

Student Sustainability Educators: A Guide to Creating and Maintaining an Eco-Rep Program on Your Campus



By **Christina Erickson, Ph.D.**, with support from NWF and AASHE
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CONTENTS

About the Author	2
About the Editors	2
Additional Contributors	2
Introduction	4
Defining Student Eco-Rep Programs	4
STEP ONE: Program Design	5
Action Item: Getting to Know Your Audience	5
Action Item: Building Program Acceptance	5
Action Item: Determining the Mission	5
Action Item: Marketing and Branding Outreach	5
Sidebar: Community Based Social Marketing	6
Action Item: Obtaining Human and Financial Resources	6
STEP TWO: Program Implementation	8
Action Item: Recruiting and Hiring	8
Action Item: Training	8
Action Item: Clarifying Expectations and Accountability	9
Action Item: Conducting Events and Activities	10
Action Item: Documenting	10
Action Item: Communicating	10
Action Item: Collaborating	10
STEP THREE: Program Evaluation	12
Action Item: Determining Indicators	12
Action Item: Establishing Methodology	12
Conclusion	15
Eco-Rep Resources Appendices	16
Appendix A: Campus Sustainability Organizations	16
Appendix B: Campus Sustainability Organizational Tools	16
Appendix C: Further Reading	16
Appendix D: Activity, Event, and Outreach Examples	18
Appendix E: Recruiting and Job Description	25
References	29

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INTRO

With the growth of the campus sustainability movement in Northern America, many programs have been created to address issues of outreach and education. Student sustainability education and outreach programs, often known as “Eco-Rep” (short for Eco-Representative) programs, seek to shift student culture toward pro-sustainability behaviors through education and outreach.

The first Eco-Rep program was started in 2001¹ at **Tufts University**, a mid-size, private institution in urban Massachusetts. It was initiated by Tufts Climate Institute (TCI) staff member Anja Kollmuss. TCI hoped to broaden its base of participation by engaging undergraduate students in climate action work on campus. The idea was to build on the success of campus activities in the previous decade (1990s) including Tufts’ launch of the Talloires Agreement and signing onto the Kyoto Protocol. The original Eco-Rep program was designed as an opportunity for students to learn about environmental issues and through a formal structure, become actively involved in greening projects in the residence halls. The program had clearly stated goals, including:

- Train a core group of students as environmental educators and activists;
- Increase overall student awareness of environmental actions and ways to effect individual change on campus;
- Institutionalize environmental stewardship within the student body.²

At the time of this writing, there are more than 60 active Eco-Rep programs on campuses across the United States and Canada, involving anywhere between six and 30 students each, plus staff facilitators and supporters. The main motivation for the creation of such programs is a desire to extend outreach efforts for issues such as waste reduction and energy conservation to a broader student audience, beyond those students that are already “eco-minded.” Now in their second decade, these programs have evolved to include more issues and use new social media communication methods. Recognized by both the American College & University Presidents’ Climate Commitment (ACUPCC) and the Association for the Advancement of Sustainability in Higher Education (AASHE) as an effective method for student outreach (AASHE’s Sustainability Tracking, Assessment & Rating System (STARS) awards credit for having such a program), there has been a demonstrated need for campus guidance in both creating and maintaining Eco-Rep programs.

In the decade since its inception, the original Tufts program has evolved to meet current needs (see sidebar on page 23).

Together with formative Eco-Rep programs at **Harvard University** in Massachusetts, **Dartmouth College** in New Hampshire, and **Sewanee: the University of the South** in Tennessee, Tufts’ program has inspired at least 60 other campuses to create programs of their own. A list of these programs can be found in AASHE’s Resource Center, “Peer to Peer Student Sustainability Outreach Campaigns.”³ Just as every campus and institution is unique, so are their Eco-Rep programs. Each one, however, has the same general idea in mind: having students teach other students about living more sustainably on campus and beyond.

DEFINING STUDENT ECO-REP PROGRAMS

Many student organizations and clubs on campuses work on environmental and sustainability issues. For the purpose of this guide, Eco-Rep programs are defined as those student-based programs that:

- Focus on sustainable living practices
- Are based in residential buildings
- Use peer education techniques
- Have a direct relationship with or are supervised by an employee of the institution

Not all student sustainability education and outreach programs have “Eco-Rep” in their title, but all programs included in this guide fit the definition above.

This guide builds on work the author completed for her doctoral studies at the **University of Vermont** while running the university’s Eco-Rep Program. The guide reflects a collaborative effort among Eco-Rep program coordinators across the country, echoing the nature of Eco-Rep collaboration across campus. We are a self-declared open-source group, willing to share our successes and roadblocks, poster designs and activity plans. See the Eco-Rep Resources Appendices (page 16) for example activities, events, job descriptions, and organizational tools to help with the implementation of an Eco-Rep program on your campus. This guide, then, is not the product of one individual’s research and experience alone, but synthesizes the work of many.

To maximize user friendliness, we have organized this guide into a series of steps with action items for each step. The steps are followed by a set of appendices designed to provide useful examples, templates and additional resources. The first step in establishing an Eco-Rep program is designing a successful program.

STEP ONE: Program Design

So you want to start a student sustainability outreach program on your campus, but where do you start? What resources do you need to begin? Who will run it? With thoughtful planning and design you can build a thriving program that meets the particular needs of your campus. There is no one-size-fits-all, but there are a number of general guidelines that can help create a successful program. This section describes several actions to get you started, namely:

- Getting to Know Your Audience
- Building Program Acceptance
- Determining the Mission
- Marketing and Branding Outreach
- Obtaining Human and Financial Resources

ACTION ITEM: GETTING TO KNOW YOUR AUDIENCE

A good first step is learning about your audience – i.e., residential students. One aspect of this involves a general understanding of human behavior. The fields of social and environmental psychology have a plethora of information and theories on behavior modification, motivation, the role of education on behavior, and the influence of peers and social settings. Successful programs have built these theories into their program design. See the “Community Based Social Marketing” (CBSM) sidebar on page 6, which details marketing techniques that build upon these theories.

ACTION ITEM: BUILDING PROGRAM ACCEPTANCE

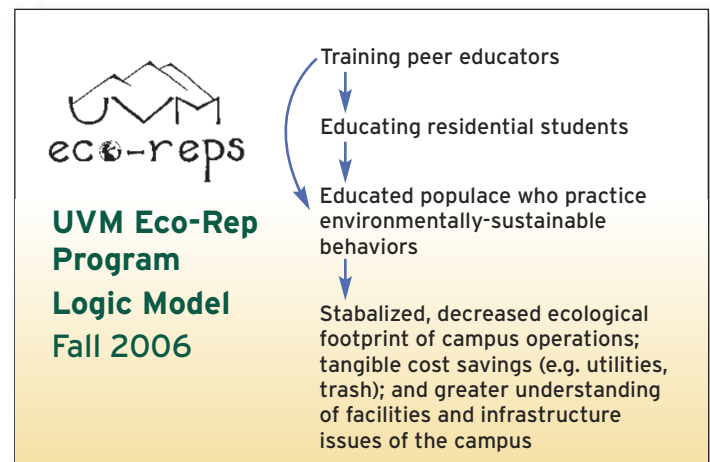
Equally important to designing the program is who designs it. To ensure that campaigns and other outreach efforts will be accepted by students, it is very helpful to get students engaged early in the design process. Student participation can help overcome the criticism that programs developed solely by adults for youth can be stifling.⁴ New York-based **Barnard College’s** Eco-Rep program was designed by students who wanted to be sure it reflected an egalitarian administrative structure without a top-down hierarchy. The Eco-Reps maintain a relationship with key staff people to help with some of the logistical aspects, such as getting paid and housed during training. But it is the students who manage the recruiting, hiring, activity planning, and scheduling. They use a buddy system to try to hold each other accountable for their commitments to the group.⁵

ACTION ITEM: DETERMINING THE MISSION

While enthusiasm and passion are needed to get any program off the ground, an articulated program mission can provide a solid foundation upon which to build.⁶ Drawing on concepts of organizational behavior, the process of drafting a mission should include identifying activities, goals, short- and long-term

impacts, inputs, and resources. If possible, the underlying program mission should be developed with participating students, as it may offer insights into the context and greater meaning of their work. At the same time, the mission should be flexible enough to be able to change in response to current and future circumstances.⁷ Integrating and aligning the mission and goals of the program with those of the institution may help increase the program’s recognition and support.⁸

One planning tool that can assist with identifying the inputs and outcomes of a program is a logic model.⁹ Logic models help define how a program does its work, often through a visual diagram. Drafting an early logic model for the **University of Vermont’s** Eco-Rep Program (see the model below) led to a greater understanding of what participants were expecting to accomplish, and helped define what indicators they would measure up to. Walking through the exercise of creating this model also helped them in rewriting their mission statement a few years into the program.



ACTION ITEM: MARKETING AND BRANDING OUTREACH

Part of the program planning process should also include plans for how you will develop your organizational reputation and brand across campus. You will want to create a strong presence that is visible and well-known, which will help in your recruiting process as well as overall recognition on campus. Designing a logo with a descriptive tagline is one way to create visible recognition. Putting this logo on your website, flyers, stickers, etc. will help you get noticed. You can reach out to the marketing resources on your campus (perhaps a student who has taken a marketing course, a marketing or advertising professor, or someone who holds a marketing position) for advice on how to move forward.

Community-Based Social Marketing

In their book, *Fostering Sustainable Behavior*, McKenzie-Mohr and Smith explain that information-only campaigns are not effective. Instead, such campaigns need to be partnered with tactics from traditional marketing, such as advertising, with direct personal contact to motivate behavior change. The four key steps of Community-Based Social Marketing (CBSM) include:

- Identifying barriers and benefits of an action or behavior
- Designing an appropriate strategy
- Pilot testing that strategy
- Evaluating the strategy's impact on the program

More information on CBSM can be found on McKenzie-Mohr's website: <http://www.cbsm.com>.

Students at the **University of Vermont** used a CBSM approach to research and design a campaign for their residence hall, specific to an issue that was most relevant to the location and residents. See Eco-Rep Resources Appendix E (page 25) for a complete project description.

ACTION ITEM: OBTAINING HUMAN AND FINANCIAL RESOURCES

In order for a program to always have a “home” on campus, a direct relationship with a campus staff person (either as coordinator or advisor) is important, and will help facilitate relationship- and capacity-building throughout the institution. Programs should have champions at various levels of authority (from custodial supervisors to high-level administrators) who can defend and support the needs of the program. This includes financial support and access to various spaces and storage on campus.¹¹ In terms of program coordination, graduate students can be a great hybrid between staff and students, as they may have professional experience but also be able to relate more closely to undergraduates. This type of experience may be suitable for an internship or practicum.

As the campus examples throughout this guide show, there are a number of administrative models, from having one coordinator to having returning students act as student coordinators, to non-hierarchical systems. The important thing is to design a model that best fits your campus culture and resource availability.

Here's a tip: Trying to gain support from a bunch of people you've never met? Request a face-to-face meeting with them in their office. A personal pitch often has a stronger pull than a well-meaning email request.

Dedicated financial resources are another important aspect of a program's success.¹² Planning a budget for the year that includes wages, materials, food, and other supplies is a helpful step to knowing what resources are needed. Eco-Rep programs often have a variety of props and materials for their events and campaigns (think bike-powered smoothie makers!) and therefore are in need of a storage and/or office area that should be included in the budgeting process. There are various funding models; the key is to find the best scenario for your particular campus. Obtaining funding from multiple sources may ensure availability, but can also be time-consuming, especially given the budgeting process within many institutions. Securing permanent rather than temporary funding is an important way to institutionalize the program. In addition, supportive offices, departments, and programs can offer in-kind funding, such as office space, photocopying or food.

One example of finding permanent funding comes from **Rice University** in Texas. After conducting a successful pilot year, students submitted a proposal to an internal grant program to secure seed money for launching a full-scale program. The students' proposal demonstrated the need for an Eco-Rep program, detailed the specific duties for involved students, outlined costs and potential paybacks of the program, addressed the relationship of the Eco-Rep program to existing organizations, and proposed specific project ideas for conducting outreach. A central argument in the discussion of the need for such a program was to avoid the same basic pattern (ending in failure) among voluntary student initiatives such as the Student Recycling Committee. Stated reasons for this pattern included students being too busy and having competing priorities, the lack of consistent commitment in voluntary activities, the lack of full coverage across all residential colleges,¹³ and the lack of overall organizational structure. To remedy this, Rice students proposed a program that would be part of the institution and overseen by a staff member. The grant proposal was accepted, and the Rice Eco-Rep program was underway. With seed money of \$1,500 from the grant, Sustainability Director Richard Johnson was able to continue a cooperative agreement between his office (Office of Sustainability) and Housing and Dining to pay the students and purchase necessary supplies.

University of Massachusetts Amherst Eco-Rep Program



Mary Harrison, University of Massachusetts Amherst

Average # of Reps: 50

Year Started: Fall 2008

Compensation: Two college credits

Management Structure: Five student facilitators and student Program Manager, supervised by staff Sustainability Manager

Institution: University of Massachusetts, Amherst, public, 21,300 undergraduates

Website: <http://www.umass.edu/ecorep>

Best Practice/Successful Element: We allow students to interact with their peers and exchange information, thoughts, and questions about environmental issues and their impacts. The peer-to-peer facilitation provides a unique learning experience for Eco-Reps, and helps them to enhance their own understanding of what it means to be sustainable, as well as the impact that an individual can make. 🌱

University of Pennsylvania Eco-Rep Program



Scott Spitzer, University of Pennsylvania

Average # of Reps: 110

Year Started: 2009

Compensation: Volunteer leadership program

Management Structure: An eight-member Student Executive Board and two paid Student Coordinators, supervised by Full-time staff Program Coordinator

Institution: University of Pennsylvania, private, 10,000 students

Website: <http://www.upenn.edu/sustainability/eco-reps.html>

Best Practice/Successful Element: Our program has experienced tremendous success as a volunteer-based leadership program. Self-selecting students work within their residential communities to engage students on topics related to environmental sustainability. Our success is largely based on students' willingness to collaborate with other groups on campus and integrate environmental programming within their communities. 🌱

Do Eco-Reps need to be paid?

This is a common question asked by many who are starting up programs. The answer is, "it depends." Some campuses have found it useful, if the resources exist, to pay their students (even if just a small stipend) since it can increase accountability. Under this system, if the students are clearly not holding up their end of the bargain, they don't get paid. Others, however, find that students are so ready to be engaged that the training, food, and sense of community benefits are enough to keep them coming back as a productive volunteers. Other campuses have explored using course credits as a means of compensation. Each of the campuses highlighted in the sidebars of this guide explain their compensation situation.

Once you've got the various pieces in place (i.e., audience research, program theory and logic model, administrative structure, physical and financial resources, and plenty of enthusiasm), you are almost ready to go. Starting with a pilot program in a targeted area of campus (one building or first-year residence halls, as an example) is one way to test everything out before going full steam ahead. The new program can be refined through lessons learned during the pilot phase and then expanded to reach the full, intended audience. Past program implementers advise to start small, become successful, and then build on that success.¹⁴

STEP TWO: Program Implementation

So now you've secured necessary funding and space, you have an outline of goals and outcomes, and a structure to follow. What's next? You'll need to recruit, hire, and train students, and establish clearly defined expectations for the role. You'll need to develop the methods and activities that make the program visible in the campus community, and find partners to collaborate with. You'll also need to create systems for documenting and communicating your work. Whew! That's a lot. So let's start at the beginning. Actions to get you going include:

- Recruiting and Hiring
- Training
- Clarifying Expectations and Accountability
- Conducting Events and Activities
- Documenting
- Communicating
- Collaborating

ACTION ITEM: RECRUITING AND HIRING

A key step in developing your recruitment plan is to figure out how many students and of what type you are hoping to hire. For example, are you aiming for gender balance? A variety of academic majors? Returning students only, or are you open to first-year students? Only one student in each building? Setting those goals will allow you to more accurately create a plan for how, where, and when to recruit. There are many methods of recruitment so you will need to understand the culture of information exchange on your campus. Are there newsletters or a student newspaper where you can post an ad? Digital screens in the student union to place an announcement? Listserves through Residential Life? Tabling during a big event on campus? Pull together a list of these key advertising places and start spreading the word. Don't forget about the importance of word of mouth. If you can get this opportunity into the ear of influential students on campus, you'll be a step ahead of the game.

Here's a tip: Save that list of key advertising places, as this will be a key resource when the Eco-Reps start promoting events and campaigns.

Part of the recruitment process is knowing what you are recruiting for. Having a job description with sample tasks is helpful in your program design as well as in letting applicants know what is expected of them. See sample job descriptions in Eco-Rep Resources Appendix E (page 25). You'll want to include any qualifications you desire, such as:

- Effective communication skills (through a variety of means)
- Ability to work independently and collaboratively
- Ability to see projects through to completion
- Ability to learn information about sustainability topics and relate that information to peers
- Enthusiastic, engaging individuals who are passionate about environmental and social issues
- Students who can be held accountable for their work
- Sense of creativity and fun

You should also include information on benefits (e.g., payment, free food, training, etc.) and the expected time commitment.

Some campuses find that recruiting at the end of spring semester or quarter allows students to be hired and ready to go on opening day in the fall. Others have found that they want to capture the fresh enthusiasm of first-year students and hire in the fall. Your methods will depend on the formula that you create for your program. Realize that flexibility can be an important asset, and don't be afraid to try something different until you find the right fit for your campus.

Current programs have a variety of hiring practices – some more formal than others. A written application can be useful in obtaining basic information about the applicants. Depending on the size of the applicant pool, short interviews are a way to get a better understanding of each individual and see if they meet the needs of the program.

ACTION ITEM: TRAINING

Offering training for participating students—both at the beginning of the school year and throughout the year—helps build capacity among the students as well as the whole group.¹⁵ Training topics can range from how to plan and carry out an event in a residence hall to stress management for student leaders. Partnering with other student leader orientations and training sessions is a good way to initiate collaborations between groups. Beyond your campus, regional and national sustainability conferences offer further training opportunities and can help students network and share ideas, as well as realize they are part of a larger sustainability movement.

Here's a tip: There are many student leadership training modules and resources available that can be adapted to fit your needs. Contact your Student Life/Activities Department or Student Government Association for ideas.

University of Vermont Eco-Rep Program



Stephen Posner, University of Vermont

Average # of Reps: 35-40

Year Started: 2004

Compensation: \$8.50 per hour for four hours per week with option to enroll for course credit

Management Structure: Four to five senior Eco-Reps supervised by Graduate Student Program Director

Institution: University of Vermont, public, 10,400 undergraduates

Website: <http://www.uvm.edu/~ecoreps/>

Best Practice/Successful Element: Our Eco-Reps hold public waste sort events to help residents on campus understand how much of the trash headed for the landfill could actually be composted or recycled. With campus community participation, they sort and weigh materials, communicate the results widely, and reduce the amount of waste generated on campus. This effort is reinforced by Eco-Rep actions to promote reusable materials such as sporks, water bottles, and Eco-ware dining containers. 🌱

Skidmore College Sustainability-Rep "S-Rep" Program



Sustainable Skidmore

Average # of Reps: 10

Year Started: 2008

Compensation: \$8.25 per hour for four hours per week

Management Structure: One paid student S-Rep Manager supervised by staff Sustainability Coordinator, plus additional student volunteers support paid S-Reps

Institution: Skidmore College (NY), private, 2,400 students

Website: <http://cms.skidmore.edu/sustainability/ecorep/index.cfm>

Best Practice/Successful Element: The most successful implementation of our "S-Reps" - Sustainability Reps-program is the Student S-Rep Manager position. By creating a position for a person that had previously been an S-Rep, there is an understanding of the challenges faced by current Eco-Reps that the Sustainability Coordinator may not have. The most successful S-Rep-initiated program on campus is "Skidmore Unplugged," where residence halls compete to reduce their individual energy consumption over a period of three weeks every November. 🌱

It is critical that program coordinators be offered training as well, in topics such as organizational and program management, behavior change theory, community-based social marketing, sustainability concepts and education, and student employee and volunteer management. Another important resource for program coordinators is other student affairs professionals on campus who may offer useful advice and resources.

ACTION ITEM: CLARIFYING EXPECTATIONS AND ACCOUNTABILITY

In order for everyone to be on the same page, it is helpful for the expectations for participating students to be defined as clearly as possible, and stated in the application process. These expectations

can be revisited when needed to help students and program coordinators clearly understand what duties are to be fulfilled. Expectations can be further delineated by creating task lists (by topic or time period, or whatever framework the program uses). Pledges or contracts can be used to further the understanding of and commitment to the expectations. Manuals or resource guides are helpful tools for participating students; clarifying expectations and identifying who to contact about what.

Maintaining participant records and task completion records is a helpful practice, and can also come in handy when students ask for references or letters of recommendation in the future. Working in pairs or teams can create a sense of shared responsibility and ultimately a greater success rate.

Repercussions for students consistently not meeting expectations will vary with the situation (especially if it is a paid vs. unpaid position), ranging from not receiving a positive recommendation to terminating the position.

Here's a tip: Have students submit digital photographs of their work (such as bulletin boards they created), so that coordinators don't have to spend their time scurrying across campus to check up on these tasks.

Record-keeping is also important for activities such as bulb swaps and waste sorts. By tracking data and results, there is something to look back at over time, as well as report back to supervisors and/or funders.

ACTION ITEM: CONDUCTING EVENTS AND ACTIVITIES

A common goal for Eco-Rep programs is to get out and interact with students through peer education. There are many methods for doing this, and Eco-Rep Resources Appendix D (page 18) provides a number of popular examples of the types of events and activities that Eco-Reps accomplish.

An Eco-Rep from the University of Vermont, Winter Heath '10, provided the following advice for creating meaningful events.

In order to create an effective event or program that will have a lasting impact on the campus community, Eco-Reps should follow three steps to creating well-planned and effective programming: know your resources, network, and market your event.

1: Know your resources. There are TONS of resources available to you as an Eco-Rep to help you create and organize an event. One very important tool is the media. Media vehicles such as advertisements (TV, radio, print), movies, and newspapers are a great way to reach students. Social media such as Facebook and Twitter also offer an easy, free method of connecting with a greater number of students at once.

2: Network. Working with other individuals and groups on campus is an effective way to make your event more visible. You can increase attendance, make connections with outside groups, and receive more support. One of the most important collaborative partners an Eco-Rep can connect with is the residential life staff of an on-campus complex. Res Life can provide connections to a number of different groups, resources (including money for events!), and more. Student groups on campus offer another outlet for Eco-Reps to connect with students around campus.

3: Market your event. This is a key aspect of planning your event because if no one knows about it then no one will come! It's a good idea to start planning as early as six weeks in advance where arrangements such as room/table reservations can be organized. Other marketing tips include designing and displaying advertisements and spreading the word about the event in class, door-to-door, and online (using email, social media, etc.).

ACTION ITEM: DOCUMENTING

Programs should have a clear system for documenting and archiving information and procedures so that information does not get lost from year to year and need to be recreated. Additionally, through records from the past, new staff can know the activities, accomplishments and institutional dynamics that shaped the program over the years. Producing an end-of-year report is an excellent way of reflecting on the past year's accomplishments and setting goals for the following year.

Here's a tip: document as you go, via a blog or website, so that at the end of the year you can pull all these tidbits into one tidy report.

ACTION ITEM: COMMUNICATING

Maintaining a website, blog, or whatever key communication piece is used on campus is important for programs to disseminate success stories and program information to the campus audience. Using resources such as the campus press office or student newspaper and other institutional publications is a way to get stories broadly shared. Good documentation (as mentioned above) enables better communication by providing a wealth of examples and statistics to draw from. This is the stuff that your campus public relations person loves! And, your program's scrapbook will start to fill up.

ACTION ITEM: COLLABORATING

Collaboration with other departments and programs on campus helps a program reach a broader audience, incorporate concepts such as social justice that are often neglected in sustainability education, draw upon multiple resources, and become further "institutionalized" (meaning an essential part of the institution). A steering committee made up of personnel from associated offices is a way to build these alliances and generate feedback. Tapping into relevant governing bodies may also be a source of support and collaboration for programs, as well as a way to disseminate information to a broader audience. Programs need to navigate points of potential competition between other existing organizations/programs and find ways to collaborate.

Princeton University Eco-Rep Program



Princeton University

Average # of Reps: 12

Year Started: 2004

Compensation: \$11 per hour for two to four hours per week

Management Structure: Two undergraduate student co-presidents with sponsorship by the Office of Sustainability

Institution: Princeton University (NJ), private; 5,000 undergraduates; 2,500 graduate students

Website: <http://www.princeton.edu/sustainability/student/groups/eco-reps/>

Best Practice/Successful Element: Our Eco-Reps spearheaded a residential education program for first-year students that encourages students to adopt environmentally friendly habits and mindsets. The program features an interactive recycling game and green prizes, and is offered during both orientation and study breaks throughout the year. Our Eco-Reps also coordinate closely with the Facilities Organization and Alumni Services to maximize recycling efforts, outreach, and awareness at Princeton Reunions - an annual event with over 20,000 visitors. 🌿

Babson College Eco-Rep Program



Dallase Scott

Average # of Reps: 14

Year Started: 2009

Compensation: Eco-Reps: \$8.75 per hour for four hours per week; Eco-Rep Coordinators: \$10.25 per hour for five hours per week

Management Structure: Two undergraduate Eco-Rep Coordinators supervised by full-time staff Sustainability Program Manager

Institution: Babson College (MA), private, 1,900 undergraduates

Website: <http://babsonsustainability.blogspot.com/>

Best Practice/Successful Element: Our Eco-Reps systematically develop and execute large-scale projects on campus that focus on institutional change with lasting sustainable effects. Each student must attend a three-part Environmental Action and Leadership workshop in the fall to learn key skills-sets to become successful change agents. The 2010-2011 Eco Reps successfully created a Sustainability Class to be included as part of the First Year Seminar (FYS) curriculum at Babson. 🌿

For example, if there are several student environmental groups on campus, instead of competing for the same audience to attend one event over the other, why not team up and create one high quality event together?

Eco-Reps are poised to be valuable resources on campus, able to reach out to other programs and departments to help them in various ways. For example, Eco-Reps can act as consultants on how to integrate sustainability practices into events hosted by different groups. They could also offer services such as organizing a campaign or event in the library, student center, or other location.

Beyond the campus, Eco-Reps can collaborate with each other by sharing activity ideas, strategies, and resources through listserves and regional and national gatherings. To this effect, the first-ever student Eco-Rep Symposium was held at **Tufts University** in November 2009, organized by a class taught by Tina Woolston and Dallase Scott. This half-day gathering had representatives from 15 different colleges and universities in New England, and allowed students and program coordinators to learn about other programs and directly share best practices.¹⁶ In November 2011, **Babson College** hosted the second symposium for Eco-Reps, building off of the success of the first gathering. There is a plan to make this an annual event, hosted by a different campus each year.

STEP THREE: Program Evaluation

So now you have a program in place with Eco-Reps in action all over campus. How do you know if you are meeting your intended goals? Are there outcomes occurring other than the ones you originally intended? Are the student Eco-Reps having a positive experience? How might the program shift and evolve to meet current and future needs? These are the very questions that you can assess through a program evaluation.

Two types of evaluations are process evaluations and outcome evaluations.¹⁷ Process evaluations can help improve the day-to-day operations, objectives, and participating students' experience overall – or the process of how your program works. It is also important to have a mechanism for generating external feedback, and understanding if you are meeting the intended outcomes of your program, and to what extent. These are outcome evaluations. Two actions that can greatly assist with this process are:

- Determining Indicators
- Establishing Methodology

ACTION ITEM: DETERMINING INDICATORS

For both process and outcome evaluations, an important first step is to determine the appropriate indicators or metrics for what you will be measuring. Ideally, this is something you would do when designing your program. In other words, when you design your program you should also determine how to measure whether you are meeting your intended goals. For each goal or outcome, there should be a corresponding indicator that maps out how success will be measured. It has been found that indicators generally fall into two categories: campus-wide impacts and the participating student experience. The indicators listed below were suggested by Eco-Rep program coordinators across the country:¹⁸

Campus-wide Impacts

- Application rates
- Event attendance
- Visibility of program, especially among students and administration
- Activity impact, such as how many light bulbs were swapped out
- Utility reductions (gas, water, electricity, trash, etc.)
- Frequency of requests for information (inside and outside of institution)
- Perceived accessibility to an Eco-Rep
- Perceived influence of the Eco-Reps

- Amount of media coverage
- Lasting behavior change of students
- Number of students studying environmentally-related subjects
- Rate of ecoliteracy on campus

Participating Student Experience

- Number of Eco-Reps involved
- Number of residence halls with an Eco-Rep
- Eco-Rep retention rates over the semester, year, and between years
- Eco-Rep satisfaction with the program
- Number of program alumni in student leadership positions
- Lasting behavior change of participating students

ACTION ITEM: ESTABLISHING METHODOLOGY

Once you determine what you will measure, you will need to establish the methods or ways that you will measure them. The methods you choose depend on the program size, access to certain data sets and specific needs from funders or other program constituents.

Evaluations can measure the success of a program's procedures, such as administrative functions like recruiting and hiring and can also measure the rate of success of the desired results of a program. Some popular methods include gathering input from a comment section on a website, surveys (either from the program or questions added to another's survey), gathering feedback by attending residential life staff meetings or training events, or requesting mid-semester/quarter, mid-year, or end-of-year feedback from those indirectly related to the program (such as advisors and Residential Assistants). Programs can build in an annual review of outcomes to see to what extent they were met. An end-of-year report to stakeholders can be an instrument for articulating this, and may prove important if there ever comes a time when a program needs to be defended in order to retain staff or other resources. The table on page 14 shows an example of performance indicators used by the **University of Vermont** Eco-Rep program.¹⁹ These indicators were determined by the program's advisory team and conducted by its program coordinator.

Elon University Eco-Rep Program



Brittany Siciliano/Elon University Office of Sustainability

Average # of Reps: 7

Year Started: 2009

Compensation: \$250 per semester stipend

Management Structure: Paid undergraduate intern Student Coordinator with additional supervision from Director of Sustainability

Institution: Elon University (NC), private, 5,000 undergraduates

Website: <http://www.elon.edu/e-web/bft/sustainability/sp-ecoreps.shtml>

Best Practice/Successful Element: Our program has a residential component and a first-year student component. The Eco-Reps work with Residence Life staff to promote sustainability within the residential areas and provide Sustainable Living lessons to Elon 101 courses upon request. 🌿

Middlebury College Residential Sustainability Coordinators



Middlebury College, Jak Knelman

Average # of Reps: 25

Year Started: 2010

Compensation: Five Head "Residential Sustainability Coordinators" (RSCs) paid \$8.75 per hour for up to five hours per week; First-year RSCs are volunteer

Management Structure: Each of the five Residential Commons has a group of first-year RSCs led by a Head RSC; Head RSCs supervised by Sustainability Integration Office staff

Institution: Middlebury College (VT), private, 2,400 students

Website: <http://www.middlebury.edu/sustainability/tools/orgs/RSCs>

Best Practice/Successful Element: We have found that students are most engaged when they have ownership over a project. The less we (in the Sustainability integration Office) plan, the more we see the students take initiative to make things happen. RSCs-sponsored "Sustainable Snack Nights" in the residence halls were a big hit and a great way for students to talk about sustainability issues in an informal setting. 🌿

Harvard University Resource Efficiency Program



Brandon Geller, Harvard Office for Sustainability

Average # of Reps: 21

Year Started: 2002

Compensation: \$11 per hour for starting REPs; \$11.25 for Returning REPs, four hours per week for REPs; 10 hours per week for REP Captains

Management Structure: Four student REP Captains supervised by one full-time staff REP Coordinator

Institution: Harvard University (MA), private, 6,400 students

Website: www.harvard.edu/rep

Best Practice/Successful Element: In fall of 2009, we started the "Green'13" program. The idea was to engage the first-year class (at that time, the class of 2013) and harness their energy and enthusiasm early on. Early in the semester, we held a brainstorm session for any students interested in environmental issues. We divided them up into small groups, where they first shared their environmental interests and past experiences, and then asked them to use those ideas to come up with new and innovative ways to decrease Harvard's environmental impact. Over the following couple of months, with the guidance of one of the REP Captains and the Coordinator, the students applied for grants and met with administrators, ultimately bringing many of their projects to fruition with funding from the Harvard Student Sustainability Grant Program and other sources. Examples of some of the projects include: replacing paper towels with energy-efficient hand dryers, a sticker campaign about energy-efficient laundry and shorter showers, and a pilot vermiculture project in one of the first-year residence halls. 🌿

Performance Indicators of the University of Vermont Eco-Rep Program, May 2009	Level of achievement	Method/Data Source
Application rates to program	Average # of applications from 2004-2009 = 47.29 Average hiring rate (# applications/# hired) from 2004-2009 = 66.87%	Tabulation of applicant demographics
Eco-Rep coverage in residence halls (desired is one for each building)	Average coverage rate from 2004-2009 = 71.64% of total residence halls	Tabulation of applicant demographics
Attendance at events hosted by program	Student organized res. hall events: 2007-2008 = 15 events, with an average of 21 participants 2008-2009 = 22 events, with an average of 17 participants	Program files (Event planning and reporting forms)
Accomplishing specific goals for specific projects Examples: <ul style="list-style-type: none"> • Waste sorts: improved separation rates • Bulb swaps: electrical and greenhouse gas savings 	Waste sorts results: often find that at least 50% of what is in the trash should have been recycled or composted Bulb swap savings estimates: continue to swap bulbs annually	Waste sorts results Bulb swap savings estimates
Program Coordinator and students recognized as resource people	Not formally assessed; some positive indication regarding Eco-Reps from Resident Assistants; frequent requests for information from Program Coordinator	RA focus groups Log of Requests
Program visibility, especially among students and administration	Need to improve visibility	RA focus groups Interviews Residential student survey
Residential students know the Eco-Reps name and what the program is	48.6% of surveyed students knew of program	Residential student survey
Eco-Reps are accessible to residential students	Not formally assessed; RAs indicated that students with an Eco-Rep in their floor had most access (over in the building or not at all)	RA focus groups
Eco-Reps and program activities are perceived as influential	Top two behaviors most influenced by Eco-Reps Program: reducing trash through recycling more and saving energy; top two behaviors least influenced by Eco-Reps Program: use public transportation or carpool and compost food waste	Residential student survey
Receiving media coverage	2007-2008: 4 <i>Vermont Cynic</i> articles, cover story of the Burlington Free Press (11.2.07), article in USA Today (11.5.07), Eco-Rep interviewed for article in the <i>Christian Science Monitor</i> (11.26.07) 2008-2009: 2 <i>Vermont Cynic</i> articles	Program files



Middlebury College, Jak Knelman

Utility Savings

Frequently, when Eco-Rep programs are proposed they include projections of how much electricity could be saved or landfill trash avoided. However, on many campuses, getting the actual calculations for these indicators is very difficult. Some forward thinking (and lucky) campuses have buildings that are sub-metered for their utilities, while others can only get data for the entire campus or large portions of campus. Fortunately, many institutions are seeing the value in sub-metering buildings, as it enables problems to be pinpointed and addressed—resulting in big savings! Other potential issues are multi-function buildings. Some may contain residential areas and large dining facilities, while others might be purely residential.

If you are expected to show utility savings, it is important that you have access to the data you require. Consult your energy management office or facilities department as a first step. Additionally it is important to consider that changes to utility expenses may not be directly attributed to the Eco-Rep program, as there are a number of contributing factors that could impact the rates and costs including infrastructural changes, heating degree days, and human behavior patterns. So, depending on what type of data is available on your campus, use it to the best of your ability. Examining trends across campus can be useful in understanding how well (or NOT) a campus community is faring in their conservation and carbon reduction efforts – either through infrastructural or behavioral improvements, or both.

Program evaluations can seem like overwhelming projects, but they do not need to be so. Once systems are created for generating and tabulating annual data, reporting those figures can be relatively easy. The important thing is to determine what kind of information you need or want and how you will get it. What will be most useful? You will want to get information that will best help improve your program to serve current and future needs.

Here's a tip: offer your program evaluation up to a research methods course on campus for some real-time experience.

Conclusion

To reiterate, there is no one-size-fits-all Eco-Rep program plan. Each campus has its own culture with its own opportunities and challenges. The goal is to create a model that works for you and your campus community. We know that higher education sustainability offers a complex systemic challenge to us all, and that student outreach programs are but a piece of the complex puzzle of solutions. Hopefully this guide will help take some of the complexity out of this piece.

APPENDIX A: Campus Sustainability Organizations

Association for the Advancement of Sustainability in Higher Education (AASHE)

<http://www.aashe.org>

College and University Recycling Coalition

<http://www.curc3r.org/>

National Wildlife Federation – Campus Ecology Program

<http://www.campusecology.org>

Powershift

<http://www.wearepowershift.org/>

Recyclemania

<http://www.recyclemania.org/>

Second Nature

<http://www.secondnature.org>

APPENDIX B: Campus Sustainability Organizational Tools

Campus Sustainability Calendar (AASHE Resource)

<http://www.aashe.org/events/campus-sustainability-calendar>

Dorm vs. Dorm Sustainability Competitions (AASHE Resource)

<http://www.youtube.com/aasheorg#g/c/7606C262CE970EE4>

Peer to Peer Sustainability Outreach Campaigns Directory (AASHE Resource)

<http://www.aashe.org/resources/peer-peer-sustainability-outreach-campaigns>

Campus Conservation Nationals

<http://www.competetoreduce.org/>

Eco-Reps Program Coordinators Listserve – Join by sending a message with “subscribe” in the subject or text to eco-rep-list-request@lists.hcs.harvard.edu

Greener U Guides and Toolkits

<http://www.greeneru.com/resources/greeneru.html>

Social Change Model – Leadership Training Resources

<http://socialchangemodel.ning.com/>

Greener Campus Webinars (NWF Campus Ecology Resource)

<http://www.nwf.org/Global-Warming/Campus-Solutions/Events/Greener-Campus-Webinars.aspx>

APPENDIX C: Further Reading

Erickson, C. and Eagan, D. J. (2010). *Generation E: Students Leading for a Sustainable, Clean Energy Future*. Reston, VA: National Wildlife Federation. <http://www.nwf.org/Global-Warming/Campus-Solutions/Resources/Reports/Generation-E.aspx>

McKenzie-Mohr, D., & Smith, W. (1999). *Fostering sustainable behavior: An introduction to community-based social marketing*. Gabriola Island, BC: New Society Publishers.

Rappaport, A., and Creighton, S. H. (2007). *Degrees That Matter: Climate Change and the University*. Cambridge, MA: MIT Press.

Western Washington University Resident Resource Awareness Program



Leah White, Western Washington University

Average # of Reps: 40

Year Started: 2007

Compensation: Volunteer, two to three hours per week

Management Structure: One paid student Coordinator and one paid student Assistant

Institution: Western Washington University (WA), public, 14,000 students

Website: <http://www.wvu.edu/sustain/initiatives/residence/>
<http://www.wvu.edu/sustain/goforthegreen/index.shtml>

Best Practice/Successful Element: Our *Go for the Green: Total Waste Reduction Challenge* has been very successful. All residence halls (nine communities, 16 halls) participate during winter quarter. This year we saw a 21.3 percent reduction in electricity use equal to \$21,000 in savings; a 30 percent reduction in landfill waste; collected over 1,800 Water and Heat Reduction Pledge signatures; and hosted over 60 Eco-Rep programs in all the halls. 🌱

Qatar Foundation Sustainable Living Ambassadors



Christopher Silva, Qatar Foundation

Average # of Reps: 12

Year Started: 2010

Compensation: 25 Qatar Riyals per hour for five hours a week (approximately \$34 per week)

Management Structure: Supervised by staff Sustainability Coordinator

Institution: Qatar Foundation - central campus that serves as the branch campus for six universities (Virginia Commonwealth University, Weil Cornell Medical College, Texas A&M, Carnegie Mellon, Georgetown, Northwestern), 2,000 undergraduates

Website: http://myeducationcity.com/en/dynamic_pages/index/236/2/community-living

Best Practice/Successful Element: Interacting with 10 higher education institutions, the SLAs bring a plethora of backgrounds, cultures, languages and experiences that enrich the program. Utilizing community-based social marketing, our educational initiatives aim to impact energy and water conservation, two of the essential elements part of the Qatar National Vision 2030. 🌱

Bowdoin College Eco-Rep Program



Keisha Payson

Average # of Reps: 16

Year Started: 2004

Compensation: \$15 per week

Management Structure: Student Manager (a former Eco-Rep) supervised by staff Sustainability Coordinator

Institution: Bowdoin College (ME), private, 1,700 students

Website: <http://www.bowdoin.edu/sustainability/campus-initiatives/ecoreps/ecoreps2010-11.shtml>

Best Practice/Successful Element: Our annual energy conservation competition in the residence halls is always a very popular way to get students thinking about the little things they can do in their halls to reduce campus greenhouse gas emissions. Eco-Reps work with the buildings to hold special events during the month long competition to keep the excitement up and energy use down. Other events, like our Trash Audit, focus attention on waste reduction and recycling, another strong area of attention for our Eco-Reps. 🌱

APPENDIX D: Activity, Event, and Outreach Examples

D1. Popular Events and Activities Hosted by Eco-Rep Programs

Bathroom Stall Newsletters: Surely a captive audience! The back of a bathroom stall door is a good place to post interesting facts and announce upcoming events in a one-pager.

Tip: Some campuses require prior clearance before items are posted. Be sure to get clearance from the proper department before hanging your newsletter.

Bulb Swaps: A favorite activity by many Eco-Reps, light bulb swaps are a way to have interaction with individuals in their residence hall rooms or other places of distribution. This activity generally means swapping out incandescent bulbs for compact fluorescent bulbs (CFLs) (or other energy efficient bulbs) in students' individual task/desk lamps.

Tip: Be sure to contact your facilities or energy management office regarding this project. They may even be willing to purchase the bulbs for you and assist with proper waste disposal of existing bulbs.

Bulletin Boards: Just about all residence halls have some sort of bulletin boards in the hallways. This is a place where Eco-Reps can post information about a current topic and upcoming events.

Tip: Many Resident Assistants (RAs) are often required to put together bulletin boards on a regular basis. Team up with them to collaborate on a topic, or better yet, come up with a fun activity to reuse the paper and other materials used, such as recycled notebooks.

Community Based Social Marketing Projects: Using the CBSM model (see sidebar on page 6), Eco-Reps can research and design a campaign for their own residence hall specific to an issue that is most relevant to the location and residents.

Tip: There may be other entities in the residence hall, such as a Hall Council or other student-governing board, which might be willing to collaborate on making this campaign successful.

Door-to-Door Outreach: Whether you are distributing tip sheets on ways to reduce electricity usage or just getting to know residents in a building, personal outreach allows everyone to get to know who you are and how you can help.

Tip: Don't want to go it alone? Team up with another Eco-Rep.

Electricity Reduction Competitions: If you have the good fortune of having buildings or floors that are individually metered for electricity (or other utilities), you can design a competition between buildings to see who can reduce the most electricity per person.

Tip: There are many resources and even a national competition for this type of event. See the Appendix B: Campus Sustainability Organizational Tools on page 16.

Event Promotion and Participation: Whether it is your own campus's Earth Week event or a national event like RecycleMania, Powershift, Campus Sustainability Day, or the annual AASHE conference (including the Student Summit), Eco-Reps can encourage each other and other students to attend and participate in these events.

Tip: Do your best to see which major events are happening on campus and nationally that year and build them into your program's calendar. You can learn about various national and regional events on the AASHE Campus Sustainability Calendar, as listed in Appendix B: Campus Sustainability Organizational Tools on page 16.

Facility Tours: Taking tours of local facilities such as a recycling facility, waste water treatment plant, or electricity generation station is an excellent way to make the issues real. Make this a training session for Eco-Reps or an open event to the campus community.

Tip: Connect with faculty members to offer extra credit to their students for participation in these educational tours.

Film Nights: There are numerous popular films and documentaries on a variety of environmental and social issues that are relevant to the work of Eco-Reps. Whether a cozy screening in your building or a campus-wide event, this can be a way to further educate yourself and other campus members.

Tip: See if your library has relevant films in their collection. If they don't, inquire if they are willing to make some purchases.

Bentley University Residential Housing Association Eco-Reps



Bentley University Eco-Reps, Amanda King

Average # of Reps: 20

Year Started: 2010

Compensation: Volunteer (Program is part of existing student organization Residential Housing Association (RHA))

Management Structure: Supervised by Manager of Sustainability; one student, the "Residence Hall Sustainability Coordinator," represents Eco-Reps at the Residential Housing Association (RHA) Executive Board meetings

Institution: Bentley University (MA), private, 5,600 students

Website: <http://student-organizations.bentley.edu/rha/ecoabout.html>

Best Practice/Successful Element: Our Eco-Reps meet once per week as a group and once per week with their Residence Hall Council. The Residence Hall Sustainability Coordinator also meets once per week with the RHA Executive Board. These meeting requirements help the Eco-Reps to be accountable to the team and to plan awareness events. They also ensure integration into the existing RHA structure. The Eco-Reps typically hold one campus-wide awareness event and one residence hall sustainability event per semester in addition to updating bulletin boards in residence halls with sustainability information every month. 🌿

Harvard Law School Graduate Green Living Program



Christopher Dydyk, Harvard Law School

Average # of Reps: 6

Year Started: 2005

Compensation: \$18 per hour for three hours per week

Management Structure: Supervised by full-time staff Sustainability Coordinator

Institution: Harvard University (MA), private, 1,800 students in Law Graduate School

Website: <http://www.law.harvard.edu/about/administration/facilities/energy/hls-green-living-program.html>

Best Practice/Successful Element: At the graduate student level, our Eco-Reps exhibit a high level of professionalism and self-direction, and have therefore achieved significant results working directly with administrative groups to propose and implement campus-wide sustainability initiatives. One such example is the Harvard Law School Read & Ride bike share program, an innovative partnership with library staff that uses existing library catalog technology to reserve and loan bikes to community members and therefore promote emissions-free transportation alternatives. Students obtained and maintain bikes, and promote the program through campus outreach including facilitated group bike rides with their peers. 🌿

Green Room Certification: The main purpose of this activity is to encourage students to take individual action in their own room regarding energy conservation, waste reduction, and conscious consumption. **Brandeis University** in Massachusetts asks students to register online, and Eco-Reps then conduct follow-up visits to present a sticker or a reusable mug to those who have registered to participate.²⁰

Potlucks: Food has a way of bringing people together. This is the idea behind the **Barnard College** Eco-Reps' monthly potluck series, which includes a discussion about a related environmental topic.²¹

Recycling Room Audits: Let's face it. While we hope in this day and age that students know how to recycle properly, it doesn't always happen. Eco-Reps can do a quick analysis of how their building is faring by checking on the status of the bins and signage in the trash and recycling areas.

Tip: Work with your Facilities or Recycling Manager to develop an auditing procedure that can be used from year to year to help track progress.

Social Media and Film: Facebook, Twitter, YouTube, blogs, and so on can be used for personal communication, but you can also use them for spreading your program's messages. See an excellent example of a student-produced film about the Eco-Rep Program at **Babson College** in Massachusetts.²²

Tabling: Whether during a student activities fair or in front of the main dining hall during a busy lunch period, having a staffed table with information about a current campaign or promoting a current event is another way of interacting with other students and campus members.

Tip: Go beyond the usual passive tabling position of just sitting at a table. Instead, have some sort of interactive way of engaging people to stop and chat, such as offering a quick game or activity that matches your message.

Visual Displays: While two-dimensional posters have their time and place, 3-D displays are another eye-catching way of showing what you are promoting. Eco-Reps at **University of Vermont** hung plastic water bottles in a tree outside the student center to represent the number of bottles sold in one day on campus, and to promote the use of refillable bottles.

Waste Sorts: Conducted either on a small scale (in a residence hall or floor) or larger scale (multiple buildings or a large building), waste sorts provide a visual, interactive way of finding out how well (or NOT well) a group does at separating its waste properly.

Tip: In establishing your protocol for this event, be sure to stress safety measures such as wearing protective gear and watching out for sharp and other dangerous objects.

Zero Waste Events: Whether for an Eco-Rep Program-sponsored event or in providing support for another campus-wide event, Eco-Reps can work with event planners to cut down on unnecessary or unrecyclable materials and to staff waste separation stations.

Tip: Does your campus have a guide to event greening? If not, you might want to create one. One excellent example comes from the **University of California, Davis**.²³

Lehigh University Eco-Rep Program



Lauren Zell

Average # of Reps: 30

Year Started: 2010

Compensation: All Eco-Reps receive one credit per semester for an “Eco-Reps” class (2 hours per week) and outside class activities; all Eco-Reps and Coordinators are paid \$8 per hour for waste audits; three undergraduate program coordinators (upperclassmen, first-year student, Greek) receive two credits per semester and a possible additional wage

Management Structure: Three Program Coordinators (Upperclassmen, First-year student, Greek); Building Coordinators (one per Residence Hall); supervised by staff Sustainability Coordinator

Institution: Lehigh University (PA), private, 4,700 undergraduate students, 2,200 graduate students

Website: <https://sites.google.com/site/lehighuniversityecoreps/>

Best Practice/Successful Element: Our Eco-Reps not only conduct awareness and outreach campaigns to effectively change student behavior but they also enroll in a course focused on sustainability education as a means to “teach the teachers.” This course invites guest speakers—from faculty to staff to community members to national recognized lecturers—to discuss different aspects of sustainability. This education is intended to not only impart theories of sustainability upon the students but also spark discussion around the challenges and solutions to creating a sustainable world. This lecture coupled with work sessions, during which Eco-Reps develop leadership and communication skills needed to plan and execute hall programs in their residence halls, strengthens Eco-Reps’ abilities to be effective peer to peer educators and influence the behavior of other students. 🌱

Tufts University Eco-Rep Program



Fannie Koa, Tufts University

Average # of Reps: 10

Year Started: 2001, with revamped program starting in 2010

Compensation: \$25 per week for three to five hours of work

Management Structure: Two upperclassman co-coordinators supervised by staff Sustainability Program Director

Institution: Tufts University (MA), private, 5,100 undergraduates

Website: <http://sustainability.tufts.edu/?pid=151&c=49>

Best Practice/Successful Element: Having student co-coordinators has been very effective; they can allocate Eco-Rep prep between themselves depending on their coursework loads throughout the semester. Scheduling meetings between themselves makes them accountable to each other and provides structured time to prepare. They can split up visits to the Eco-Rep events or accompany each other on dorm “rounds.” They have a much more current feel for what students are into, what they can expect of the Eco-Reps (they have HIGH standards!), and what motivates other students. It’s also a great leadership opportunity for them - they organize day long training for the Eco-Reps, meet weekly with the Sustainability Director and participate in Sustainability Office staff meetings. 🌱

D2. Community-Based Social Marketing in the UVM Residence Halls

Social Marketing (def.) “The application of commercial marketing technologies to the analysis, planning, execution, and evaluation of programs designed to influence the voluntary behavior of target audiences in order to improve their personal welfare and that of their society.”¹



Community-Based Social Marketing (def.) “Draws heavily on research in social psychology which indicates that initiatives to promote behavior change are often most effective when they are carried out at the community level and involve direct contact with people.”²

YOUR TASK: As a team, to develop a CBSM approach for one specific behavior in your complex.

Step 1. Familiarize yourselves with basic CBSM background, by browsing online portions of the book “Fostering Sustainable Behavior”, found on <http://www.cbsm.com/pages/guide/preface>

Deadline: September 21st

Step 2. Do some reconnaissance work. What specific human-behaviors (sustainability-related) do you see in the complex that you think should be changed (examples: not recycling pizza boxes; residents leaving lights on in rooms when no one is in them; leaving phone chargers plugged in when the phone is not being charged; etc.) Decide as a team which specific behavior you will target. Report this to Christina.

Deadline: September 28th

Step 3 . Conduct methods uncovering barriers (can divide this up among team members).

See <http://www.cbsm.com/pages/guide/barriers> for information.

3.1. Observation: physically observe area where behavior takes place. Make notes on how, what, why.

3.2 Informal interviews/focus groups: Ask people why they do or don't do the particular behavior.

3.3 Survey: develop a short (~5) question survey and ask at least 50 residents to complete it.

See more information on surveys below.

Deadline: October 5th for survey draft to be reviewed; October 12th for all methods to be complete.

Step 4. Conduct an analysis of findings; put together a brief report including survey results.

Deadline: October 19th.

Step 5. Pick two tools (commitment, prompts, norms, communication, incentives, convenience) and develop a strategy to promote your behavior. See <http://www.cbsm.com/pages/guide/commitment> for information. Implement this strategy.

Deadline: Brief description of strategy by October 26th.

Step 6. Check in on strategy. Maintenance if necessary. Casually ask around to see if people notice. Observe participation or lack of participation. Adjust if necessary.

Step 7. Conduct project evaluation, using same methods from the uncovering barrier stage (Step 3). Your main objective is to note any differences in behavior as a result of your implemented strategy.

3.1. Observation: physically observe area where behavior takes place. Make notes on how, what, why.

3.2 Informal interviews/focus groups: Ask people why they do or don't do the particular behavior.

3.3 Survey: Use the short (~5) question survey and ask at least 50 residents to complete it. You may want to include a specific question regarding your strategy. (eg. Did you notice_____?)

Deadline: November 30th

Step 8: Write up brief report including analysis of evaluation findings, comparison of evaluation findings to barrier findings, and recommendations for the future, including what you would have done differently.

Deadline: December 7th

¹ Andreasen, A. (1995). *Marketing social change: Changing behavior to promote health, social development, and the environment*. San Francisco: Jossey-Bass.

² McKenzie-Mohr, D. & Smith, W. (1999). *Fostering Sustainable Behavior: An introduction to Community-Based Social Marketing*. Gabriola Island, BC: New Society Publishers.

TOOLS & RESOURCES:

- Fostering Sustainable Behavior website – includes many examples of projects.
<http://www.cbsm.com/public/world.lasso>
- Tools of Change website – includes case studies and examples of projects.
<http://www.toolsofchange.com/en/home/>
- Survey Monkey – conduct free on-line surveys (10 questions or less). Includes analysis of responses.
<http://www.surveymonkey.com/>



SURVEYS:

Designing A Survey (Things To Keep In Mind)

- Start with the main research question. What do you want to know?
 - Ex: What do UVM residential students think about the accessibility of bike paths on campus?
- The survey itself should have five steps:
 - 1) Opening (introducing yourself, the purpose of the survey, how long it might take, etc.)
 - 2) Directions
 - 3) Survey Questions
 - 4) Any Additional Information (such as contact information on where they can learn about the results)
 - 5) Closing & Thanks
- Question wording can be tricky. It's very important to read the questions out loud to make sure the wording makes sense. You may want to test the survey out on your roommate or a fellow Eco-Rep before you go out to the rest of your building.
 - There are two types of questions:
 - 1) Open-ended – Defined as: “survey question that requires the respondent to answer in their own words.”
 - 2) Closed-ended – Defined as: “survey question that requires the respondent to choose from a list of responses.”
 - Good Questions:
 - Use simple, clear, and unambiguous
 - Use language that the respondents will understand
 - Frames limitations (time, etc.) at the beginning
 - Good Responses
 - Cover all possible responses, within the needs of the study
 - Uses the proper level of measurement required for the analysis

Survey Analysis

- An analysis of the survey results should address the following questions:
 - What methodology did you use for your survey (i.e. who did you ask and how?)
 - What were the results of your survey? You can depict the responses in tables or graphs if appropriate.



A sample form included in First Year Seminar Instructor's Notes: A resource created by Babson Eco-Reps to be integrated in to the First Year Seminar course that all undergraduate students have to take. (Note: other campuses may have different correct responses to the questions below.)

D3. "How to Be Green" Quiz, Babson College

The following quiz can be used to check how well the students read through the workbook and paid attention in class, or as an indicator to see how much the students already know about sustainability at Babson at the beginning of class. It can also be used to measure the effectiveness of the course. Correct responses are green.



1. Circle what is NOT recyclable.

- Straw
- napkin**
- paper sandwich holder
- wax sandwich lining**
- paper drink cup
- plastic drink container
- non-greasy top of pizza box
- greasy bottom of pizza box**

2. If you are interested in sustainability, what are the three main places to visit on campus:

- a. Sustainability Office
- b. **Green Tower**
- c. Facilities

3. What are two ways to be sustainable in your dorm room?

Possible answers can include: Turn off lights when leaving the room, turn off heating when leaving the room, close windows when using the heater or air conditioner, use power strips and turn them off before going to bed, recycling, purchasing eco-friendly dorm material.

4. Where can you get free efficient replacements for traditional light bulbs? (fill in the blank)

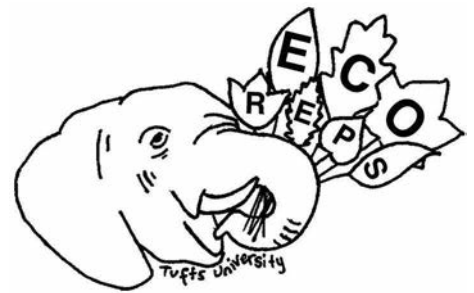
Sustainability Office

5. Being a sustainable student on campus (circle one):

- Requires special skills
- Can be done by anyone**
- Demands affiliation with campus groups devoted to environmental sustainability

D4. Eco-Reps Zero Waste Challenge, Tufts University

Where does our trash go once we throw it away? How much trash do we generate? And do we care? These are the questions that the Eco-Reps' "Zero Waste Challenge" seeks to address. Collecting all of our trash for one week and displaying it wherever we go forces us to think about these issues. Why is it socially acceptable to put as much trash as you please in the can, but not in a bag you carry with you? Campus wide, people are trying this challenge- and are amazed with what they find.



Participate!

If you would like to try the Zero Waste Challenge yourself, or organize a Zero Waste Week for a group or organization, you can follow these simple rules.

Rules:

- Take a gallon Ziploc bag (or other large, clear bag) and affix the "zero waste challenge" sticker to the outside.
- Any waste that you do not recycle or compost goes in the bag. We make an exception for 1 time use water bottles—those should go in the bag!
- No biohazards in the bag.
- The bag should be attached to the outside of your backpack or bag at all times.
- Wear the "Zero Waste Challenge" pin (or put it on your backpack), too—it will let people know what you're doing and is a great conversation starter!
- If your group participates in this challenge, please take a picture with your bags at the end of the week and send it to the Office of Sustainability at sustainabilityoffice@tufts.edu



APPENDIX E: Recruiting and Job Description

E1. Recruiting Eco-Reps at Tufts University

Recruiting should occur throughout the year and every public event is an opportunity to advertise the program to possible future Eco-Reps. Eco-Reps are paid \$10 per hour for 2.5 hours of work a week, which works out to \$25 a week.

Job Description:

The Tufts Eco-Reps are a group of residential students who help to raise awareness about ecological issues, encourage environmentally responsible behavior in their hall mates and peers, and plan related events and activities. They also organize group activities, collaborative projects, and represent the Eco-Reps Program at various campus events. Eco-Reps must attend a training retreat as well as weekly meetings. At each meeting you'll be introduced to a new topic, help plan activities, and brainstorm actions to take in your residence halls. Any returning student living in university housing is eligible to apply. **You must be available to attend a training day—please indicate your availability on the following days...**

1. Ideal Applicants

Ideal candidates are not necessarily those with the most knowledge about the environment. Rather, look for personable people with strong leadership and communication skills. It is the responsibility of the coordinators to educate and train the Eco-Reps, providing them with the knowledge they need to lead their peers. Although leadership is part of this training, it is much easier to teach science and sustainability than it is communication skills.

- Important Qualities
 - o Educator experience
 - o Leadership experience
 - o Enthusiasm/ passion
 - o Commitment to the program & sustainable living
 - o BEST CASE: is a resident of the dorm they will be working in

2. Recruitment Plan

- Communication Targets
 - i. Email Elists with job descriptions and applications sometime towards the end of the spring. Continue to advertise the position until applications are due in late July/early August.
 - 1. Tufts Sustainability Collective
 - 2. Tufts Mountain Club
 - 3. Tufts Institute of the Environment
 - 4. Tufts Office of Sustainability
 - 5. EWO
 - 6. Group of 6
 - ii. RAs
 - iii. Previously interested students from email account
 - iv. Consult sign up/sign in sheets from events held throughout the year.
 - v. Applications
 - vi. Tuftslife Posting
 - vii. OOS Twitter
 - viii. OOS Newsletter
 - ix. Jobx Posting
 - x. Hillel
 - xi. Tisch College
 - xii. Crafts House
 - xiii. Facebook Event
- Interviews- Conducting interviews in person is ideal as it is easier to “get a feel” for how comfortable someone is talking about sustainability. Skype is the next best option, then phone. Ideally both coordinators would be present for the interview. Interviews should be conducted in August.

E2. Babson College Eco-Rep Job Description

Student Employment - Job Description Template

Title: Eco-Rep

Department/Division: Sustainability Office/Facilities Management & Planning

Supervisor: Sustainability Program Manager

Extension: 6000

Email: dscott@babson.edu

Job Summary:

Eco-Reps are student representatives that will be trained through team meetings to become environmental change agents. These students will educate other residents in their community about environmental issues and encourage them to live in a more ecofriendly way. Goals of the program include enhancing students' knowledge and skills to successfully communicate sustainability to their peers, increasing overall student awareness of environmental actions and ways to effect individual and group change on campus, and institutionalizing environmental stewardship within the student body.



Essential Responsibilities:

- Engage peers on issues of conservation, personal pro-environmental behavior change, and sense of environmental responsibility
- Work with administrators to identify potential conservation projects on campus and implement one or more of these projects though using a systematic social marketing campaign approach (campaigns could include energy management, recycling, water conservation, reducing food waste, etc.)
- Act as a liaison between students and administrators on issues of sustainability, comfort, health, and efficiency
- Attend weekly Eco-Rep Team meetings for continued environmental action training on future dates to be determined.
- Develop creative outreach materials (posters, emails, eco boards, etc.)
- Be available to work 4 hours per week on the Eco-Reps program and not be overcommitted with other extra-curricular activities.

Qualifications:

Prepare a letter explaining your qualifications and why you want to be an Eco-Rep and attach your resume.

Job Requirements:

Students hired must:

- Be able to attend a three-part Environmental Action and Leadership workshop that will be held on select Friday afternoons (September 16th, September 23rd, and October 30th)
- Be able to attend subsequent bi-weekly Eco-Rep Team meetings on future dates to be determined
- Be interested in environmental issues as well as learning how to create personal and systemic behavior change
- Be flexible, good natured, outgoing and easy to work with
- Be reliable, proactive, independent, and creative
- Communicate clearly with other Eco-Reps, sustainability staff, Green Tower and other interested entities.
- Not be afraid to be very visible, available and approachable in the residence halls

Hours: 4 hours per week – variable times

Additional Comments: Sustainability staff will review applications and interview all candidates who meet our requirements.

By August 26th: Send resume and qualifications to Dallase Scott, Sustainability Program Manager: Sustainability Office, Reynolds – First Floor.

E-mail: dscott@babson.edu

Hourly Pay Rate: \$8.75 an hour

E3. Elon Eco-Reps Program Application

Elon University Eco-Reps Program 2011-2012 Application

Instructions: Please complete, then email as an attachment along with your resume to sustainability@elon.edu by **5pm on Friday, April 22.**

Full Name: _____
Last *First* *M.I.*

E-mail Address: _____ Local Phone #: _____

Local Address: _____
Street Address *Apartment/Unit #*

_____ *City* *State* *ZIP Code*

Home/Permanent Address: _____
Street Address *Apartment/Unit #*

_____ *City* *State* *ZIP Code*

Home/Permanent Phone #: _____

Residence Hall (if applicable): _____ Room #: _____

Major: _____ Minor (if applicable): _____

Birth Date: _____ Datatel #: _____

Class Status for **2011-2012**: Sophomore: Junior: Senior: Other (please specify): _____

EXPERIENCE

Please attach your most recent resume that details your involvement as a student and a history of your work and volunteer experience. **Please send one email with two attachments** (completed application and resume, include your last name in the file name for both documents).

APPLICATION QUESTIONS

Guidelines: Please respond to the following questions. When possible, include personal examples and/or define terms and concepts using your own words. Responses should be **no more than 300 words**.

Question #1: Why are you interested in being an Eco-Rep? What relevant interests and experiences do you have, and what do you hope to gain from being an Eco-Rep?

Question #2: As an Eco-Rep it is important to understand environmental topics and communicate them effectively to others. Give an example of one environmental topic you think your peers at Elon should know about and summarize your approach to communicating that topic.

E3. Elon Eco-Reps Program Application

Question #3: Eco-Reps are educators and leaders. How do you describe a successful leader? What leadership skills do you possess, and how have you developed them?

TIME COMMITMENTS

Please list your anticipated time commitments for fall 2011 (e.g., class time, study time, employment, work-study jobs, volunteer work, athletics, student organizations, etc.). Include an estimate of the number of hours weekly it will take as well as your role within each commitment. If you know specific meeting times for work commitments or organizational meetings please provide them. **There will be mandatory bi-weekly Eco-Reps meetings.**

Commitments	Hours/Week	Your Role	Specific Mtg Time
How many academic credits are you enrolled in for fall 2011?			

REFERENCES

Please list the name, position, relationship to you, phone number and email for two individuals (at least one Elon Faculty or Staff member) who will serve as references. No written letters are required.

Name: _____ Position: _____

Relationship to you: _____

Phone #: _____ E-mail Address: _____

Name: _____ Position: _____

Relationship to you: _____

Phone #: _____ E-mail Address: _____

HOW DID YOU HEAR?

How did you hear about the Eco-Reps program and available positions? Please indicate all that apply.

- | | | |
|--|--|---------------------------------------|
| <input type="checkbox"/> My AD | <input type="checkbox"/> My RA | <input type="checkbox"/> E-mail |
| <input type="checkbox"/> E-net | <input type="checkbox"/> Friend | <input type="checkbox"/> Staff Member |
| <input type="checkbox"/> Class/Professor | <input type="checkbox"/> Moseley Board | |

Other (please specify): _____

ADDITIONAL COMMENTS/QUESTIONS

Is there anything else we should know about you? What questions do you have about the program/position?

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National Wildlife Federation

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