

Is a Zero Waste School Possible?

Jeannette Rankin Elementary in Missoula, Montana stepped up to pilot a zero waste program to find out. An audit revealed that 20% of what was in the trash after lunch was food that hadn't been eaten, including milk cartons that were still sealed. This helped determine the four categories for waste reduction: 1) liquids, 2) recycling, 3) composting, and 4) food capture or "rescuing food", which is edible, sealed food and whole fruit that could be prevented from going to waste.

A school planning team led by the principal ensured availability of the appropriate recycling and composting collection services. Custodial staff involvement during the planning stage was critical to the program's success as it became a school-wide team program, versus just something new they had to start doing.

There really were two areas of focus for the program to be successful: 1) building the physical infrastructure and 2) the social infrastructure.

Physical Infrastructure: Creating the process began with considering how they would separate different materials into different bins. Using best practices from the Carton Council, the sorting system was optimized to reduce residual liquids in the recycling bin, thus ensuring only clean materials were entering the recycling stream. A partnership with a local high school welding class created carts that made it easier for collecting all four categories and the residual trash. It was quickly realized that it would require about 30 extra minutes each day for the custodian to deal with the increased sorting, but everyone felt it was a progressive program that served a bigger good.

Social Infrastructure: This primarily included the learning curve of getting students and everyone on board to understand the process and buy-in to the new behaviors that would be required. A lot of education was conducted, both in the classrooms as well as in the cafeteria. It was quickly discovered that the younger children would need a lot of ongoing help to sort correctly. To supplement parent volunteers, a volunteer program was created with the Missoula Aging Services to get senior volunteers.

Results: The volume of trash decreased by more than 90%. While this exceeded expectations, the real surprise was the fact that a significant amount of the material diverted was by rescuing food, in addition to recycling and composting. Students seem more mindful of wasting food and strive to be better about consuming what they select. They cannot prove that the initiative has led children to drinking more milk, but it definitely has resulted in less milk wasted.

What's Ahead: Modifications are being made to the carts, with input from custodians to allow them to be modified to better fit their work. There is the prototype from last year's senior project and the three carts already produced, as well as CAD drawings from another student for future carts intended to be created. The district is expanding the Zero Waste program to all elementary schools in the district. Under one vision, many have come together to strive towards zero waste and the concept is a tangible way that makes sense to the kids, making it a success while also hopefully creating future sustainability leaders.







