Waste Sorting Campaign Case Study

Spring 2019 | By Makayla Salas

Project Overview

While The University of Vermont has improved its waste infrastructure, from expanding composting facilities beyond dining halls to implementing waste reduction programs like EcoWare and a straw-upon-request policy, these systems do not make a difference without widespread understanding of how they work. For the composting and recycling practices to be useful, most, if not all, people at the university must participate correctly, lest they contaminate the helpful work of others. To ensure this happens, UVM Eco-Reps first performed waste audits on campus to determine what the problem areas of waste sorting were, then carried out a campaign to improve waste sorting according to the specific needs of each waste audit location.

Background

The issue of improper waste sorting came to our attention as an even more immediate issue to tackle with the passing of China's National Sword Policy. For the last 25 years, China imported most of the U.S.'s recyclables, but this new 2017 policy implements a new acceptable contamination standard of a mere 0.5%. That means we must become even more knowledgeable and rigorous in our recycling practices, lest we contaminate our recycling to the point of no return -- AKA, it simply gets diverted to the landfill.

Where to place many items can feel ambiguous or overwhelming to figure out, especially if recycling and composting weren't present where you grew up,. With peer-to-peer outreach and education, we are hoping correct waste sorting practices will become second nature, and UVM's campus would mitigate its contribution to cross-contamination.

Goals

Through various outreach efforts tailored to each waste audit area, the campaign goal was to discover the most common waste-sorting mistakes, then educate students about proper waste-sorting practices and provide permanent reminders around campus waste hotspots.

Implementation

The UVM Eco-Reps program consists of 20 students that are divided up into five community teams, with each team assigned to a specified residential area on campus. Efforts included a campus wide intervention as well as smaller events held in residential locations.

Each community team performed a waste audit for one of the buildings in their area. After sorting through a combined total of approximately 500 lbs of trash and recycling, they determined what contamination issues were the most prominent in their respective residential areas. How these issues were addressed varied by community team with events ranging from a ResHall waste competition to a waste themed jeopardy game. All teams handed out or posted corrective materials in the form of compost bags, informational waste pamphlets, or visual aids in waste rooms in reshalls.

Our full-team effort included running "Green Out the Gutt", which aimed to both reduce and correctly sort waste produced at a UVM men's hockey game. Students are typically handed 'bam-bams' (inflatable noise-makers) at every home game. These are only used for the duration of the game and then disposed of. This is the type of single-use item UVM's Zero Waste goals are trying to eliminate from campus. Green Out the Gutt they were instead provided neck-warmers and stickers that said "I Watch My Waste". Throughout the game, Eco-Reps stood by each waste station to help attendees properly sort compost, recycling, and trash. Following the game, the Eco-Reps performed a waste audit of both the waste produced at Green Out the Gutt and at a game the day before, which had no intervention.

We performed a 'Snapchat takeover' for the both reshall waste audits and Green Out the Gutt. This involved using UVM's official snapchat account to post videos of each event in progress and reach the broader UVM student body.

Two final initiatives taken on by Eco-Reps included writing a piece about the reshall waste audits for UVM's primary newspaper, *The Cynic*, and creating an infographic about how to properly sort the different types of coffee cups on campus.

Timeline

11/6/18	First Custodial planning meeting
11/13/18	Presentation of draft plan to Custodial department for feedback
12/6/18	Eco-Reps walk through reshall audit locations with building custodian
1/16/19	First planning meeting with Athletics department
2/2/19	Waste Audits on each major residential campus (5 total)
2/8/19	Community Team level reslife programming/interventions begin
3/23/19	Green Out the Gutt: Waste Sorting at UVM Hockey Game
3/25/19	Waste Audit on waste collected from Green Out the Gutt

Financing

Expense	Revenue	In Kind	Description
-	\$925.00	Sup	port from
Inter-Residence	e-Association		

\$280.00		Event Services labor charge for waste	
audit setups			
\$117.52	Two floor scales		
\$140.25	Stickers		
\$25.98		Two reusable utensil kits as Jeopardy	
event prizes			
	\$155.75	Two pizza parties for winning floors of	
waste sort			
	com	petition	

We were lucky to have the support of our Inter-Residence-Association for this campaign. Most of the funds were used for Event Services to set up tables and extra receptacles in each Reshall for the audit. Leftover funds were used for the following campaign. We received support from ResLife in the form of incentives for the winning floors of the two reshall competitions that were held.

UVM Recycling already owned one floor scale. We were able to borrow one floor scale from a neighbor, Champlain College. Our local solid waste district assisted with the day of audits and brought a scale of theirs. Without this help it wouldn't have been possible to have all of the residential waste audits on the same day.

Results

Across all ResHall waste audits, a total of 628.56 lbs of recycling and 1212.20 lbs of trash were sorted. A total of 113.40 lbs of recycling and 154.50 lbs of trash was sorted from Green Out the Gutt. These results were highly informative in tailoring recommendations for each department:

Residential Life: <u>https://docs.google.com/document/d/16Ea6mD39U-7Yi4bhfgZtUhA6xhAe9kQc3DYWH</u> <u>7y9FEs/edit?usp=sharing</u> Athletics: <u>https://docs.google.com/document/d/13PC2Viq_FgWH7dvJdG_JhMtr6nFbrFSs8IEb11J</u> zcWI/edit?usp=sharing

These initial audits were used to give Eco-Reps direction for where to focus their efforts in each ResHall (i.e. composting being thrown in the recycling, technotrash being thrown into the regular trash). It would be worthwhile to perform more waste audits in the future to see if our strategies for intervention have been effective, and to what degree. As new students come in every year, our interventions are ones that could be redone quite frequently to foster early learning and good waste-sorting habits.

This campaign also helped start the conversation with Athletics and Dining about striving towards more sustainable games. Currently, the materials used at the athletics

concession stands are not streamlined and many of the materials are not compostable or recyclable, they are also often made up of many different parts that are difficult to sort correctly. Another critical component of Green Out the Gutt was experimenting with withholding distribution of bam-bams, with are treated as single-use plastic noise-makers. These bam-bams are usually given to students upon entrance to the arena. However, during Green Out the Gutt, we found that despite the UVM Athletics department's insistence on having bam-bams for the students to encourage the team, none of the students entering questioned the greeters (Eco-Reps and Event Staff) about why they were not being provided. This suggests that the students attending do not find bam-bams to be an essential part of the experience.

Community team events and initiatives were designed for each specific residential area based on the reshall audit. Success of the community team events was measured in terms of community engagement and participation and amount of waste-sorting literature distributed (either around the building in the form of posters, or given to people directly). In total, Eco-Reps interacted with 4,705 people during this campaign, 80 of which were considered highly-engaged. This number is inflated because 3,532 attended the Green Out the Gutt hockey game. Also, the two halls that ran competitions or distributed information door to door counted each resident, a total of 1,172, as an interaction. Other engagement was from events, like waste jeopardy, that were held in the reshalls. It is likely corrective signage in the waste rooms of reshalls reached a wider audience as well.

The article about the waste audits for *The Cynic* reached both the print and online edition of the paper

(<u>https://vtcynic.com/opinion/eco-rep-trash-tips-compost-recycle-decontaminate</u>), and was also posted on *The Cynic*'s facebook page, which has a following of over 2,000 people. This campaign also reached the greater community because the Chittenden Solid Waste District wrote a blog about the campaign

(<u>https://cswd.net/schools/school-spotlight-uvm-eco-reps/</u>). Their help with this effort also deepened our partnership with CSWD staff. Lastly, our Snapchat takeovers reached ~1,000 people for both the waste audit and Green Out the Gutt events.

Lessons Learned

While the reshall waste audits were largely effective in allowing us to determine problems specific to each campus to target, we were not able to gather solid evidence that our interventions were successful since we did not hold a second waste audit. Eco-Reps will conduct another audit in spring 2020 but will not be able to connect those results to efforts from spring 2019. These audits serve more as a benchmarking tool for campus than a way to measure effectiveness of individual community team education efforts.

At Green Out the Gutt, there was not enough time or engagement to explain to students what the point of receiving "I Watch My Waste" stickers instead of bam-bams was. The general audience at hockey games is primarily community members who are not part of UVM and are not familiar with Eco-Reps. The rink is chilly and Eco-Reps were not in their uniform t-shirts so many attendees confused Eco-Reps with Athletics event staff. After the game, most people were in a rush to leave and did not feel inclined to engage with the Eco-Reps when throwing out their items. They often left their items in the stands, meaning they never encountered an Eco-Rep in the first place.