Lead Coordinator of EPA On-Campus Food Waste Prevention Program By: Christopher Ramirez California State University Chico Fall 2015-Spring 2016

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Executive Summary

As the lead coordinator, I was chosen to help and conduct research with EPA and others to design and implement EPA food waste prevention program on CSU Chico campus. The project is to reduce the amount of food waste on this campus that would end up in landfills and contribute to greenhouse gas emissions. Food waste is one of the largest products being filled in landfills and we aim to reduce the environmental impact. The food being thrown out doesn't necessarily have to be thrown out but donated to feed people in need or composted.

Project Objectives

Food waste in America is an on-going problem that contributes too many of the environmental problems associated with landfills. The objective of the project was to design, communicate and implement a plan that would be specific to each of the dining centers on the CSU Chico campus. The main points of interest was the dining hall and the main cafeteria on campus, Marketplace. We excluded the on-campus food stations for this initial project due to their relatively smaller size compared with the main dining areas.

Comparing and auditing the dining areas was the first step to adequately determine how much food was being thrown away and how much could be donated, if possible. The dining hall was initially the first eatery investigated because most freshman purchase a meal plan from the university. Food waste would be the most here, relatively, because a majority of the food is being served buffet style. Buffet style meaning the food are on tables and the students could take as much as they would like. The meal plan covers breakfast, lunch, and dinner so a food audit was considered. This food audit would consist of taking the total amount of food being cooked, how much un-used food was being thrown out at the end of each service and the amount students threw away. The food students threw away would be marked as to see which food group was being wasted the most and possibly re-organizing the menu to reduce excess amount of waste. The initial food audit would be done at the beginning of each food service and be done for one week. This would be then calculated to create a total typical amount of how much food was being used and wasted for each service and would then be used, mathematically, to find how much for total semester. Details were still being worked out. The same method would be used in the Marketplace.

In order for the food audit to become accurate and consistent, there needed to be a group of school volunteers that would help and assist in the data collection. This in itself is a difficult task to complete. There are students willing to help but having a team ready and coordinating time schedules proved rather complicated. Kitchen staff was considered to help but not with project details only with writing down total weights of food used during food service hours. If food weight was needed then a scale would been provided to them. Unused product was also considered for donating to local shelters and food banks.

Unused food product is a valuable resources for the donor and the recipient(s). Excess food that was not used service could be donated to others in need. Details were being finalized but creating a partnership between a Chico shelters was considered. The idea was simple: Bring the unused food to the local shelter and help feed people at the shelters(s). This idea had good intentions but was disregarded. Meal services did not have the time to take the food to the shelters because of the possibility of food temperatures being out of the "safe zone" preventing bacterial growth. So this idea was scrapped because of legal purposes as the main reason. "Legal purposes" being liability issue. People and institutions try and avoid no matter what; which is understanble. Though the "Bill Emerson Good Samaritan Food Donation Act" provides protection for the food donors if donated food was given with good intentions but unlikely food donations would at this time.

A CSU Chico representative spoke with me and told me the details about the food was being served to students. The dining hall does have smarter preparation for their food and consistently adapt by reducing the amount of food as the food service gets closer to ending. So the waste is minimized but exactly how much was not given. The Marketplace is also practicing better food preparation. Unlike some other colleges where their waste is substantially more because of fastfood partnerships and many different eateries, CSU Chico does not have such eatery expansion. The Marketplace offers 6 different types of meal choices and are cooked made-to-order, with a few minor exceptions. This type of food prep reduces the amount of food waste produced but by how much is unknown. Finding data about before and after changes in food prep were "not available at this time". To clarify, the dining areas to practice smarter food prep methods but knowing exactly how much food they save and thrown away is not known. This information was good to hear but actually viewing it for myself did not happen because of the time constraints so late in the semester.

Project Approach

Certain steps were critical into the implementation of the project. A project outline was drawn up and each step was ranked in order of importance. First, the duration of the project and the commitment into the spring needed to be established because this is an ongoing leadership role with the EPA and CSU partnership. The size and scope of this project needed to consider when gathering student volunteers. Student volunteers are a good way to involve students but towards the end of the semester, they are worried about last minute projects and finals. I spoke with various indivuals about gaining access to the dining areas but seemed time consuming with people not responding to e-mails and phone calls. E-mails and phone calls were too slow for a response so going to their offices seemed as the next viable option. Accessing the dining areas was possible but the time waiting was variable.

Access to the dining areas could be done but permission would be needed and the time waiting for permission could take weeks to a months. The dining hall and marketplace are two separate entities so permission for one doesn't mean permission for the other. If given permission to be at the kitchens, there would be even more coordination of schedules needed.

Project was left unfinished but steps were taken in the right direction. The CSU representatives I spoke with were very candid and open to my questions without the typical stonewalling techniques used by others. The timing of the project could be done better in future uses. The internship was awarded to in mid-October which was well into the semester. Otherwise, there was limited time to accomplish set goals and plan for events that are not within the coordinators control. There is no immediate supervision for this internship by the EPA mentor so a weekly check-in was done. Though there seemed to be a high level of expectations from the mentor. The amount of time needed to contact CSU Chico persons wasn't as simple and the response time was slow or not there. With that happening, not much could be expected and set unrealistic goals that can't be met within the last month of the schedules semester. No progress on awaiting CSU representative responses was a needed break when conducting a project outline. This was the most important part because of the amount of detail and clarity needed.

This was a CSU/EPA internship so I expected there was a representative of this partnership that would assist me directly. Such as a kitchen staff member or a CSU representative that was managing the dining halls and/or marketplace. There seemed to be a little disconnect but that is what made the internship worthwhile. Starting this project was a realistic real life experience that made me proactive into researching and speaking with the university representatives and expressing interest into the schools food service system. This is a bigger than expected project and quite possibly would need two lead coordinators to accomplish this audit of the university within a two semester span.

During my time with the project, it gave me a sense of accomplishment and real life expectations about the process of implementing a project in the real world setting. Usually in school reports there is always an end product to research that tangibly shows what the results after conducting the experiments. The real world setting can never be predicted to produce a viable product. This experience showed me about the steps to follow and make to reach the end goal. Even with a project outline and outlining the possible road blocks, there will always be a variable that cannot be accounted for. Adjusting and adapting to changes is necessary in conducting projects and this internship has made me aware about real life expectations.