Case Study: Rowe Elementary School Silverware Pilot

In 2019, the Food Fuels Learning Sustainable Practices Group partnered with Portland Public Schools Nutrition Department and Facilities Department to explore the costs and opportunities to making the switch to reusable silverware from disposable plastic cutlery at Rowe Elementary School. The Sustainable Practices Group is a diverse stakeholder group composed of schoolteachers, administrators, nonprofits, waste service providers, parents, and community members.

This case study provides an inside look at the cost, time, and community response.

Overview

The project began in September 2019. Materials that the school needed to kickstart the project included:

- Forks: 290; Spoons: 275 (some purchased, some donated; budget below)
- Additional dishwasher racks
- Buckets for dirty silverware
- Signage (see back)

School Community Response

Students and staff always love the changes. Comments from Rowe students and staff include:

- *"This is the best day ever. No plastic!"*
- *"Real spoons? I never thought I'd see the day!"*
- *"Save the turtles!"*
- *"Do you like them?" "Yes!"*

Taking the opportunity to educate the community about the importance of not losing silverware and tying it to the better dining experience can help prevent added cost.

Process and Timing

The School Nutrition Department wanted to measure the time it takes to manage silverware through the lunch period. Total additional time it takes is 10-15 minutes. Timeline:

- Students take a fork and/or spoon at the start of the lunch line. **0 minutes**
- After eating, students return forks and spoons to a bucket filled with soapy water. **1 minute**
- Silverware in the bucket is sorted by kitchen staff between forks and spoons. **3 minutes**
- Forks and spoons go through the dishwasher separately. **3 minutes**
- Silverware air dries. **0 minutes**
- Forks and spoons are put back into containers once dry (20 forks/spoons per container). **5 minutes**

The School Nutrition Staff and Sustainable Practices Group makes these recommendations:

- Put out enough silverware for all three lunches (20 forks/spoons in each holder for a total of 160 forks and spoons).
- Encourage students to think about what silverware they will need (most days they will only need either a fork or spoon).
- Post clear signage for forks and spoons so the choosing process doesn't slow down the line. Ask an art class to make signage.
- To limit sorting time, have students sort dirty silverware into forks and spoons.
- Rowe School found that magnets for trash cans were not critical because someone was monitoring the station.
- Encourage students to help each other sort their cafeteria waste.
- Wash silverware holders once a week.

Challenges

The School Nutrition Staff and Sustainable Practices Group has identified these challenges:

- Silverware loss: most likely by students who bring lunch from home, take a fork or spoon and forget to put it back
- Limited drying space
- Some students have started to bend the forks and spoons

Budget

Item	Amount	Cost	Where to Buy
Forks and spoons	About 300 each	$0.50 each $300 total so far	Christmas Tree Shop, Walmart, Goodwill, restaurant supply store, through Food Service
Additional dishwasher racks	2	$15 each, $30 total	Restaurant supply store
Buckets for dirty silverware	2	$7 each, $14 total	Restaurant supply store

Total budget: $500

- Rowe already had detergent, silverware holders
- More silverware, other materials will have to be purchased in the future

The experience that Rowe Elementary School had is similar to other schools that are making the switch to silverware. Staff and students love the changes, and the amount of waste reduced is noticeable. Projects do need to plan for some loss and prepare for the cultural change component that does take time.

For more information, contact NRCM Sustainable Maine Outreach Coordinator Chrissy Adamowicz at chrissy@nrcm.org or (207) 430-0144.

Natural Resources Council of Maine
3 Wade Street • Augusta, Maine • 04330
(207) 622-3101 • nrcm@nrcm.org • www.nrcm.org