OVERVIEW

School foodservice professionals face growing pressure to operate the Child Nutrition Programs (CNP) in their school districts with increased cost-effectiveness. High participation and quality food do not necessarily guarantee adequate funds for the school CNP to be self-sufficient. In many districts, program costs are increasing faster than revenues, leaving foodservice administrators with hard decisions to make about future long-term goals for their operation. As administrators find it more and more difficult to break even, they are being forced to analyze the financial management procedures they are using to operate the CNPs in their school districts.

Successful financial management is critical to the management of a quality CNP and has therefore been identified as a research area of high priority for the Division of Applied Research (DAR) at the National Food Service Management Institute (NFSMI). The complexity of the research will necessitate that the thread of financial management research continue over several years. This issue of INSIGHT describes a case study conducted by NFSMI to help identify areas for further research in financial management.

RESEARCH

OBJECTIVE

The purpose of the first financial management research project conducted by NFSMI was to determine revenue generation and cost control measures currently used in four school districts that operate financially successful CNPs.

METHOD

We used a case study approach to identify revenue generation and cost control measures currently used by the selected CNPs. During a site visit to each school district, we examined financial records and other documentation to determine types of financial reports and tools used in making financial management decisions. We asked about cost effective measures used to control labor, food, and other operational expenditures. We compared expenditures with revenues and looked at methods used to generate revenues.

CASE STUDY SITES

The four school districts in the case study were from the Southwest, Southeast, Northwest and Midwest regions of the country. The districts were centralized, self-operated, and identified by their state agency as quality programs that utilized effective cost control measures. Selected demographic characteristics of the four school districts are listed in Figure 1.

<table>
<thead>
<tr>
<th>Geographical Region</th>
<th>Southwest (A)</th>
<th>Southeast (B)</th>
<th>Northwest (C)</th>
<th>Midwest (D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Enrollment</td>
<td>59,000</td>
<td>5,086</td>
<td>12,955</td>
<td>2,275</td>
</tr>
<tr>
<td>Participation Rate/Lunch</td>
<td>65%</td>
<td>76%</td>
<td>50%</td>
<td>77%</td>
</tr>
<tr>
<td>Free/Reduced Eligibility (based on enrollment)</td>
<td>57%</td>
<td>35%</td>
<td>30%</td>
<td>31%</td>
</tr>
<tr>
<td>Full price lunch - Elementary</td>
<td>$1.00</td>
<td>$1.00</td>
<td>$1.50</td>
<td>$1.20</td>
</tr>
<tr>
<td>Full price lunch - High School</td>
<td>$1.15</td>
<td>$1.00</td>
<td>$1.75</td>
<td>$1.65</td>
</tr>
</tbody>
</table>

Figure 1
Selected demographic information of school districts chosen as case study sites.
How important is student participation to the financial success of the CNP?

All school districts in the case study emphasized the importance of student participation to the financial integrity of their program and all had long term goals to increase the number of students eating school meals. At the time of our visit the main areas of focus to improve participation in the school lunch program were:

- offering more choices of menu items,
- improving the quality of food and,
- asking students what they liked or didn't like about the school lunch program.

Increasing breakfast participation had also been targeted for special efforts in three of the case study districts. Successful marketing strategies which increased breakfast participation were:

- increasing special promotional activities in the elementary schools and
- changing high school breakfast menus to offer more choices among breakfast components.

Although CNP administrators in the case study considered reimbursable meal sales as the primary source of revenue, all districts allowed extra sales of meal components and two districts allowed a la carte sales. CNPs that sold a la carte items indicated the fastest growing item of demand was bottled water. One CNP sold freshly baked cookies and milk at the end of the school day as an after-school snack. It was interesting to note that the school district with the highest percentage of revenue from extra sales and a la carte (14%) also had the highest student participation (77%) for the reimbursable meal.

CNP ADMINISTRATORS CONSIDER FINANCIAL REPORTS AN ABSOLUTE NECESSITY FOR MONITORING THE CNP FINANCIAL STATUS AND FOR MAKING DECISIONS REGARDING THE MANAGEMENT OF FINANCES.

What was the importance of financial reports as management tools in the case study districts?

We found that CNP administrators in this study considered financial reports an absolute necessity for monitoring the CNP financial status and for making decisions regarding the management of finances. Where the reports were generated did not seem to be a major factor in the financial management process. Two of the four CNP administrators in this study had total responsibility for generating reports and determining which reports they would use for financial management analysis. The other two CNP administrators shared responsibilities for accounting duties and generation of reports with the school business office. All of the districts used computerized accounting systems to record data and generate reports and all used either accrual or a modified form of accrual as a method to determine when to record transactions.

What were the costs of producing meals in the case study districts?

According to the meal equivalent formula used by NFSMI researchers, plate costs ranged from a low of $1.74 to a high of $2.40 (Figure 2).

The high cost of producing a meal in District A was attributed to labor expenditures. The district reduced labor costs significantly in the year following the study through a successful campaign to increase productivity.

District D had no equipment expenditures in the year studied. However, it should be noted they are building a new cafeteria which includes a production kitchen that will serve a middle school on site and also satellite to five elementary schools. The CNP had budgeted over several years to increase their fund equity for purposes of contributing to equipment purchases for the new facility.

![Figure 2. Plate Cost for Meal Equivalents](image)

<table>
<thead>
<tr>
<th></th>
<th>District A</th>
<th>District B</th>
<th>District C</th>
<th>District D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>0.56</td>
<td>0.6</td>
<td>0.7</td>
<td>0.71</td>
</tr>
<tr>
<td>Labor</td>
<td>1.4</td>
<td>0.61</td>
<td>0.89</td>
<td>0.81</td>
</tr>
<tr>
<td>Supplies</td>
<td>0.06</td>
<td>0.21</td>
<td>0.07</td>
<td>0.06</td>
</tr>
<tr>
<td>Commodities</td>
<td>0.14</td>
<td>0.22</td>
<td>0.17</td>
<td>0.12</td>
</tr>
<tr>
<td>Equip. (Capital)</td>
<td>0.08</td>
<td>0.15</td>
<td>0.02</td>
<td>0</td>
</tr>
<tr>
<td>Overhead</td>
<td>0.07</td>
<td>0.12</td>
<td>0.06</td>
<td>0.04</td>
</tr>
<tr>
<td>Indirect</td>
<td>0.09</td>
<td>0</td>
<td>0.12</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>$2.40</td>
<td>$1.91</td>
<td>$2.05</td>
<td>$1.74</td>
</tr>
</tbody>
</table>

What financial reports and tools were used for financial monitoring and analysis of the CNP status?

We asked CNP administrators to tell us which reports they used and how often. We found several common to all of the CNPs.
Budgets were prepared and reviewed on a regular basis in each district. Three CNP administrators had the sole duty for budget preparation and analysis, the fourth worked with the district finance officer because of the size of the budget and amount of dollars involved.

Profit/loss (P&L) statements were prepared on a monthly basis in three of the four CNPs. Two CNP administrators prepared their operation's P&L statements and one received the P&L statement from the business office. Two districts prepared P&L statements for each school production site in their district.

Operating ratios were considered crucial to financial management decisions by CNP administrators in this study. The most frequently used ratios were relatively basic and simple. Below are three of the most popular.

1. Participation rates were calculated as a basis for decisions regarding staffing, equipment purchases, menu development and types of services to offer.
2. Ratios of meals/meal equivalents to labor hours were used as a basis to monitor productivity.
3. Percentage of inventory value to total revenue and inventory turnover ratios were used as a basis for inventory control.

It was somewhat surprising to find that none of the case study CNP administrators used balance sheets or break-even-point calculations at the time of the study. Although the four CNP administrators indicated they had access to balance sheets and occasionally used them for filing reports, none used them for financial analysis of the CNP operation. They preferred instead P&L statements, current and year-to-date revenue and expenditure reports, and budget analysis reports. The CNP administrators were well aware of how to calculate the break-even-point for their operation and indicated they were considering the benefits of using the tool at a later date.

How important was productivity to the financial success of the case study districts?

It was evident that all of the CNP administrators in this case study spent a considerable amount of time analyzing labor cost and employee efficiency to improve operations. Total labor costs which included salaries/wages and benefits ranged from a high of 58% to total revenue in District A to a low of 33% to total revenue in District B (Figure 3).

Because wage rates and fringe benefits were often state and local policy issues, the four school districts had diverse policies on employee salary schedules, staffing, and benefits. CNP administrators in the case study had very little control over hourly rates or benefits paid and frequently were in the position of dealing with state or local mandates to give raises or add benefits. To offset rising labor costs, the case study CNP administrators were actively involved in developing plans to increase productivity and thereby lower labor costs in their respective school districts.

Two school districts reduced normal working hours for the kitchen staff by employing new hires for fewer hours (1/2 to 1 hour) than previous employees in the same position and one district reduced...
the number of hours for part-time workers. The fourth school district used a rather unique approach to reducing labor hours. Part-time employees (regular 5 hours) were offered flex hour scheduling on a voluntary basis. Employees worked for two hours during the early morning peak, checked out for two hours, then returned for two hours during the noon day peak for a total of 4 hours. This worked especially well for employees who lived near the school or employees who had errands to run during morning hours. Well-defined guidelines for the use of substitute employees and overtime for regular employees helped reduce labor hours in three districts.

Districts in the case study monitored productivity on a regular basis. Total labor hours allowed were determined using staffing formulas based on either student participation or average meals served. District averages for meals per labor hour were:

- 19 MPLH in District C
- 15 MPLH in districts B and D
- 12.5 MPLH in District A. District A has successfully increased productivity since the study.

Two school districts lowered labor cost by reducing compensation for the position of the school site manager. For example, one district did not have a manager position, but instead used head cooks to carry out operational responsibilities such as requisitioning food and monitoring customer service. All cooks in the operation shared other responsibilities such as food production, receiving, and inventorying. A second school district lowered the educational qualifications for becoming a manager, thus lowering the salary scale.

What kinds of food cost controls were implemented?
Although government regulations and the menu system were the driving forces behind school districts' purchasing policies, all CNP administrators emphasized the importance of using cost-effective procurement procedures and maintaining written procurement plans to curb food costs. Purchasing systems varied, however, all of the case study CNPs utilized the following:

- written procurement plans describing purchasing systems and procedures,
- written specifications for products requested,
- competitive bidding for vendor selection,
- well-defined methods for making informal purchases of items not on bid, and
- written instructions to test new products and approve brands when appropriate. CNP administrators were acutely aware of how the changing nature of the foodservice market and the availability of new products impacted their operations.

Monitoring requisitions and/or purchase orders from school sites was a standard practice in the case study districts. Two districts allowed managers to purchase food items and supplies directly from the prime vendor using an approved products list. Upon delivery, the site manager sent the invoice to the CNP district office for verification that delivered products were from the approved list. In the other two districts, an order request was sent to the CNP office from the school site. The CNP administrator approved the items requested, then forwarded a purchase order to the appropriate vendor.

All CNP administrators in the case study recognized the importance of having well trained and competent personnel for receiving purchased products. Each required site inspection of products at time of delivery to check for accuracy and condition of delivered products. Receiving personnel were trained to observe conditions of packaging for signs of mishandling during the delivery cycle. They also measured the temperature of fresh and perishable food products at the time of delivery.

Three districts required verification of invoice prices at the delivery site and discrepancies noted. The central office purchasing department verified prices in the fourth district. All districts had strict policies for reporting delivery shortages and for returning unacceptable merchandise. Policies included procedures for ensuring that credits were received when appropriate.

Use of centralized menus and standardized recipes as cost control factors in the CNP operation were common practices in the case study CNPs, however, only one CNP used cycle menus. Forecasting and maintaining food sale histories along with plate waste checks were the basis for planning future menus and food production. New items were added after testing for acceptability. We found costing menus to determine affordability and monitoring leftovers were standard procedures in the case study CNPs.

The CNP administrators in this study adhered to the notion that producing food based on production records and serving food in proper portions are important factors in food cost control
for their operations. Some of the more common practices we found are listed below.

- Production schedules were monitored by all the CNP administrators to discourage overproduction and food waste.
- CNP administrators required food to be pre-portioned prior to serving whenever possible.
- Kitchen personnel were trained to use proper sized serving utensils combined with proper serving techniques to control food waste.
- Individual school sites were required to complete reports which compared amount of food prepared with the number of meals served. This allowed CNP administrators to monitor portion sizes, overproduction, and amount of leftovers.
- The offer-versus-serve regulation was used by two districts in all grades to lower food waste. The other two districts used the regulation in selected grades to help curb plate waste and food costs.

How important is training to cost containment?

The CNP administrators in this case study recognized training as an important key to cost containment. Training for continuous improvement was standard practice. Specific inservice training was conducted as needed according to state requirements or program changes. Common methods used to deliver training in the districts were:

- state/national professional association conferences,
- vendor-sponsored food and equipment shows for training employees about operational issues,
- consultants,
- refresher courses or workshops at sites other than the school district,
- visits to other school CNP operations, and
- NFSMI national satellite teleconferences.

PRACTICAL USE OF THIS INFORMATION

Changing federal regulations and increasing operation costs are forcing school districts to look more closely at how CNP dollars are being generated and spent. If CNPs are going to be financially successful as we go into the next century, it is essential for those administering the program to develop more cost effective operations to deliver nutritious meals to school children. As indicated by this study, financial management is an ongoing process that involves every step in the chain of menu planning, purchasing, receiving, storing, preparing food and serving, as well as scheduling the personnel involved.

SFS administrators who are going to be held responsible for operating financially successful CNPs must have basic financial management skills. It is essential that they understand the budgetary process, be able to analyze financial data and understand cost control techniques. This study confirms the importance of making financial decisions based on financial reports that are accurate and up-to-date. SFS administrators can use the information in this report as a guide to explore the kinds of financial reports and tools that would be helpful in their operations.

Financial data recorded in a consistent and uniform method can be used to benchmark internally and externally. Benchmarking is one of the most reliable ways of finding techniques to improve an operation. By utilizing financial data to gauge performance, SFS administrators can measure their performance against “best practice” facilities. The financial practices described in this INSIGHT can become the foundation of a benchmarking program.
RESOURCES:


Information about this and other topics may be obtained by contacting the

NATIONAL FOOD SERVICE MANAGEMENT INSTITUTE
The University of Mississippi
Telephone: 800-321-3054
Order Number R110-98

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This project was funded at least in part with Federal funds provided to the National Food Service Management Institute at The University of Mississippi from the U.S. Department of Agriculture, Food and Consumer Service under Grant number P33385. The contents of this publication do not necessarily reflect the view or policies of the U.S. Department of Agriculture, nor does mention of trade names, commercial products or organizations imply endorsement by the U.S. government.

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