HAWAII

Section 1: School Demographics

School Name Roosevelt High School **Principal's name** Sean Wong **School Address** 1120 Nehoa Street Hawaii Honolulu United States Map It Number of students (total enrollment) 1360 Lowest grade 9 **Highest grade** 12 This school is: • A public school

Please explain:

Number of students by grade levelElementary or lowerMiddle gradesHigh or upper schoolN/AN/A1360

Number (or percent) of students eligible for free or reduced lunchFree lunchReduced lunchNeither free nor reduced lunch78%22%0%

Section 2: Background about school lunch

How many students buy lunch in the school's cafeteria?

10 to 30 percent

How many minutes do students have to eat lunch?

40

Are students allowed to eat lunch in rooms/buildings other than the cafeteria?

Yes

Are students allowed to leave campus for lunch?

No

Which students are allowed to leave campus for lunch?

Are there any times during the school year when breakfast or lunch is free to all students?

Yes

Please explain:

Our cafeteria provides Summer Feeding to City and County programs in the district. The program allows our students to have breakfast and lunch free during that time.

Who controls the portions and servings students receive?

Cafeteria staff plate lunch items, students do not choose serving size Please explain:

Does the school serve set meals (e.g. chicken nuggets with potatoes and carrots) or can students choose what they want from the menu?

The students receive sides with the entree, whether they want them or not Please explain:

Are fruits/vegetables required with every meal?

Yes, fruits/vegetables are included in the price

In your teams' opinion, are students content with the meal options at school?

Yes, somewhat content

Please explain:

While most lunches are accepted among the student population, others are less popular. However, it is understood that the school cannot maintain a low cost and high quality lunch service due to the lack of funding in the public school system.

What type of utensils do students use to eat?

Disposable utensils, such as traditional plastic Please explain:

What type of plates/trays are used to serve the food?

Disposable paper plates or trays Please explain:

Section 3: Food waste activities at the school

Does the school use any of the following waste reduction activities?

- Menus revised to reduce commonly wasted food items
- Recess occurs before lunchtime

Please explain:

Has the school performed a food waste audit previously?

No, a waste audit has not been considered Please explain:

Which of the following generates the majority of food waste at your school?

Unserved food after lunch period is over Please explain:

On average, do you think food waste is an issue at your school?

Yes, very important

Section 4: School Waste Data Form

School name						
Roosevelt High School						
Date of audit						
03/29/2017						
Students in attendance on day of audit						
1348						
Numbers of lunches served on day of audit						
465						
Menu served on day of audit						
Chicken Tenders with BBQ sauce on a bed of Lettuce						
Rice						
Mixed Vegetables						
Peaches						
Roll of Bread						
Milk						
Waste type: Unopened food						
A: Type of B: Number of C: Weight of empty D: Total E: Net weight (Total -						
food items bin weight Empty)						
None 0 0 0 0						

Total net weight of unopened food

0

Notes regarding unopened food

All unopened food is thrown out and was therefore included in the amount of Food Waste and Milk

Waste type: Food waste

A: Bin/Bag Number	B: Weight of empty bin	C: Total weight	D: Net weight (Total - Empty)	E: Picture taken of the bin? (Y/N)	F: Percent full	
6	10.13	136.93	76.15	Y	30%	
Total net weight of food waste 76.15						
Waste type: Liquid waste						
A: Bin/Bag Number	B: Weight of empty bin	C: Total weight	D: Net weight (Total - Empty)	E: Picture taken of the bin? (Y/N)	F: Percent full	
3	30.39	58.22	27.83	Y	50%	
Total net weight of liquid waste 27.83						
Waste type: Recycling						
A: Bin/Bag Number	B: Weight of empty bin	C: Total weight	D: Net weight (Total - Empty)	E: Picture taken of the bin? (Y/N)	F: Percent full	
0	0	0	0	0	0	
Total net weight of recycling 0						
Waste type: Other (Landfill)						
A: Bin/Bag Number	B: Weight of empty bin	C: Total weight	D: Net weight (Total - Empty)	E: Picture taken of the bin? (Y/N)	F: Percent full	
4	40.52	104/84	64.32	Y	80%	

Total net weight of other wastes (landfill) 64.32

Notes regarding food, recycling, and other (landfill) wastes

All food is eventually thrown out, the only reason it is kept for over a day is for record purposes in the case of an outbreak or food related emergency. There are no recycling bins located within the cafeteria for unknown reasons, probably associated with a lack of funding. Everything is sent to the landfill. Also ALL MEASUREMENTS ARE IN POUNDS. The system would not allow me to add anything into the Total Net Weight boxes because it only allowed numbers.

Describe the process you used to establish clear guidelines for students to follow to sort their food waste.

We had first anticipated an orderly response to the presence of our audit, however, we noticed that some students either did not care enough to pay attention to the signs or could not read them due to a language barrier. We also realized that during the later parts of lunch there may not be time to properly sort food and get to class on time. We therefore began accepting plates from the students because volunteers had a pass to be tardy from their next class. The population of students which participated was fairly orderly and allowed us to properly conduct our audit.

Upload photos

- <u>IMG_8053.JPG</u>
- <u>IMG_8057.JPG</u>
- <u>IMG_8056.JPG</u>
- <u>IMG_8055.JPG</u>
- <u>IMG_0012.JPG</u>
- <u>IMG_0015.JPG</u>

Link to files unable to upload

Would your team be interested in being part of the food waste panel at Nationals? Yes

Section 5: Critical Thinking

Based on your observations during the food waste audit, make three recommendations to your School Board to reduce food waste.

The first recommendation to the School Board would be to allow the students to pick the amount of food they are served, and while this may sound like a rather costly move to make, it is an environmentally friendly and easy method to implement and would both allow students the freedom of choosing and reduce the amount of uneaten food thrown away.

The second recommendation to the School Board would be that not only should students get to pick the amount of food they are served, but they should also have the chance of donating the food to others if they so happen to not be able to finish everything on their plate. Though this could raise concerns about sanitation, it would ensure that unopened food is not wasted and those who are not completely satisfied by the end of lunch are able to be filled with whatever is donated.

The last suggestion for the School Board on the topic of reducing food waste would be to adjust the amount of food placed outside to offer students and the amount of food at our snack bar/alternative lunch in terms of popularity in order to make sure that there will be an accurately estimated amount of plates out there for each meal, meaning not only more sales for the cafeteria, but also achieving the goal of reducing food waste by taking proactive steps to reduce the general problem of unwanted food before it occurs.

Justify a school's role in teaching children about food waste and the impact food waste has on school budgets, the environment, and hunger in the community.

The school has one of the largest roles in teaching children about food waste because in the home and in the workforce, people do not care too much about food waste in general because, quite frankly, there will usually not be as much food waste as the amount generated by a school cafeteria. By default, the cafeteria needs to make enough lunches to serve all the students present on that day, and when a typical school only sells about half of them at most, the other half is usually thrown away or served as an offered side the next day, something students normally would not usually be quick to accept. From what schools could teach about how it affects the economy, environment, and community, food waste directly harms each of these three aspects, by wasting more money than necessary; by polluting more land than is necessary; and having the food redirected to a landfill rather than the starving stomachs that are out there begging for food, respectively.

The US Environmental Protection Agency has set a goal to reduce food waste by 50% by the year 2030. Based upon your experience conducting this food waste audit, will the US meet this goal? Explain why or why not.

Seeing as our school wastes an unfathomable amount of food on a regular basis every school day, it is safe to assume that if our school's food waste problem has worsened, if it has even improved at all. From a Hawaii Department of Education point of view, the goal of reducing food waste by 50% by 2030 seems rather unreasonable due to major economic obstacles, but seeing as how almost all other aspects of our daily lives have changed and grown in quality within the past decade, the possibility of reducing public school food wasted is a foreseeable future.

Detail two or three findings or observations that surprised you. Describe how conducting this food waste audit has impacted you and your team, and the way you think about food in America.

The first and saddest truth that we noticed while performing the food audit was the sheer amount of food which was being wasted in regards to the entire school. Before the food audit, we predicted that the amount of food wasted would peak at around 70% of the total weight of food received, however when we combined the total weight of food thrown away and the un-served cafeteria food we were astonished to find that the true amount of food wasted was around 85%. The other aspect of the lunch service that surprised us was the massive amount of lunches served in the cafeteria. We had expected the that the amount of students purchasing lunch would be somewhere between forty and fifty percent of the school's student population, however, we discovered that this that this estimate was far from correct as the true amount of students purchasing lunch was only about thirty percent. This created doubt in either the accuracy of the count or the purity of our data. The idea that only thirty percent of the school's population eats lunch everyday is appalling; however, when we sampled the same population during other lunch periods we noticed that this trend continued, meaning that the sad truth is that a majority of the students would rather bring a home lunch or starve than eat what is provided to them.

What is one obstacle your team faced during the audit and how did you work to resolve it? If the issue went unresolved, what steps would you take to reevaluate your approach?

The only issue we had while performing the food audit was a small amount of students who refused to act accordingly with the guidelines we had set.. Bluntly speaking, this problem was most definitely out of our control, and yet, a surprisingly easy fix to this problem would have been to station faculty at our stations to ensure orderly behavior. This would have discouraged those who believed it would be "funny" to harass our volunteers and taint the data by being insubordinate.

Bonus Question

Should all schools be required to do food waste audits on a regular basis? Why or why not? Support your answer.

Ethically, yes, food audits should be done in as many places as possible and as often as possible. This ensures that the methods in which food is served to the public is constantly improving until one day we can proudly say that the amount of food wasted is zero. Until that time, we must continue studying as to what works and what does not, so that we are able to constructively change our food service industry so that it is safe and efficient. However, from an economical standpoint, conducting food audits is at best unreasonable. Accurate food audits require planning and materials which cost time and money. The biggest obstacle we faced while suggesting improvements to the administration was the lack of funding and lack of personnel available. This only shows that while food audits are important in understanding trends in food, they are somewhat pointless if we are unable to follow through with any of the improvements suggested. Overall, as long as you are able to conduct food audits effectively, they should be a priority. However, when these audits begin to become an economic burden, it may be wise to consider other possibilities in regards to saving money.