitions and trash audits. But the program clearly had its shortcomings, that I believe I have identified and can use to the advantage of the future program. Firstly, the governance of the program was too loosely defined; they set out to have a student led steering committee. The issue with this was that in the first year of the program, none of the students involved were experienced enough for self-governance, this is why future programs should have some sort of faculty or staff leadership.

The past program also included a system of electing Eco-Reps early in the year. This meant that Eco-Reps were not only volunteers, but were mostly untrained. The future program should hire students in advance, not only making them paid positions, but ensuring that before the start of the semester, Eco-Reps are trained and ready to take on the task at hand. Also, the

2009 program did not pair closely with Residence Life, and only met with them on a monthly basis. Other successful programs have shown that pair closely with one or more administrative agencies is helpful, and any future Eco-Reps program on the St. Mary's campus will have more frequent interaction with Residence Life.

Project Overview:

The scope of this project thus far has been almost entirely research to frame the project in sound research, and to determine the necessary steps that must be taken to implement such a project. As I researched into the pedagogy behind environmental education and the theory behind peer education, it became apparent that the scope of this project was greater than what could be implemented in a single semester. This project will now be expanded into next year in the form of a St. Mary's project. Throughout the equivalent of an eight credit class I will continue to layout not only the recruiting, training and implementation of the Eco-Reps, but the underlying infrastructure of the program to help ensure that it continues in the year following my graduation.

Aside from ensuring that this project can continue as an SMP, steps have been taken to set up its future relationship with Residence Life. Steps have also been taken to try to secure funds, to get the project on its feet. In conjunction with Dr. Muchnick, a proposal was drafted and submitted to the Mellon Foundation for Civic Engagement. If this project is deemed a worthy cause that will enhance opportunities for civic engagement, the project will receive funding to spent by the end of next fall semester. These funds could help alleviate many of the start-up costs of an Eco-Reps program from the school, making it that much more likely that it will be successful.

In addition to attempting to acquire funds, a dialogue with Residence Life has been started. In a meeting with Joanne Goldwater I was informed of the Eco-Reps program that

preceded this one. This was an important step as this original study can now be used to see where the new program will have to be stronger. One of the original programs most significant shortcomings was that it did not pair closely with Residence Life, as many other successful programs have. Steps have already been taken to try to avoid this issue, currently a proposal is being drafted with Derek Young to help develop an internship that would have this project be developed in a Residence Life office. This Professional Fellowship Program, if it deems my project as a viable opportunity to increase opportunities for students to gain professional skills on campus, would guarantee a much closer relationship with Residence Life, both to start and in the following years of the program.

Through these conversations with Residence Life, some of the next connections that need to be made have been established. Despite Joanne Goldwater's excitement about the program, Residence Life does not have a budget for maintaining it. This means that sometime in the near future, after an official proposal is submitted to Residence Life, that a connection with Charles "Chip" Jackson should be made and the idea should be formally proposed to him. If the funding for a paid Eco-Rep position in the future is to come from the school, a dialogue with the administration will have to be started.

Outcomes:

Although in terms of actual hard data and outcomes, my efforts may be lacking, I have been able to use this project as a leap board to something much bigger. Not only do I believe that I have taken the first big step into something that I hope to expand into my SMP, but I have had a lot of personal realizations about why this project is important to me. Throughout the course of this project I have realized this as an opportunity to not only increase environmental awareness on campus, but also a potential way to adjust for pedagogical short comings. This stemmed from

my first set back in my research, finding out that Eco-Reps had already been attempted on this campus. So that raised the question, what will I do differently? That is where I realized that this could be taken on as a longer term project. Instead of just following the proper channels that would be necessary to just get Eco-Reps on their feet, I have the opportunity to research other programs successes and shortcomings, to research how to manage the continued education of Eco-Reps and how the pedagogy of students teaching other students should be handled.

The objectives for this project are as follows: to create a visible program, with the structure that will continue after I graduate; to design the lessons for Eco-Reps in a manner in line with the currently accepted ways to teach sustainability; and to have the lessons that the Eco-Reps impart to their fellow students not only increase sustainable practices on campus, but make those same students more likely to see how every discipline is crucial for true sustainability.

If I were to do this project over again, I would not focus so much on the theory of environmental and peer-to-peer education. Though this research lays the foundation for much of the work I'll do in the coming year on my St. Mary's Project, it did not lend itself too much to the scope of this project. I would try to make connections more, not only with campus administration, but with other schools as well. Interviews with the coordinators of Eco-Reps programs at other colleges, as well as with Eco-Reps themselves would have informed my project much more effectively than some of the research I have already done. But luckily, I am presented with the opportunity to continue my project, and learning from my mistakes, I can move forward and do what I wished I had done.

Conclusions:

The scope of setting up a student focused sustainability project partnered with Residence Life proved to be too substantial to actually put into action this semester. This turned out to be

one of the largest limitations of this project, and means that I'll have to set up the infrastructure for the Eco-Reps program so well that it runs completely independently of me. But if that is done successfully, there are number of benefits that the school could incur. Aside from making up for a lack of sustainability education, and for encouraging more connections between disciplines, it will serve to bolster the Environmental Studies minor and the future major. By making the issues of sustainability more visible and by showing students the common ground that it shares with their current studies they will be way more likely to pick up the minor and broaden their studies. Also, Eco-Reps program reflects well on a school that tries to claim it has sustainable ambitions, because there seems to be a disconnect when a school tries to make its campus sustainable but misses the opportunity to educate their students why.

Recommendations:

In the future this project can expand to be much more than just sustainability education. Eco-Reps are in a unique position, like RA's to live among students. Though we already have many student groups that work to protect students' environmental interest in the proceeding of the college, such as SEAC. Eco-Reps would have a direct connection to Residence Life that they can use to voice their concerns and vis-versa. Not only does this mean that small clerical changes that can increase the sustainability of dorm life can be fast tracked, but when bigger changes come around, student representatives that already have a report with administration and staff will have more clout and pull more influence on the deliberation of things. Also, with the potential for a future addition of Eco-Ambassadors, the Eco-Reps would have with them a coalition of Professors and Staff with whom they collaborate, and who will add credence to any actions that the Eco-Reps try to take on this campus. On a small campus like this, staff endorsement can go a long way.

It might seem that on a campus with existing student coalitions such as SEAC, and administrative groups such as the sustainability office, that an Eco-Reps program might be superfluous. But I envision a sort of team, where instead of additional student minds tackling the subject being redundant, they can work together. The Eco-Reps education on the subjects surrounding sustainability will make them invaluable to SEAC in helping to brainstorm ideas and flesh those ideas out. And if the Eco-Reps have as wide of campus availability as I intend to promote via my groundwork for the program, they will be able to spread the word as well as explain and debate contentious issues such as Sustainability Wednesdays to the student body.

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