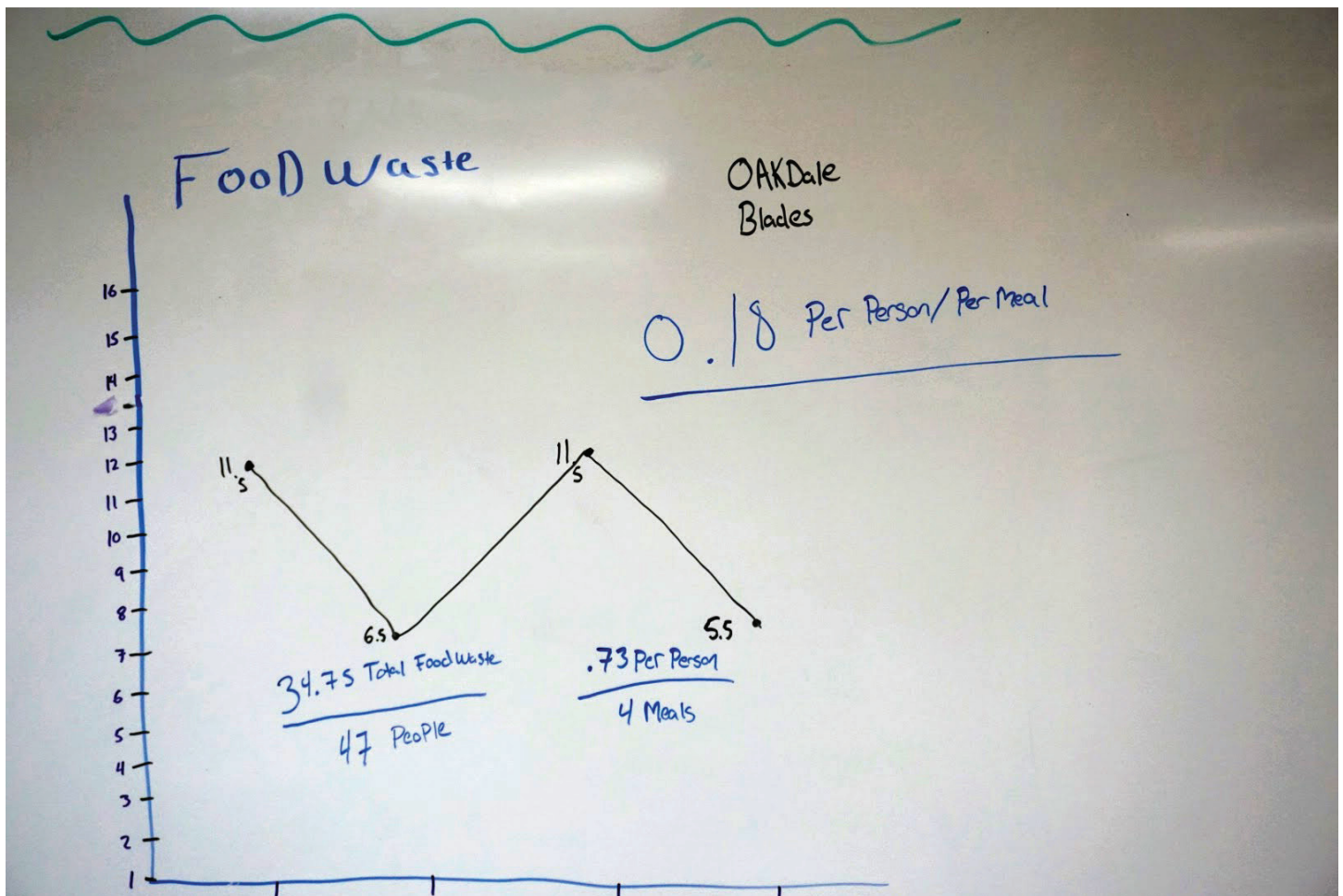




Dining Hall Food Waste: SEL and...Math?

Food waste is a place where numbers can tell a story—a story of a school community getting better and better at responsible decision-making. The math of food waste is also the mechanism for this change. Here's how:

Document the weight of a group's food waste from meal to meal as a line graph. The slope of the line and its fluctuations serve as a visual representation of a group's ability to conserve food changes over time.



Instead of the goal being for the group to get a “Zero Food Waste” score, you can instead calculate the average food waste per person, per meal; just add up a group's total food waste for their stay, and divide by the number of meals and the number of people. This number, which tends to be pretty small, makes the food waste personal on an individual scale. See an example below:

Food Waste Heroes!

CLASS OF 2017-2018

School	Amount [avg lbs/person/meal]
Abintra Montessori	0.005
A.M. Yealey Elementary School	0.105
Berrien County Math and Science Center	0
Bluegrass Home Learning Center	0.047
Central High School	0.066
Central Middle School	0.021
Chesterfield Day School	0.0043

School	Amount [avg lbs/person/meal]
Oliver Springs Middle School	0.0036
Pi Beta Phi Elementary School	0.029
Pope John Paul II High School	0
Portland Christian School	0
Rainbow Community School	0.044
Rainbow Montessori	0.07
Randolph School	0.027

According to the Natural Resources Defense Council, the average American wastes more than 20 pounds of food per person, per month. This number comes out to about .22 pounds per person, per meal, which means that for any given meal, you can calculate how much food was saved compared to the average American. **You can even calculate a group's "food saved" number instead of "food wasted"!**

Why does food waste matter? In addition to the social inequity issues regarding lack of access to healthy food compared to those who have more than they need, food waste contributes to a significant portion of global greenhouse gasses in the production and transportation side of food production. Reducing food waste is an easy way for young people to take actions to reduce their carbon footprint, demonstrating responsible decision-making and pro-environmental behavior.

At the final meal, debrief the food waste experience. Ask: *What can explain the success in our food waste reduction this week? What can you bring back to your own life regarding food waste? Are there any changes you can make or ways you can help your family to reduce waste?*

You can also share this anecdote by Donella Meadows: "There was this subdivision of identical houses, so the story goes, except that in some houses the electrical meter was installed in the basement and in others it was installed in the front hall, where the residents could see it constantly, going round faster or slower as they used more or less electricity. With no other change, with identical electricity prices, electricity consumption was 30% lower in houses where the meter was in the front hall."

Ask: *How does that story connect with your experience tracking food waste this week?*

Follow-up question: *Think about something else in your life you'd like to change. What lessons can we take from our food waste experience to make that happen?*

¹ <http://donellameadows.org/archives/leverage-points-places-to-intervene-in-a-system/>