

Service-Learning: Changing Students Through Non-Traditional Education

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Introduction

Six students huddled around three heaping black trash bags in a parking lot. Equipped with latex gloves and notebooks, they sifted through the garbage from a campus cafeteria. Day-old bread, rotting vegetables, plastic forks and packaging – there, sprawled out on the asphalt, a full-blown research project took place. It may be hard to believe, but the parking lot was a classroom, and the trash, a test.

Two months later, in a sharp contrast to sorting trash, those same six students stood in front of a research poster at an event where results of service learning projects were presented. Equipped this time with brochures, statistics, and experience, they presented to Utah State University Dining Services the results of that waste audit, making suggestions that would have direct impacts on the university. Unconventional as it may seem, both scenes present education at its finest. This was service-learning.

As defined by Utah State University, “Service-Learning is a teaching and learning strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities” (“Service Learning” 2017). The beauty of this definition is the flexibility it allows; service-learning can provide a different experience for everyone. Despite this versatility, service-learning has two overarching purposes: to prepare students for life experiences through education that extends beyond the classroom, and to encourage students to be involved with community issues at every stage of their lives. It transforms students into concerned citizens and helps them develop skills that go beyond what are typically developed in traditional classrooms.

Sorting through trash may not be the most orthodox service-learning experience; however, it provided a basis for students to embrace this definition. This project was part of the University Honors Program’s “Think Tank,” a course composed of six multidisciplinary groups from three discipline-focused sections: Humanities, Physical Sciences, and Social Sciences. The instruction for the course focused students’ attention on sustainability, defined as “being a method of using a resource so that the resource is not depleted or permanently damaged” (“Sustainable” 2017). Sustainability emphasizes ways in which people can reduce, reuse, and recycle. This course helped students identify and solve local sustainability problems. Working collaboratively with administrators in the university’s Dining Services, which had invited the research projects, students learned to address community concerns in regard to their own disciplines, and collaborated with students in other disciplines to solve problems. The six teams tackled separate projects to assist Dining Services with its overall goal of becoming more sustainable.

The Problem and The Project

Food waste is a rising global concern and has drawn increased attention in recent years (Parfitt, Barthel, and Macnaughton 2010). As commercial eateries grow in popularity, the amount of landfill waste grows as well. As can be seen in **Figure 1**, food is a large part of what consumers throw away: 40% of food in the U.S. is wasted, placing a large environmental and financial burden on households. Restaurants struggle with effective food waste strategies, and

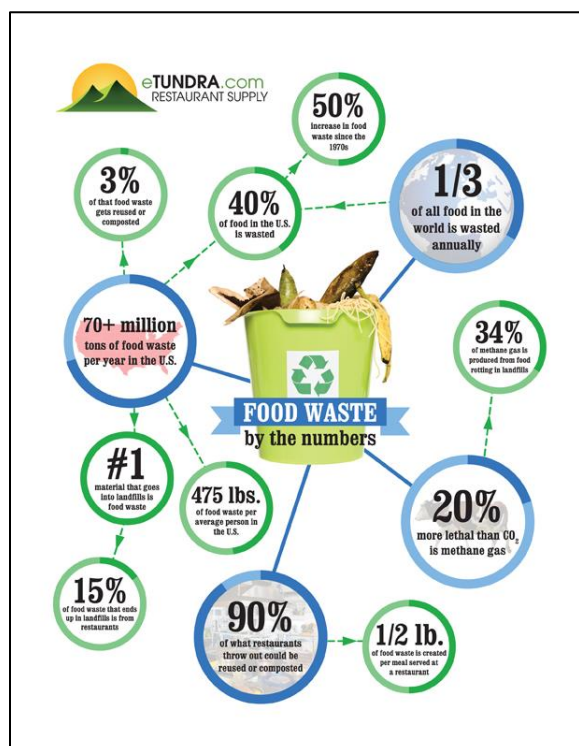


Figure 1 ("Food Waste by the Numbers" 2013)

90% of food thrown out could be composted (**Figure 1**). Composting holds potential for better waste disposal techniques in restaurants.

To address the growing concern about food waste, specifically on college campuses, my team's project focused on the largest cafeteria at Utah State University: The Junction. We were concerned with the pre-consumer stage: before food even got to the plates of consumers, we wanted to know how waste was being addressed. After we observed kitchen production processes, we determined that current composting practices were inadequate and inefficient. At first glance, it was apparent that despite having a composting receptacle, many compostable items were being inappropriately placed in landfill receptacles. Thus, a large portion of reusable waste was being sent to landfills each day.

To gain an understanding of just how much waste was inappropriately sorted, we conducted a waste audit of kitchen garbage cans. We obtained landfill-destined trash bags from the entire preparation area on two separate days,

emptied the contents from each bag, and sorted them according to three categories: food waste, plastic or otherwise recyclable waste, and landfill waste. We then weighed the contents and compared each to the total weight of all waste. Our discoveries from these two audits showed that up to 30% of landfill waste in the kitchen could be composted. The significance of this number is even greater when we look at annual data – this is a difference of two tons a year! As we evaluated possible causes of improperly placed waste, we noticed that within the kitchen, only one composting receptacle was available, and it was placed in an inconvenient location for many employees within the kitchen. Our proposal for change was supplying composting receptacles more generously throughout the kitchen and training employees to improve composting techniques.

Going Beyond the Classroom

One of the greatest advantages of service-learning for me was the ability for coursework to go beyond the classroom to teach practical, workplace skills. Much of our time was dedicated to developing teamwork skills, enhancing communication skills, and applying our classroom

knowledge to our projects. Service and research did not replace classroom instruction, but rather supplemented it to provide a rich learning experience.

Our project exhibited how service-learning goes beyond traditional education by providing opportunities to develop mature problem-solving skills. As part of this Honors “Think Tank” course, students, not teachers, identified and tackled a problem within the campus kitchens and cafeterias. Initially, it was difficult for our group to find something in the pre-consumer phase that would make a difference. As we discussed different problems and the various benefits of each as a research project, we came to a consensus on a project involving composting. Because we were creating our own research project, we had to determine which calculations to use, how best to present our findings, and how to solve the problem at hand – namely increasing and effectively utilizing composting in the kitchen. In the end, we presented conclusions that through increasing composting receptacles and more effectively communicating composting regulations to employees, the kitchens would improve sustainability significantly. Through identifying problems and exploring options to solve them, students developed critical-thinking skills.

Classroom instruction was essential to the successful practice of these skills. As part of the humanities and arts course, my peers and I explored how art and literature influence societal perception of sustainability, and how we could use that to our advantage when solving problems surrounding sustainability. This focus helped us as we were brainstorming how to assist the employees in becoming more sustainable. An essential part of our solution plan was to add a brochure to employee training. Our classroom work helped us in creating a professional and effective brochure for Dining Services by using aesthetic design and clear writing.

Our classrooms thus became forums to discuss real problems and real solutions. Students learned within their own discipline, and then collaborated with other disciplines to discuss the overarching principles of sustainability. Developing competent communication skills was vital in order to interact effectively with our group members, professors, Dining Services, and other staff. Written and verbal communication skills, along with interpersonal skills, are often highly sought-after characteristics in college graduates, and are practiced in service-learning classes (Adams 2014). In addition to sending emails and organizing personal meetings with different individuals throughout the project, we needed to communicate our findings via formal papers and a poster presentation, both to the public and to Dining Services.

Effective teamwork was one of the most important skills we learned. This service-learning project allowed us as a team to encounter and overcome difficult situations throughout our project. College provides an environment where groups of people come together in collaboration for a common goal, but too often students and faculty are siloed by divisions between majors or colleges. The structure of this “Think Tank” as designed by University Honors Program director Dr. Kristine Miller deliberately sought to tear down those silos. Service-learning adds a multidisciplinary aspect to collaborative projects, something that closely resembles life experiences. Through collaborating as a team, we brought together different talents and skills. Some brought a knack for math, others a gifted artistic ability. We used our unique skills to work together in gathering information, communicating that information to each other, reflecting on and documenting the information, and finally, presenting our findings. Because societies are defined by and built on the interactions of people, these interpersonal skills are important to learn and practice. Traditional lecture classes may not offer what small, group projects can. Teams are essential in making a difference.

Our services to the community certainly build the community, but they ultimately shape our character, personality, and sense of self. They define us as learners. Service-learning provides an outlet to discover who we are and how we fit into the community around us (Lovett and Chi 2015). Classroom learning may prepare students cognitively, and service-learning helps them apply concepts. Service-learning encourages doing, involving students in solving real problems.

Empowering Civic Involvement

As students gain more from their education, they have an increased responsibility to their community. Too often the citizen's role is only as the critical observer. What causes so many of us to acknowledge a problem to the point of complaint, but then discourages us to the point of complacency? On the other hand, what compels us to create change?

As I made observations, conducted research, and reached realistic conclusions to resolve how the campus kitchen could be more sustainable, I discovered how solving this problem made an impact on me as an individual. The kitchen-generated waste was a cost that was directly passed on to me, and something I had the power and responsibility to change. When this idea resonated with me, the problem changed from being a campus problem to being *my* problem, and gave me an increased motivation to help resolve it. Working on a campus-wide issue helped me to feel that I was intimately involved with the workings of the university. It helped me to become more conscious of my role in the university as well as the role of fellow students, faculty, and staff. It taught me not only to *see* opportunities for service on campus, but also how to *use* my skills to contribute to improving the campus community. Everyone can make a difference in their community, and personalizing a problem internalizes the importance of it.

Service-learning gave me the opportunity to develop a vision for community involvement. The idea that one person cannot make a difference resonated in my life until I became involved in service-learning. The sheer masses of people in this world can cause individual efforts to seem useless in the big scheme of things. However, this mindset is detrimental to progress, as it destroys passion and suffocates vision. If enough people believe that they as individuals cannot make a difference in the world, change cannot happen. On the other hand, if one person believes a difference can be made, the results can be monumental.

Service-learning stands as a practice run for future civic engagement. Becoming involved in a college campus is the perfect way for students to prepare for community involvement. This project taught me that Utah State is my community, and I can be integrally involved through my interactions throughout campus. The skills developed through this process will carry on with me. Citizens shape their communities, and I was able to realize the value of my role as a citizen through this project. We learned that what we do does have an influence, and that helps motivate us to be even more involved in the future. As solutions are proposed and changes are made, a lasting effect is felt by the community. The passion to improve the community can be contagious, and those who catch this fire can influence others.

Conclusion – A Worldwide Impact

After experiencing service-learning, I cannot look at civic involvement the same, because I am no longer the same. Changing the world starts with changing ourselves, and we change

ourselves through engaging in new experiences. Service-learning provides many of these self-discovery opportunities. It creates a snowball effect with massive consequences.

Service-learning is only the beginning — a bridge between school and work, between an individual life and the community. It is not intended to be an end, but a beginning. Service-learning can be transformative. While this may have been a solution for the university, Utah State was not the sole beneficiary of this experience; the students also gained much. Just as something beautiful can grow from composting, something wonderful came from a waste audit. Composting, as a rule, requires a certain amount of time and is a complex process, but waste eventually becomes fertilizer that grows plants and flowers. Likewise, service-learning is a process, and it has the ability to take a waste audit, and through a process, grow individuals who can make a difference in the community. Service-learning is a fertilizer for growing educated members of society who can shape the communities around them.

An individual can make a difference in the world, and I can make a difference in the world. Our project identified problems and offered solutions to a sustainability issue on campus, and while that may not change the world today, it changed me. No effort, no matter how small or large, is ever wasted. And so, the question remains: what in *our* world is worth changing?

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