FCCLA

Section 1: School Demographics

School Name

Blair Oaks High School

Principal's name

Gary Verlsues

School Address

6209 State Highway B Jefferson City, Missouri 65101 United States

Map It

Number of students (total enrollment)

431

Lowest grade

9

Highest grade

12

This school is:

A public school

Please explain:

Number of students by grade level Elementary or lower Middle grades High or upper school

431

Number (or percent) of students eligible for free or reduced lunch Free lunch Reduced lunch Neither free nor reduced lunch

34 Kids; 7.9% 10 Kids; 2.3% 387 Kids; 89.8%

Section 2: Background about school lunch

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

51 to 70 percent

How many minutes do students have to eat lunch?

22

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

No

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?

No

Please explain:

Who controls the portions and servings students receive?

Cafeteria staff portion items into servings (i.e fruit into cups) but students select items and number of servings themselves)

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?

Other

Please explain:

Students receive the main entree, but are allowed to choose from options of sides.

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?

No, somewhat dissatisfied

Please explain:

Between what the students say, and actions in the lunch room, such as throwing food away, we concluded students are somewhat dissatisfied.

What type of utensils do students use to eat?

Reusable utensils, such as metal

Please explain:

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

Other

Please explain:

Majority of the time the school uses reusable plastic trays, but occasionally uses Styrofoam.

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
- Procedures put in place to reduce food over-purchasing
- Procedures put in place to reduce food loss to expiration
- Share table created for unopened food items
- Unopened food is recovered for afterschool or supplemental snacks

Please explain:

Has the school performed a food waste audit previously?

Other

Please explain:

Yes, the state requires one every three years.

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

Student food waste

Please explain:

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

Yes, somewhat important

Section 4: School Waste Data Form

School name

Blair Oaks High School

Date of audit

03/10/2017

Students in attendance on day of audit

431

Numbers of lunches served on day of audit

237

Menu served on day of audit

fried catfish, mac & cheese, baked beans, fruit choice (choose between strawberries and pears), crackers, milk

Waste type: Unopened food

A: Type of	_	C: Weight of empty		E: Net weight (Total -
food	items	bin	weight	Empty)
crackers	3	2.5 lbs	3 lbs	.5 lbs
milk cartons	13	2.5 lbs	10.5 lbs	8 lbs
condiments	6	2.5 lbs	3 lbs	.5 lbs

Total net weight of unopened food

9

Notes regarding unopened food

The condiments and the crackers were optional for students.

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
1	20 lbs	50 lbs	30 lbs	yes	25%
2	20 lbs	41 lbs	21 lbs	yes	20%

Total net weight of food waste

51

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
1	3 lbs	17.5 lbs	24.5 lbs	yes	30%

Total net weight of liquid waste

24.5

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
1	13 lbs	21 lbs	8 lbs	yes	75%

Total net weight of recycling

8

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
1	20 lbs	22.5 lbs	2.5 lbs	yes	60%

Total net weight of other wastes (landfill)

2.5

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

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

Throughout our process of getting ready for the food waste audit, we wanted to be sure all students knew how to sort their food. We made numerous handouts, announcements (over the intercom and our school news show), and we created a slideshow. We made sure to label all of the bins we used, while also including pictures of each of the signs. We made a single, large sign as well to advertise what we would be doing. As the audit was taking place, we had our team standing by and helping students as they went to dump their trays.

Upload photos

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- IMG 1470.JPG
- IMG 1469.JPG
- IMG 1468.JPG
- <u>IMG 1467.JPG</u>
- IMG 1466.JPG
- <u>IMG 1465.JPG</u>
- <u>IMG 1464.JPG</u>
- IMG 1463.JPG
- <u>IMG 1461.JPG</u>
- <u>IMG_1459.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.

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 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.

Drawing on our experiences conducting the audit, we conclude that the United States will not likely succeed in meeting its goal of reducing food waste 50% by 2030. During the audit, we realized that virtually none of the students in our high school were aware of the importance of lessening food waste; in spite of our extensive efforts to inform them, many of these students expressed confusion as to what a food waste audit was. Near the beginning of our audit, it became necessary to take the students' trays from them and separate their food ourselves; they were taking so much time struggling to separate their own food that the lunch line was backing up. Because there is little (to no) education in schools or elsewhere regarding food waste and its negative impacts, students are unwittingly contributing to such dangerous phenomena as global warming. In addition, many students displayed great ignorance as to what can and cannot be recycled. Considering that most students seem unaware of what can and cannot be recycled, as well as of the harmful effects of food waste, it is safe to assume that their parents and others around them are equally uninformed. Reducing food waste nationally requires a truly national effort; significant results cannot be achieved with widespread ignorance. Unless education efforts targeted at both adults and youth intensify, we conclude that such a lofty goal as a 50% reduction in 13 years is unrealistic.

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 difficulty we experienced in guiding students through the process of the food audit was surprising. One of our team's main goals was to ensure clarity and openness with the student body during this procedure. Several days before the planned date of the audit, our team produced and displayed a slideshow to educate and prepare our school's students. We distributed a handout to students informing them of the different bins into which they would need to separate their waste. We created a poster reminding students that the food audit would be taking place, and hung it in the cafeteria in plain view. Additionally, signs were placed on each bin to accurately show what each was supposed to contain. Considering the extensive work we did to educate, prepare, and remind the students of the workings of the upcoming food audit, we were surprised by how unready many of them seemed to be when asked to sort their food; they appeared hesitant and uncertain as to what exactly they should be doing. To address this confusion, each member of our team took an active part in supervising the sorting of the materials. We stationed ourselves directly by the bins, verbally assisting students with the placement of their waste. We quite often resorted to taking items from trays and sorting them ourselves; we were uncertain whether their hesitancy to participate stemmed from genuine confusion or apathy. Nonetheless, we calmly worked through these unforeseen difficulties and continued to help educate where we could. Some students later admitted that they were reluctant to act for fear of making a mistake, but actually did want to correctly place their items; we helped to reassure them and guide them through the process.

Additionally, we were surprised by what we found when we compared the results from our audit to the results from another team's (the Varsity/Missouri Team also attending nationals from our school) food audit. One of the reasons for this comparison was looking for differences between the results of an audit conducted during a better liked lunch and a less liked lunch. Our audit covered the less liked lunch while the other team's audit focused on the more liked lunch. Something interesting we discovered was that the school provides two different types of fish. One is a federal commodity offered to the school through a reduced price at the expense of edibility and taste. The school directly bought the other fish, and its taste was more favorable. However, most students were unaware of the differences between the fish, as the food was unlabeled and the staff didn't inform them. Students

would taste some of the cheaper fish, dislike it, and discard all of their fish assuming that the other pieces would taste the same. This phenomenon contributed to the total amount of food waste. Moreover, we were surprised to find that 68 (twenty-nine percent) more students ate on the day featuring the more favored lunch than on the day featuring the less favored lunch. We did not take this into account in our initial hypotheses on the outcomes of the audits, and were thus startled to find that there was more food waste on the more preferable lunch. We had assumed there would be less because it was so liked: this was not the case. An important unforeseen factor was the significant impact banana peels had on the amount of food waste recorded in the other team's audit. They did not cover this factor in their hypotheses, but it had a drastic effect on the results of their audit. Certainly, this audit impacted all the members of our team in positive ways. Never before had any of us spearheaded a project involving the entire student body, and it was exhilarating. We felt empowered by our role in spreading a message that could genuinely benefit the country and the world as a whole. Prior to the audit, we, too were ignorant of the great importance of the food waste problem; this experience has been illuminating in that regard. Being responsible for the execution of the audit, we were determined to do it well. We used our time management skills to the full to allow for team meetings about organizing the audit, while at the same time keeping up with our class work. As our team is composed of a senior, two juniors, and two freshmen, aligning schedules was a significant obstacle to work around. We exercised our public speaking skills when presenting the importance of this audit to the school principal and when addressing each lunch shift with information about the food separation process we employed. One freshman member of our team was assigned the intimidating duty of addressing each large group of students that came through the cafeteria. The experience provided her with the chance to practice public speaking - a widely applicable skill of lifelong value. Considering her minimal time for preparation, she performed admirably well; such an experience is not often afforded her peers. Each team member became more aware of the drastic amount of food wasted and the startling amount of recyclable materials that are thrown away each day, even in our small school of Blair Oaks. We used our determination and responsibility effectively to ensure that the audit was seen through, and it introduced us to the problem of food waste in a very explicit way that we could not have otherwise experienced. We will definitely consider what we've learned about the fate of wasted food the next time we go to toss our remaining lunch.

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?

One obstacle our team faced was the fact that many students simply did not care about the food audit or its purpose. Even the basic concept of a food audit was foreign to many students in our high school. To most teenagers, thinking about food waste- or for that matter, any problem of real, global importance- is simply not a priority. When purchasing school lunch, they choose between items that they are required to buy, consume of that only what they desire, and throw the rest away. They do not think about the impact that throwing that food away will have on the environment; they do not think about recycling or composting unused or half eaten items; even many of those that are informed of the consequences of such actions decide to be lazy and waste their food. Our team wanted to get the best, most accurate results for the procedure that we possibly could; therefore, we knew we would need to come up with ways to get the student body willing to cooperate.

Collectively, we decided to create handouts to pass to each student in their first period class to ensure they would have at least a basic idea as to what was going to happen during the audit. We informed them briefly about the purpose the audit and of what type of food they would be asked to put into each designated bin. At the top of the handout, we included an announcement reminding students when the audit would be taking place. We went even further and created a descriptive slideshow explaining the food waste audit procedure which we displayed on the "Falcon Points" program at our school. Falcon

Points is a student-produced slideshow that plays on tv screens in every classroom, all day; its purpose is to inform students of events happening around school and in the community. We made detailed posters to hang around the cafeteria and labels to put on our bins. We also utilized the school's news show, FLCN, which is played to the student body in their first-period classes. We had the students who operate FLCN give explanations and a little presentation to the student body about this food audit. Finally, the day of the audit, we made a last announcement to the student body to help remind them that the audit was happening, and to inform them on what items from their lunch trays went into which bin.

Bonus Question

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

We conclude that schools should definitely be required to do food waste audits on a regular basis. The food waste audit has proven to be a remarkably effective means of identifying exactly how much food is being wasted at a school; the information an audit can provide is essential to forming plans to address schools' problems of food waste. Without any idea of the scope of a school's food waste problem, the school's administration will remain unaware that there is an important situation that needs to be remedied; visibility of the issue brought by an audit can be the impetus to spur much-needed change. Information provided by audits would largely assist with recognition of the food waste problem in our country. Together with mass education, action taken to reduce food waste in schools nationwide would be the most important steps in making the U.S.'s goal to reduce food waste 50% by 2030 a reality.

Taken in concert with education about the severe impact of food waste, food audits would provide a real example to students, staff, and parents of the significance their actions can have. Seeing the numbers in the audit results gradually decrease would provide a tangible reason to continue working to reduce food waste. We hypothesize that one primary cause of people's apparent apathy toward efforts to help the environment is feeling removed from the problem- the same reason it's much easier to sympathize with starving kids at the homeless shelter than starving kids in Africa. If people could see the fruit of their efforts, they might be more inclined to continue giving effort, to the benefit of the country and the world.