Megan J. Rue

Jack Johnson

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Further Development of Educationally and Environmentally Friendly Waste Practices

Overview: Upon examination of the University of Washington's trash, The UW Garbology Project found that many of the discarded items were inappropriately allocated as waste when they were actually recyclable or compostable materials. This leads one to ask: How should we actively engage and educate our demographic about waste disposal, and how can we minimize our carbon footprint? Through the implementation of Gimme 5 and TerraCycle, which are companies that accept materials that are normally difficult to recycle or are non-recyclable, we can educate the UW community and offset our environmental impact while decreasing our financial commitments to trash. These programs are easy to introduce and require little to no financial commitment. **Methods:** The UW Garbology Project will partner with the UW Recycling and Facilities Center (UWR&FC) and slowly implement these programs into a few buildings on campus. Slow implementation will help them deal with any unexpected issues that may occur in the early stages. Six to eight weeks after the process has been implemented, there can be a campus wide integration of the programs. **Conclusion:** This program allows the university to reduce the amount of waste that is sent to the landfill and decrease the amount of money spent on recycling and trash. The programs will also give the University of Washington Community a chance to become more educated about their waste practices, the environment, and how to become involved in their communities.

Overview: The Issues with the University of Washington's Current Trash Practices

The University of Washington has made great efforts over the last twenty years to divert approximately fifty-seven percent of its trash from landfills.[1] [2] Despite this success a large amount of waste is still sent to the landfill every year, and most of this waste is inappropriately disposed of. For example, upon inspection of the garbage the UW Garbology Project found that many of the items in the trash were in fact compostable, or recyclable, which suggests that many individuals are not adequately educated on what can be recycled or composted. During this process we also encountered many plastics that are not traditionally recyclable and take a considerable amount of time to decompose. This raises two major concerns: how should we actively engage and educate our demographic about waste disposal, and how can we minimize our carbon footprint?

This is an important question because the current waste disposal system costs approximately two hundred and sixty-two dollars for every ton of garbage sent to the landfill and one hundred and twenty-five dollars per ton for recyclable materials.[2] Though the university has diverted a lot of its waste into recycling and composting, it is still paying a considerable amount of money for trash that could otherwise be recycled or composted at a lower monetary rate. Also, the trash could be diverted in another way at minimal cost to the university while being educationally enriching and creating an active engagement in the university community. This alternative is based around two programs: Gimme Five and TerraCycle. These are programs that

[1] "Annual Report Fiscal Year 2011." *University of Washington*. University of Washington, n.d. Web. 10 Dec. 2012. <http://www.washington.edu/facilities/building/recyclingandsolidwaste/files/2011Report.pdf>.

[2] *University Of Washington Recycling & Solid Waste Annual Report Fiscal Year 2010*. Fiscal Report. Recycling and Solid Waste, 10 Jan. 2011. Web. 27 Nov. 2012. <http://www.washington.edu/facilities/building/recyclingandsolidwaste/files/2010Report.pdf>.

call for minimal or no financial investment for the institution and allow it to further divert recyclable plastics and waste while saving money.

Gimme 5 is a simple program that focuses explicitly on recycling different varieties of number five plastics, otherwise known as polypropylene. [3] They have established a multitude of drop locations throughout the United States. At each established location there is a bin to deposit your recyclable number fives products. But what is the incentive for individuals to participate in this recycling process versus the standard university process?

Gimme 5 has developed a rewards system that not only benefits the environment but also the individual who participates in the recycling activity. This system is tracked through Recyclebank and allows the participant to enter a point code from the recycled items prior to disposal.[4] With these accumulated points, individuals have access to a multitude of discounts that can be applied to magazines, foods, restaurants, household items, etc.

Another way that Gimme 5 and Recyclebank allow participants to accumulate points is by creating educational incentives. This is accomplished through a variety of interactive articles that allow the participant to accumulate points while learning about a variety of topics. For instance, one can read an article about how to live a greener and healthier lifestyle. Once the individual completes the article, they may answer several questions about the article or play an interactive game that requires them to utilize their newly obtained knowledge. This really engages the participant and requires them to think about the information being discussed. There are also articles focusing on how to conserve energy, use fewer resources, and learn how to

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[3] Preserve." *Gimme 5*. N.p., n.d. Web. 27 Nov. 2012. <http://www.preserveproducts.com/recycling/gimme5.html>.

[4] *Recyclebank*. Recycle Rewards, Inc., n.d. Web. 27 Nov. 2012.

purchase products that are more environmentally friendly. Implementing this program will benefit each and every participant along with the university.

TerraCycle is quite similar to the principle of Gimme 5 but focuses more on reusing and recycling materials that are normally considered trash. Many of the items that TerraCycle accepts cannot be traditionally recycled or are very difficult to recycle. [5] However, these products are usually turned into merchandise that the company sells for a profit. TerraCycle hopes to eliminate waste by educating the public and diverting goods from landfills, which will help to ultimately conserve our resources. This program would be complimentary to Gimme 5 and further amplify the benefits of waste diversion previously discussed.

TerraCycle has established "brigades", which are essentially different categories of materials that are collected and shipped to the organization. There are brigades for chip bags, energy/granola bar wrappers, candy wrappers, water bottles, cans, various electronics, cereal bags, solo cups, pen/pencils, packaging, and much more. Many of these items were encountered by The UW Garbology Project in their trash sorts. If these brigades were established waste could be diverted from the landfill and money could be deducted from the university's annual waste bill.

TerraCycle would allow the university to engage student interests during the implementation process. TerraCycle does not provide the bins and they ask that participants provide or even create their own. This would be the perfect opportunity for the university to reach out to students in registered student organizations, the environmental college, fraternities, sororities, undergraduates living in the dorms, faculty, etc. and ask them to create their own bins

[5] "TerraCycle." *TerraCycle*. N.p., n.d. Web. 27 Nov. 2012. <http://www.terracycle.com/>.

and choose their brigade. The university community will actively participate in the process, receive education about trash and recycling, and give back to the community.

Like Gimme 5, TerraCycle also has a rewards system; however, TerraCycle's rewards system is based on different principals and procedures. TerraCycle requires the collection of items for one of the various brigades and to ship those items to them. After the collection and shipment, points begin to accumulate. These points may be used to make a donation ($.01/point) to a variety of charities, non-profits, or schools. [6] Participants can choose one of the local schools in their community or the continental US along with international organizations and communities. Many of the programs focus on providing education, protecting the environment, and building communities through such acts as providing clean and continuously accessible drinking water to impoverished communities. [6] This helps to build these underserved communities while stopping the glorification of material culture.

TerraCycle doesn't just provide the opportunity for individuals and communities to give back and recycle. It also focuses on educating the public about the environment and connecting individuals in the community. They partner with different companies to provide goods and education through free events or by requesting that an individual trade-in a recyclable product for items such as buy-one-get-one free baseball tickets or free food. [6] Through TerraCycle the university can give back to the community, educate its main demographic, and save money by reducing its waste output by recycling.

Methods: How to Implement Gimme 5 and TerraCycle

The UW Garbology project will partner with the UW Recycling and Facilities Center to coordinate the transition of Gimme 5 and TerraCycle onto campus. The initial introduction will

[6] "TerraCycle." *TerraCycle*. N.p., n.d. Web. 27 Nov. 2012. <http://www.terracycle.com/>.

be small. The purpose of starting small is to find out what works and what doesn't. To start, Gimme 5 will only be placed in one dining hall and two of the campus's larger cafés. These bins are provided for free by Gimme 5, so this process will only require the university to contact the organization and arrange to become part of their program and to have the bins delivered. Another individual will have to orchestrate the bin introduction with the building manager for the proposed locations.

TerraCycle will be slightly more complex and will be introduced into the following locations: one fraternity/sorority, one of the campuses dormitories, three-four large buildings, and one in Suzzallo Library. Various recruitment efforts will be made by the UW Garbology Project and UWR&FC to recruit and encourage individuals who live or work in these buildings to choose a brigade and create a bin. This recruitment effort can include mass emails and flyers with the necessary information about the upcoming event. The university, as well as The Garbology Project, can advertise the event on their website. The Garbology Project can also use their Facebook page and Twitter account to entice more individuals to participate in the brigade and bin creation process.

While the bins are in place for the six to eight week introductory period, the UW Garbology Project and UWR&FC should work together and monitor all of the collected material in the bins to see if anything needs to be changed with the process. After this wait period and re-evaluation a campus wide introduction may occur. Building coordinators will need to be contacted, the additional Gimme 5 bins will have to be ordered, and a campus wide advertising campaign must begin.

Conclusion: Why this is the Best Alternative to Our Traditional Waste System

The joint implementation of these programs at the University of Washington would be a simple process with extraordinary benefits to education, the environment, and the fiscal budget. Just the mere introduction of these programs creates an awareness and active engagement for the students and faculty at the university. This engagement offers the wider possibilities of helping people develop more conscious lifestyles, which help them make more environmentally friendly choices and changes to their previous habits. Financially, these programs offer the opportunity for the University of Washington to reduce the amount of money that we spend yearly on trash and recycling by essentially giving it to these companies. The benefits far exceed the costs and these programs could be initially tested on a small scale before amplifying it to campus wide status. This would allow the university to establish a process and work out any unforeseen issues ahead of time. In the end, these programs would ultimately allow the University of Washington to reduce its carbon footprint and encourage our demographic to participate in, and have access to, programs that educate about recycling.

Budget: The Financial, Environmental, and Educational Benefits Exceed the Costs

Introducing these programs would cost the university little or no money. If the university chose to bring Gimme 5 to the campus, it would not require any financial investment on their part. The assigned drop off bins and the postage required to ship the recyclables are covered by Gimme 5. The only requirement is downloading a shipping label and sending the items in. This program could reduce the amount of money spent on recycling and ensure that plastic number five is being reused in an environmentally beneficial way. This is a better alternative to it being shipped internationally to be improperly disposed of or burned as a source of energy.

TerraCycle's process is similar, but minor costs could be incurred. Almost all of the brigades provide free shipping by simply downloading a label or requesting one via phone. Some of the brigades require that the participant pay a nominal shipping fee, which is further detailed on their website. The fee to ship the materials away is far cheaper than the cost of the items to be transported to a landfill. The result benefits the environment, develops community outreach, and increases education.

Another expense that will require funding is the creation of the collection containers. Providing large tubs, re-using large cardboard boxes, and providing creative items for decorating these said containers will be necessary. These items are also a small monetary amount. Salvaging some of the larger cardboard boxes that move in and out of campus on a daily basis can dramatically reduce expenses. The only thing that will be required is flyers for advertising markers, glue, and other items that individuals will need to make their bins unique to their brigade. Groups should be encouraged to use materials that are unique to their recycling brigade and try to re-use items as a means of decoration. To make an exaggerated estimate, one can assume that $2,500 would be more than adequate to cover the cost of necessities. This would allow more than enough money to create bins for the process and have money left over to continue with the project or to help with expansion.