

Explanation of Changes to Elementary School Kitchen Layout

The main goal of our changes to the layout was to improve flow of food and people through the kitchen. First, we added three new items to decrease labor time and improve product movement through the kitchen. The most expensive addition was a blast chiller. Since the forecasts are fairly accurate in an elementary school, and leftovers are less of a concern than in other institutions, the blast chiller is expected to enable more prep. If foods can be prepared for the coming day and blast chilled to reduce microbial load, the food will be safer, and more foods can be prepared ahead of time. Another addition was a food processor. Since the school uses a variety of fruits and vegetables, this will reduce labor time in preparing some of the diced, grated, or otherwise processed produce and other food. We also added two pushcarts to be used as mini prep tables and to also ease the transportation of food and supplies around the kitchen.

Additionally, we replaced three less used items with equipment that fit better with the needs of the cooks. We discarded the 3-compartment sink because it was not being used to wash dishes. Rather, each sink was full of paper products, breads that were pulled for the day, etc. We added shelves instead to increase storage space. Since all of the kitchen equipment was already being washed in the dish area, removing the 3-compartment sink should not be a problem. Also, we removed one other sink which was too far from the food production to fill a useful function and added instead a second handwashing sink. We added this sink near the new door that we created between the kitchen and the cafeteria. The cook mentioned that the lack of an easily accessible door out to the cafeteria was her main problem with the kitchen layout. This sink will allow people, especially students helping serve, to wash their hands upon entering the kitchen from the cafeteria. Lastly, since the kitchen had three warmers, we exchanged one for a steamer, which the cooks used for a variety of things, including vegetables and hamburgers.

The major structural change was moving the dry storage area. Going from the kitchen to the dry storage required walking down a relatively long hall. We moved the dry storage closer to the kitchen and added a door that opened right into the kitchen area. We also improved the use of space by adding shelves in the dry storage area. Previously, the room lacked shelves, and the center was not being used except for receiving pallets. Because we decreased the size of storage, we were able to give back space to the school to use for other purposes.

On top of additions, replacements, and structural transformations, altering the placement of equipment should also improve flow. For example, ovens were moved to the walls, and the center of the kitchen became a place to wash food, store utensils and spices, and more. This increases flow because it allows for specificity of areas. The far side of the kitchen (away from the loading dock) was made to be used especially for the main entrée and the closer prep table was made to be used for sides. Since fruits and vegetables are often the sides, this prep area is closest to the walk-in cooler. However, the reach-in fridge was moved closer to the main entrée prep table so that those workers will not need to travel across the kitchen to the walk-in cooler for every refrigerated item. By specializing areas, the kitchen will be more organized. Finally, glass windows surround the manager's office, better enabling the manager to monitor food production. Overall, the changes in types of equipment, use of space, and direction of flow will all improve productivity of workers.