'Plate-Ready' Debuts At Texas A & M

Texas A & M's innovative new serving system provides cadets with freedom of choice.

By PAUL KING

Mealtimes are hectic in the Duncan Hall servery, where more than 20 employees work to dish up enough entrees in 15 minutes to feed 2,200 cadets.

Since 1939, the approximately 2,200 cadets who annually attend Texas A & M University in College Station, Texas, have eaten their meals family-style in Duncan Dining Hall, dining separately from the rest of the student body. Family-style service, in which diners are served at their tables from common serving trays and bowls, worked well over the years at Duncan because cadets often had less than 30 minutes to dine before heading off to classes, military exercises or other duties. Thus, these Aggies have never had the luxury of sauntering through a servery, making their meal choices at leisure.

However, as Texas A & M foodservice entered the 1980s, family-style feeding finally began to fall out of favor with both cadets and foodservice managers. From foodservice's point of view, family-style feeding had become more and more expensive, due to increased labor costs and uncontrollable plate waste. On the other hand, cadets felt deprived of variety and freedom of choice in their dining. Ultimately, in 1984, the foodservice department decided to phase out family-style dining in favor of a less costly service method. The only catch was that cadets still had to be fed within the same time span.

The resulting production and serving system, which A & M Foodservice Director Lloyd Smith refers to as "plate-ready," was unveiled last May when a major renovation of 60,000-square-foot Duncan Dining Hall and its kitchen was completed. The "plate-ready" system allows all 2,200 cadets to be served and seated within 14 minutes, and is backed up by what's claimed to be the first tray accumulator system in the world, which allows cadets to bus their own trays conveniently and quickly. This combined service/clean-up system has resulted in improved meal service, increased customer satisfaction, lower food costs, decreased plate waste and higher employee morale.

"The Department of Foodservices had studied alternate methods of feeding the Corps of Cadets for some length of time," explained Smith, who added that a committee of foodservice staff, administrators and students had worked on the final design of the dining hall's servery. "Our committee was charged with finding a way to reduce the cost of providing foodservice to the Corps of Cadets while abetting the growth of the Corps by improving retention rate, due to improved dining conditions. I believe we have accomplished both goals by creating a modern dining facility that offers quick service, nutritious foods and a dining atmosphere compatible with Corps activities."

During the planning of the new systrem, cadets' input was solicited, both in committee form and in survey form. For example, the commander of the Corps of Cadets asked students to list what they considered to be the most important needs in their dining program. The questionnaires returned revealed that, in order, cadets preferred 1) to be seated by outfits, 2) to be fed within 10 to 15 minutes, and 3) to obtain second portions of menu items quickly. Then, the Corps commander and Corps sergeant major sat in committee with Smith, Assistant Foodservice Director Jim Moore and Dr. Donald B. Powell, director of business services. During several committee meetings over the course of a year, the plate-ready system was decided upon, set up in mock form and tested.

As a result of the renovation, the Duncan Hall servery, which was practically non-existent during the days of family-style dining, has been enlarged and divided into seven double-sided

Nearly 2,000 square feet was taken from the Duncan Hall kitchen to expand the servery, which now features 14 serving stations, in addition to a salad bar, dessert bar and beverage bar.

Duncan Hall's tray accumulator system affords employees a quick and efficient method of cleaning up between meals. Trays are funneled via conveyors to a central area for easy scraping and dishwashing.

serving areas. Thus, cadets now have 14 different stations from which to select their meals. Each station features different entree combinations offered on the day's menu, pre-plated so that cadets need only go to the stations serving the items they want, pick up their plates and retire to their tables. On any given day, for example, one station might offer roast beef, mashed potatoes and green beans, while a second station would be serving ham, broccoli and hash browns; a third, roast beef, broccoli and hash browns, and so on. Each individual station is promoted by a dot matrix graphic display sign, which identifies the menu offerings available at that station on that particular day. A five-week cycle menu, the same one designed for regular residence hall foodservice, is used, and cadets always have a minimum choice of two entrees, two starches and two vegetables at every lunch and dinner.

There is a also separate station in the center of the servery, at which cadets may select hamburgers, french fries, soup and sandwiches. There are two dessert bars, one at either end of the servery, and what Smith called the world's largest carbonated beverage system, which is able to produce 800 gallons of soft drinks in 15 minutes. The beverage system includes 96 faucets and uses four five-horsepower compressers, 16 carbonators and 16 circulating pumps to cool the water and carbonate the water/syrup mixture.

The kitchen that supports this serving system has been drastically reduced in size from what was originally installed when Duncan Hall was constructed in 1939. Smith explained that the 5,000 square-foot kitchen was reduced by 2,000 square feet in order to gain additional serving and circulation space. However, the remaining production area has been filled with high-capacity cooking equipment that has made Duncan Dining Hall one of the more sophisticated cook/serve production systems in college foodservice.

Production equipment includes two 80-quart mixers, both backed up with booster heaters for instant hot water; a 20-foot open-hearth broiler; six large deep-fat fryers; six convection ovens, and four 100-gallon steam kettles.

In the servery itself, Smith has added even more cooking equipment: four grills for frying eggs, a special french fry section with four fryers backed up to the serving line, two broilers for hamburger-cooking, a double-stacked oven for pizza, four grills in the soup-and-sandwich area for making hot sandwiches, and three 20-quart kettles. To make up for kitchen space lost when the servery and dining areas were enlarged, an 250-square-foot addition to the kitchen was built near the receiving docks. That area contains refrigerator and freezer space.

As one might imagine, Duncan Hall production and serving areas become pretty hectic as mealtime approaches. "The hardest thing to instill in our employees is the importance of working quickly," said Smith. "The plate-ready system is very much like a banquet dish-up operation. We must prepare food as close to serving time as possible and then keep it close to the serving stations so that line workers don't run out."

Shortly before the cadets arrive for meals, the servery becomes a beehive of activity. To get breakfast started, for example, cooks begin preparing eggs and pancakes five to seven minutes before cadets arrive, and continue making them until the meal rush is over. At lunch, hamburgers and pizza prep begin moments before cadets' arrival.

Cadets enter the dining hall in formation by squadrons and, after breaking ranks, rush to the servery and then

Before the tray accumulator system (above) was installed, cadets left their plates at their tables for employees to clean up. Now, self-busing of trays has cut down clean-up time dramatically.

to their assigned seats. Although there is a high noise level as cadets swarm about the serving stations, there is, by design, very little interaction between cadets and line servers. Plates are laid out on the serving line and taken by cadets usually without a word being passed.

"Although in normal foodservice operations there is usually a fair amount of conversing between employees and customers, I don't want communication at Duncan," Smith emphasized. "Employees there can't talk with customers and keep the meals coming as fast as is necessary."

In order to facilitate movement further in the crowded and busy servery, traffic is channeled through the use of a combination of floor patterns, serving counter color patterns and graphics posted above the serving lines to indicate entrances and exits to each station. For example, different colors of tile were placed in the floor at angles to direct customers toward appropriate lanes at the serving counter.

When cadets have finished their meals, they bring their trays to an area adjacent to the servery where stands a wall of conveyors that, collectively, make up the tray accumulator system. The tray accumulator system resembles a giant honeycomb, with a total of 50 slots for students to insert their trays. As trays are added to each slot in the honeycomb, trays already in the slot slide along rollers until they reach the other side, where dishroom employees remove the trays and fill the dishwashers.

"This was perhaps the most difficult phase of the redesign," Smith said. "There just weren't too many tray return systems out on the market that would meet our needs." In the end, Smith and members of his staff designed a prototype of a tray system they thought would work for them by using rollers instead of a belt-type conveyor. A commercial manufacturer then drew up the final design based on the suggested system.

According to Smith, students have responded extremely well to the new plate-ready serving system.

"The major benefit they have derived from the system is increased menu variety," Smith said. "Under the family-style meal service, cadets were given only one choice of entree, starch and vegetable. This led to a significant amount of plate waste, because not every menu item would appeal to every cadet. Nonetheless, staff still had to prepare enough portions for 2,200 cadets.

Another reaction we've had from cadets is that they now perceive their meals to be of higher quality. This is due in part to the fact that food is being prepared closer to the time it is being served. With family-style service, food was being prepared much further ahead of time and held until cadets marched in for their meals. As a result, the food was not as fresh or as hot when served as it is with the plate-ready system."

Employee morale has also improved with the plate-ready system, according to Smith, particularly because of the tray accumulator system.

"Cleaning up after cadets with family-style service was often a disheartening task for employees who had to clean up the messy tables left behind by hurried and, thus, sloppy diners," Smith noted. "Now that cadets are bussing their own trays, not only is dining area clean-up much quicker and less frustrating, but dishroom work is also more orderly and less time-consuming."

Smith also noted that plate-ready has allowed him to cross-train the employees working in Duncan Hall. Because foodservice is operated there in three distinct units—preparation, service and clean-up—Smith can train his employees to work in all three modes, improving productivity per labor hour, hold down labor costs and make his staff more versatile.

"Finally, we expect to see reduced food costs because much less food will be wasted," Smith added. "In all, the Texas A & M plate-ready system has provided a long-overdue benefit to the A & M foodservice program."

While Texas A & M's "plate-ready" system is obviously not for all foodservice operations, it does work in environments where feeding large numbers of customers quickly is the name of the game. ∅