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## Integrating and Institutionalizing Sustainability Programming into University Residences

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# COLLEGE OF THE ENVIRONMENT



Internship Title: Integrating and Institutionalizing Sustainability Programming into University Residences

Student Name: Dora Vaughan

Internship Dates: 09/23/2022-12/09/2022

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DATE: 12/09/2022

## Integrating and Institutionalizing Sustainability Programming into University Residences

### **Introduction**

Pursuing higher education does not have to come with economic and ecological impairment. Transitioning to living on campus for incoming students requires increased affordability and accessibility accommodations to provide an equitable student experience. The cost of furnishing a residence room is not only for families but for the planet when the students move off campus. Through conscious consumerism, extending the lifespan of resource-intensive items, and choosing second-hand before buying new, residents contribute to reducing our collective ecological and economic footprint. I combined my two fields of study, Environmental Science and Leadership Studies, as a Sustainability Representative Mentor. With my project partner, we established a program to reduce waste in the residence halls. In a stress-induced transition, the Residence Hall Reuse Program is a closed-loop system that allows residents to reuse dorm-specific items donated by previous residents at no cost for their stay on campus. We began with our efforts concentrated on the donation and secondhand use of minifridges. A minifridge's ability to offer access to fresh food and produce can be integral to residents' autonomy and food security. Despite their high demand, then items rarely see their expected lifespan through. In 2016 alone, 3,060 pounds of minifridges ended up in WWU's Associated Students Recycle Center. We set out to build a program combating the excess items we unnecessarily send to the landfill each year.

### **Methods**

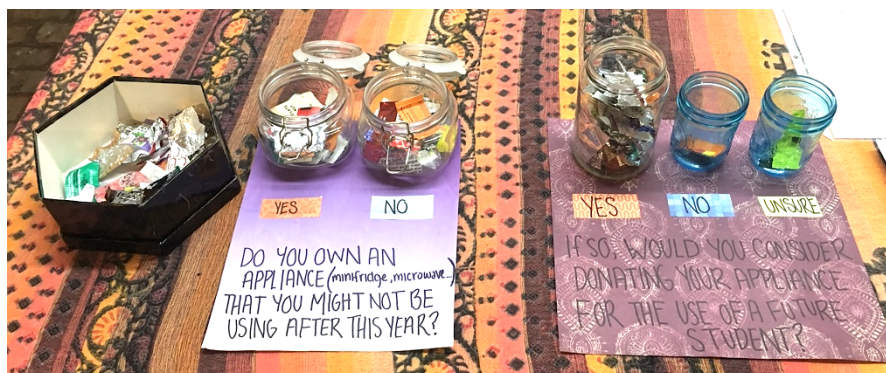
Planning and proposing a grassroots sustainability project requires research, networking, and a passionate vision. The research on case studies and environmental impact lasted months before we presented our program concept to campus partners. As far as we found, there was no minifridge rental at other universities with no cost associated. The benefits of conscious consumerism, the effects of landfill waste, and the affordability and accessibility were at the core of our promotion and interactions with residents. The monetary value associated with the excess waste during peak times on campus, move-in, and move-out, and the direct benefit to residents of a program free of charge remained an incentive factor for

campus partners. To present the importance of institutionalizing salvation and reuse programs, we quantified success metrics, aligned with the Sustainability Action Plan, and detailed all programmatic functions for transparency with stakeholders. The significant cost benefit for residents and the minimal investment required from University Residences exemplified the absence of similar, integrated programming on campus. The program will continue to bear the brunt of move-out waste until consumption habits are significantly altered.

The program still facilitates the same intentions and metrics of success as when we began marketing our idea. We tabled at the dining commons to gauge residents' response upon being asked if they would donate their minifridge after moving out of the dorm if they were planning to move off campus. We created interactive displays to provide awareness and education and record quantitative feedback. We wondered whether they had thought to keep their minifridge when moving off campus, if they would choose to use secondhand instead of buying new, or if they were interested in being more sustainable. With our overwhelmingly positive conversations, we refined and presented our project proposal.



**Figure 1** Tabling outside of the Viking Union Dining Commons on January 30, 2020, interacting with students around sustainability and interest in a dorm supply sharing program, asking questions on willingness to donate (see Figure 2).



**Figure 2** Utilizing various scraps to record response to two questions regarding A) having as appliance to donate and B) donating an application for reuse.

The program's trajectory has wavered and shifted often; institutionalizing any program is challenging enough, let alone with a



**Figure 3** The official Recovery Drive posters detailing accepted items and where and when to donate.

residents home and inundated University Residences with rooms of abandoned property. After the allotted holding period for abandoned property, our closed-loop system expanded in its offerings, with the abandoned property relinquished to University Residences Facilities. With the pilot of our program, our priorities quickly changed. We collected, sorted, cleaned, and labeled all abandoned properties specified as suggested essentials by University Residences. This became the first inventory for reservations to a reduced occupancy (around 25% total capacity) of residents.

Our reservation system has remained consistent despite the influx of interest since the pilot. Donations are promoted via posters, emails, social media, official housing communications, and word of mouth through

global pandemic. We worked with the Office of Sustainability, Residence Life, and University Residences Facilities to prepare a Sustainability Equity and Justice Fund grant proposal until the Covid-19 crisis impacted funding approval and University Residences Facilities hired us on due to our need for an accelerated timeline. To facilitate our program, University Residences agreed to hire two student employees. Our funding for the positions had come from decreased waste management fees with reduced residential occupancy. Within University Residences, our program had space availability and the possibility of a pilot program after the Covid-19 crisis sent all



**Figure 4** Dora promoting the location of the blue bins within Higginson Hall on May 26, 2021.

residential staff. Drop-off of donations occurs across campus near the main lounges of each community with characteristic WWU Associated Students Recycle Center 'blue bins' designated by signage. We officially partner with the Recycle Center in their "Recovery Drive" efforts as they collect and sort donations daily before reallocating for donation to community partners. After collecting our accepted items from the Recovery Drive, each is tested, cleaned, labeled with a specific item code, and photographed before being shelved in our storage space, lovingly named the Headquarters. Items are organized by category and item code. Our reservation system was created to support manual reservations via Google forms requiring updates in a spreadsheet. Items are reserved on a first-come-first-serve basis, are not confirmed upon request, and are only secured after a liability waiver has been completed. Residents will select a pick-up date and time at the Headquarters that best suits their move-in schedule. After moving in and those who haven't shown up for their reservation are informed of termination, residents can browse the remaining inventory in the Headquarters and check out items without a premade reservation. Returns are taken at any time and expected at the end of the academic year unless other accommodations have been made. Aside from improving our equity and staffing capacity, the rental system has functioned as presented in our project proposal.

Equity and expansion were essential parameters when considering the function of the Residence Hall Reuse Program for the 2022-23 academic year. With this being the first year back to near-full capacity, we knew demand would be high, and we had to refine our offerings somehow. This academic year, we introduced priority access to our program, offering greater accessibility to residents who are either international, first-generation, PEL grant eligible, or out-of-state. Of the 4,000 residents on campus, 1,600 of those fell within this focus audience. This focus audience received access to reservations before the general audience. The program development and behind-the-scenes facilitation would not have been possible without adding two employees to our team. With the growth of two employees to three in our second year and four in our third year, I was promoted to lead. With my last quarter, I set out to write this program into a permanent positions job responsibility; little did I know I would soon hold that (temporary albeit) position.

## Results

The impact and reach of the Residence Hall Reuse Program have been overwhelming. Every year we send out a feedback survey we address satisfaction and program improvement. To best support residents, we quantified our usage and refined our accepted items to donate the categories with less than 70

percent of the total inventory checked out annually. The number of donations processed by the Recycle Center and then by our

	2020	2021	2022
Items in Inventory (Count)	375	386	415
Items checked out	50.4%	83.7%	95.9%
Residents Served (Count)	89	119	205

team is insurmountable. We piloted our program with 375 items, checking out half of our inventory. With a mid-retention rate through returns, we collected more and replaced unreturned high-demand items, increasing our percentage of stock reserved by residents by 23 percent higher. With more students returning to on-campus living for the 2021-2022 and 2022-23 academic years, we increased our program's number of residents served. In the most recent year, we checked out over 80 percent of our inventory to priority audiences alone, and just as many students were unsuccessful in reserving as there were successful due to the limited stock. Most categories were 100 percent reserved, with only 20 items remaining after a successful free for all check-out run after move-in. Even after doubling our minifridges from 41 to 102 this year, We are limiting our programs' reach due to staff and storage capacities. The demand for our program currently outweighs our staff and storage capacity, as our manual reservation system and Headquarters are inefficient for further expansion.

## Discussion

The institutionalization of the Residence Hall Reuse Program is a reality, and the increased awareness of the program demands expansion in software, supervision, inventory, and storage. The manual system will not support another year of reservations without compromising staff work boundaries and accessibility. We have begun looking into software creation and other options available for contracting. To optimally centralize the program within University Residences Facilities, a professional staff position is responsible for administration,

communication, and education to maintain and expand the reach. With our education focus growing in the last two years from just a concentration on the reuse program, I would like to see more refined and targeted educational material developed for the next academic year. As our team focuses our educational curriculum on a different theme quarterly, an emphasis on the program in our marketing should be incorporated.

With priority access diminishing our available inventory within days, it is evident that more space is needed to retain more inventory, specifically minifridges. With our refined list of accepted items, we have honed in on what is most demanded from residents. The decision to donate and no longer take bedding concerns me as residents will continue to buy dorm-specific bedding, and there has yet to be an institutionalized solution for redistribution. We were thankful to have found local shelters and tiny home villages to donate to, but their capacity is more limited than ours. Even though we no longer check out bedding due to low usage, the item is still highly demanded, just not secondhand. Conversely, when asked by my supervisor, I responded that we would need at least 400 minifridges to appease this year's demand alone. The heartbreak of not being able to supply deserving residents with access to potential food security weighs on me, especially when we see minifridges abused and abandoned. Considerations to limit reservations have been discussed, but I am weary of dictating what a resident needs and asking them to prioritize if not accessible outside our program. I anticipate expanding our Headquarters to accommodate more inventory in the coming quarters. A prospective space in Buchanan Towers would allow accessibility to South Campus residents. With more space, we can increase our inventory abundance and variety. We have begun work to start a reuse program for abandoned and salvaged bikes on campus as we see an increase in retained abandoned bikes. Similarly, we hope to pair educational workshops and free use through application processes. Without the staff capacity to take on more projects, this has paused until the Spring of 2023. Identifying sources of increased landfill effluent or unused resources and creating solutions through experiential learning has prepared me to combine my knowledge in Environmental Science and Leadership Studies to further my experience in environmental education.



In three years, I have expanded a project proposal to an institutionalized program, requiring grit, persistence, and developed skills from my higher education to excel in public presenting, supervision and delegation, and teaching. As I look to accept a position where I have written the program into the position description, I am humbled to continue my development. I have written procedures and data analysis to carry me on to program expansion. After the transition of my co-founder graduating, I struggled to collaborate with others on our grassroots projects. My class experience in leadership and pedagogy gave me tangible skills to be a communicative leader. The scientific analysis and writing experience from my major classes have prepared me to present myself and my ideas concisely and effectively professionally. The understanding I gained of higher education organization and bureaucracy will excel me in my professional career as I explore where I will land within education. Reducing our impact ecologically while educating and empowering residents has led me to find my passion and given me a steppingstone to developing a career in environmental education.