## Zero Waste Beyond 2020: Communicating Waste Disposal to Library Users



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## Landfill waste contributes to global warming, pollution, and various environmental concerns risking human health and life on earth today.

The United States produces the most landfill waste of any country in the world. To be exact, around 1,609 pounds of waste are produced per person, making up 40% of the world's waste according to Recycling Revolution. In only one day the population of UCLA is 73,000, meaning a portion of what may be 117,457 pounds of waste is produced on campus. New technology gives us the option to recycle or compost, thus significantly reducing the amount of actual waste sent to landfills. Despite these options, individuals and institutions are often not prepared to recycle or compost lacking both awareness and the infrastructure to do so.

In 2007, the UC system established their Zero Waste to Landfill by 2020 goal. As of April 2019, the campus diversion rate hovers around 65%. In order to increase the diversion rate, Zero Waste Coordinator Kikei Wong and the Sustainability Action Research (SAR) Zero Waste Team have been using Charles E. Young Research Library (YRL) as a pilot building to research the efficiency of different techniques in increasing waste diversion. Through our collaborative efforts, the library, a hub for student, faculty, and staff activity, can become a model for other buildings on campus.

Dressed in hazmat suits, Kikei Wong, SAR, and a group of volunteers sorted through 500 pounds of trash finding everything from multiple boxes of unopened Girls Scouts cookies to dozens of Yerba Mate cans and coffee cups. Most alarming were the statistics we found: roughly 56% of the waste could have been composted and 22% could have been recycled. Altogether, a whopping 78% of waste going to landfill could have been diverted but instead was going to the landfill (see **Figure 1**). YRL has a lot of work to do in order to help achieve UCLA's Zero Waste initiative, making it the perfect trial building to implement outreach and education efforts.



Figure 1. Breakdown (by waste stream) of the trash sorted during our waste audit of Young Research Library, February 20, 2019

After installing tri-waste bins that introduce the compost, recycling, and landfill waste streams at YRL, the SAR Zero-Waste Team decided to focus their efforts on communication to ensure the infrastructure is used properly. While conducting the waste audit and designing a possible communication campaign, the SAR team consistently found themselves questioning how to properly dispose of certain items. The truth is that it is *hard* to know what material is compostable or recyclable even for people interested in and who study sustainability. People without a strong background and interest in waste management will likely not know what to do

when they are confronted with three different waste streams. Since climate change and pollution affect everyone, people usually want to do the right thing but we cannot expect them to put time into learning what to do before dumping their compostable latte drink from Cafe 451 in the recycling bin as they go about their busy days.

After the preliminary waste audit, the SAR team began tabling in front of YRL in order to converse with students and staff about Zero Waste efforts and to educate interested people about proper waste sorting behaviors. Most people conveyed that they did care about waste diversion at UCLA, but were often confused by what was compostable as opposed to recyclable. The tabling event included engaging educational games that communicated to library users both the impact of landfill waste and how to properly dispose of waste. Another popular component was the waste sorting cheat sheet that the team created to help library users decide whether they could recycle or compost their waste (see **Figure 2**). YRL staff and custodians often came by to give feedback on the efficiency of the placement and size of the bins as well, allowing the team to gather more information on how to best implement bins in YRL. The feedback from our outreach efforts illuminates the fact that students and staff would greatly benefit from more permanent and easily accessible educational resources along with improved communication to understand the efficiency of current waste infrastructures on campus.



Figure 2. The Zero Waste Team inputting the tri-waste bins in YRL (left) and tabling in front of the library to increase education and awareness (right).

Zero Waste at UCLA is an ambitious undertaking that relies on the collaboration and involvement of many different groups. UCLA has done a remarkable job at making compost and recycling bins prevalent and accessible on campus, and expanding the amount of waste disposal bins remains an important goal in the university's waste diversion efforts. Having the right equipment and resources is undeniably necessary in increasing waste diversion, but information and education is just as important in the fight to go Zero Waste at UCLA. The awareness and action of every individual is vital in the achievement of Zero Waste at UCLA and beyond. As Margaret Mead knowingly stated, "Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has."

## Part 2: Email

Hello,

We are UCLA's 2019 Sustainability Action Reach (SAR) Zero Waste Team. Our team is working with Kikei Wong (UCLA's Zero Waste Coordinator) to help UCLA reach its goal of Zero Waste to landfill by 2020, and this year we are focusing on researching effective methods of decreasing the amount of waste produced that ends up in landfill at Young Research Library (YRL). Since January 2019, our team has had a number of successes, including:

- Completed a Waste Audit of all the waste produced at YRL in one day
- Met with YRL's Library Building Officer, Tom Rosholt, and Cafe 451 manager, John Angle, to discuss staff waste habits and potential improvements
- Worked with UCLA's Zero Waste Coordinator, Kikei Wong, to install 15 new compost bins, 15 recycling bins, and 40 new tri-stream compost-recycling-landfill bins throughout YRL
- Completed a three week long education based tabling campaign with engaging activities and raffles

As our campaign comes to a close, we will be conducting a second Waste Audit to assess the effect that the implementation of the new bins and education based campaign has had on students' waste sorting habits.

A major part of our campaign has been focused on improving awareness and educating students and staff about appropriate waste habits. The original Zero Waste by 2020 goal is approaching fast, and UCLA still has a long way to go before reaching this goal. Thus, any opportunity to increase awareness of our project will be greatly beneficial. At a university as large as UCLA, it is hard to enact widespread change, but we are hopeful that by starting at one building, we can create a pilot program that will be able to be implemented throughout UCLA's campus.

We look forward to the potential to work with you towards publicizing our project and research.

Best,

SAR Zero Waste Team