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**PURPOSE**
The purpose of the National Food Service Management Institute is to improve the operation of child nutrition programs through research, education and training, and information dissemination.

**MISSION**
The mission of the National Food Service Management Institute is to provide information and services that promote the continuous improvement of child nutrition programs.

**VISION**
The vision of the National Food Service Management Institute is to be the leader in providing education, research, and resources to promote excellence in child nutrition programs.

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Lesson Title: Financial Management

Training Date _______________ Training Location __________________________

Instruction: The following tasks are necessary for presenting this lesson. Contact NFSMI to determine the contact person who will arrange for materials/equipment and the date that each task must be completed. Keep track of the progress by recording information on the tracking form and checking off tasks as they are completed.

<table>
<thead>
<tr>
<th>Task</th>
<th>Person Responsible</th>
<th>Completion Date</th>
<th>Done √</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NFSMI Contact</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Reserve equipment and gather supplies as needed for use on the day of class (six weeks prior).</td>
<td>NFSMI contact</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Remind on-site training contact that it is important for each participant to bring a calculator to the training. Please ask them to inform participants of this before they attend the training session.</td>
<td>NFSMI contact</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Check to identify availability of Internet access at the training site.</td>
<td>NFSMI contact</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Trainers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. <strong>Day before training:</strong> Check room to ensure set-up is correct and equipment and supplies are in place.</td>
<td>Trainers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. <strong>Day before training:</strong> Locate the participant manuals, evaluations, and pre/post tests.</td>
<td>Trainers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. <strong>Day before training:</strong> Cut out printed definition cards from Instructor’s Manual for the Opener exercise.</td>
<td>Trainers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. <strong>Day before training:</strong> Prepare a flip chart sheet for the Trends Activity in Chapter 9 for recording class rankings. Use the example on page 162 of the Instructor’s Manual.</td>
<td>Trainers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. <strong>Morning of training:</strong> Prior to arrival of participants, post “ground rules” at entrance of training site.</td>
<td>NFSMI contact or On-site contact</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. <strong>Morning of training:</strong> Prepare the Parking Lot on flip charts.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task</td>
<td>Person Responsible</td>
<td>Completion Date</td>
<td>Done</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>--------------------</td>
<td>-----------------</td>
<td>------</td>
</tr>
<tr>
<td><strong>List of equipment and supplies needed</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Equipment</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Podium</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer to present PowerPoint slides</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Computer should be compatible with</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1997 - 2003 Word)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video projector for PowerPoint slides</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A screen for PowerPoint</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Supplies</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-printed Class opener activity cards,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cut and sorted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Card stock for table tents (1 per</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>participant)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flip chart paper (Post-It adhesive flip</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>chart paper preferred)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>easels (table-top easels, if available)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>for each table</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Markers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highlighter for each participant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Removable tape</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sticky notes for each table</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name tags, pencils</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-12 calculators available for</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>participants who do not bring their own</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Clock</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pencil sharpener</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3-hole punch</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Stapler</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Adhesive dots/stars for recognition</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Small toys/puzzles for each table</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(to occupy hands)**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Optional but useful</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Resources needed for each participant</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Management Participant Workbook</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>NFSMI Financial Management Information System</em> publication</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre and Post Training Assessments with one set of answer sheets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course Evaluation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certification of Completion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NFSMI Contact</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Class Opener Activity Cards

Master: Financial Management Terms and Definitions

Instructions:

Copy terms and definitions on card stock paper. Cut into cards and sort according to instructions in the Instructor’s Manual for the Class Opener. There are enough cards for 40 participants.
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A la carte sales</td>
<td>The overall category for food items that are priced separately and sold separately from a reimbursable meal</td>
</tr>
<tr>
<td>Average Daily Participation</td>
<td>The average number of students eating meals in the school nutrition program on a daily basis</td>
</tr>
<tr>
<td>Capital Equipment</td>
<td>Equipment that costs over a specified dollar amount and has a life expectancy greater than one year</td>
</tr>
<tr>
<td>Competitive Foods</td>
<td>Foods sold to students at school during a meal period in competition with the National School Lunch or School Breakfast Programs</td>
</tr>
<tr>
<td>Cost Controls</td>
<td>Implementing guidelines to keep operational costs within limits needed to generate a positive bottom line while providing quality service</td>
</tr>
<tr>
<td><strong>Budget</strong></td>
<td>A financial plan that projects revenue and expenditures for a specified period of time</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Encumbrances</strong></td>
<td>The amount of money reserved for outstanding purchase orders and unpaid bills</td>
</tr>
<tr>
<td><strong>Entitlement USDA Foods</strong></td>
<td>Value of USDA Foods provided to schools based on the number of reimbursable lunches served during a school year</td>
</tr>
<tr>
<td><strong>Fund Balance</strong></td>
<td>Funds that represent the excess of funds over liabilities and are not reserved for a specific purpose</td>
</tr>
<tr>
<td><strong>Meal Equivalency</strong></td>
<td>Conversion of different meal services – snacks, breakfasts, extra sales – to a lunch equivalent</td>
</tr>
<tr>
<td><strong>Meals per Labor Hour</strong></td>
<td>Used to measure the productivity of the school nutrition program’s operation and to determine appropriate staffing</td>
</tr>
<tr>
<td>--------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Meal Reimbursement</strong></td>
<td>Federal cash payment received for breakfast and lunch meals that meet federal standards and are served to school children</td>
</tr>
<tr>
<td><strong>Statement of Revenue and Expenditures</strong> (also called the Net Gain/Loss Statement)</td>
<td>A financial report of all revenues and expenditures for a given period of time; tells whether the program is operating at a profit or loss</td>
</tr>
<tr>
<td><strong>Reduced Priced Meals</strong></td>
<td>Meals served to students who are eligible to receive reduced price meal benefits under USDA eligibility guidelines</td>
</tr>
<tr>
<td><strong>Fringe Benefits</strong></td>
<td>Compensation for employees that is in addition to salaries/wages, such as health insurance, retirement, or paid vacation</td>
</tr>
<tr>
<td><strong>Revenue</strong></td>
<td>Income received in exchange for goods or services provided by the school nutrition program</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Inventory</strong></td>
<td>The value of food and supplies that are being held for future use</td>
</tr>
<tr>
<td><strong>Accounts Payable</strong></td>
<td>The amount the school nutrition program owes for goods and services that have been purchased (unpaid bills)</td>
</tr>
<tr>
<td><strong>Accounts Receivable</strong></td>
<td>The amount of funds earned, but not yet received by the school nutrition program for meal services provided; includes reimbursement, special school events, and contract meals</td>
</tr>
<tr>
<td><strong>Rebate</strong></td>
<td>Money received from a company as an incentive to use a product. If received in the year the food is purchased, the funds are treated as a reduction to food costs</td>
</tr>
</tbody>
</table>
**Note to Instructor:** The purpose of the Instructor Information section is to help the instructor become familiar with the context of the lesson and is only for the instructor; it is not a part of the lesson detail, the section that is used to teach the class. It is not to be used to teach. It is background information provided to the instructor to review prior to presenting the lesson.

**Instructor Information**

The following information is provided to review the methods used to create the financial management materials taught in *Financial Management: A Course for School Nutrition Directors*. Specific teaching tips are included that have been gathered from instructors experienced in teaching these materials. All course materials should be read prior to beginning instruction.

**Rationale and Purpose of the Course**

The U.S. Department of Agriculture (USDA) National School Lunch Program and School Breakfast program provide subsidized meals to children in school. Managing the financial resources of these nutrition programs in the school setting is critical to the success of maintaining quality standards and ensuring nutritious meals are served to children. Child Nutrition Program Data Tables provided by USDA indicate that in the school year 2007-2008, the National School Lunch Program served an average of approximately 30 million lunches daily at an annual federal cost of $7.7 billion. During the same year, 10 million children were served breakfast each school day at an annual cost of over $2 million in federal cash payments. When dollars spent by states and paying students are added, school nutrition programs represent a significant level of public funding.
According to a U.S. General Accounting Office report (2003), the costs of serving student meals at school are increasing faster than the generation of revenue in many school districts, leaving directors with difficult decisions to make about long-term goals for their programs that will ensure sustainability of the programs. At the same time, demands are increasing for more accountability in all nutrition programs, both financially and nutritionally. To better meet these demands, school districts need financial management information systems that provide data for both evaluation and financial decision-making.

The ability to interpret the financial outcomes of operational decisions is essential to effective management of School Nutrition Programs. With changing federal regulations, increasing program cost, and growing demands to improve school meals, both in quality and nutrition, it is imperative that school nutrition program directors understand financial management as it relates to the School Nutrition Program. Directors need to

- know how to read and understand financial statements,
- be able to analyze data, and
- know what steps to take when expenditures consistently run higher than revenue generation.

Greater control and more informed decisions are possible when all costs of the program are understood. Upon completion of this lesson, the director should have a better understanding of the three concepts identified.

The purpose of this training is to focus on the effective management of resources to ensure the nutritional integrity and quality of meals served to students at school. While we cannot teach new directors everything they need to know about financial management in a day and a half, we can introduce the importance of financial management to school nutrition program quality.
Course Foundation

The foundation for *Financial Management: A Course for School Nutrition Directors* is the resource, *Financial Management Information System* (FMIS), 2005 Edition. The need for such a resource to guide the collection and analysis of financial data using standard methods was identified by participants in the National Food Service Management Institute’s 1995 National Research Agenda Task Force. As a result, a project to develop a set of standards and guide specifically adapted to school nutrition programs was initiated.

NFSMI research staff assembled a 25-member task force with nationwide geographic representation and a range of relevant areas of expertise. Participants included NFSMI staff, state agency directors, district school foodservice administrators, school business officials, an accountant, a United States Department of Agriculture (USDA) representative, and a computer software designer. A second, similar task force convened in 2004 to update and finalize uniform reporting and analysis procedures.


The most current information utilized to update and improve the financial management course was the *School Lunch and Breakfast Cost Study-II* (SLBCS-II) from the Food and Nutrition Service, USDA. This study provided detailed data on the costs of producing reimbursable meals in the National School Lunch Program (NSLP) and the School Breakfast Program (SBP) during school year (SY) 2005-06.
FMIS is the foundation for *Financial Management: A Course for School Nutrition Directors* and information from the *Financial Accounting for Local and State School Systems* and the *School Lunch and Breakfast Cost Study-II* add currency, depth, and validity.

A uniform reporting and analysis system such as the FMIS model allows school foodservice administrators to compare financial position and operational performance of a particular school district to other programs in similar districts. A system based on national standards allows comparisons with other school districts comparable in type, size, location, meal service delivery, number of meals served, and other variables. While use of the reporting and analysis system outlined in FMIS is voluntary, directors are strongly encouraged to use the model as school nutrition programs move toward more national standardization.

**Course Overview**

The National Food Service Management Institute (NFSMI) developed *Financial Management: A Course for School Nutrition Directors* to give school nutrition program directors information to enable them to recognize sound financial principles as the primary foundation for school nutrition programs. Course materials include *Financial Management: A Course for School Nutrition Directors Instructor’s Manual*, the *Financial Management Information System (FMIS)*, and *Financial Management: A Course for School Nutrition Directors Participant’s Workbook*.

The *Instructor’s Manual* is organized into chapters, each addressing a specific learning objective. All chapters begin with a cover page that offers practical information for the instructor.
Each cover page includes

- Name of the chapter
- Learning objective
- Time allotted for teaching the chapter
- Training tools needed

Included within each chapter are

- Handout(s)/Activity(ies)
- Answer sheets for all activities and case studies
- Instructor notes and/or reminders
- PowerPoint slides

Activities are planned to focus the learner's attention on financial management issues that impact school nutrition programs. These activities enable learners to identify the diverse factors that must be considered to ensure financial integrity and a fiscally sound school nutrition program. Instructors should become familiar with each activity by completing the necessary calculations before teaching the lesson. Answer sheets are included in each chapter so the instructor can check the accuracy of the calculations. In addition, a list of key terms is included on pages 10 to 13 in Chapter 1, “Importance of Financial Management to the School Nutrition Program.” The instructor should become thoroughly familiar with these terms before beginning instruction.

There is, of necessity, some overlapping of information in the course materials. Instruction does not always move from point A to B, but examples will be provided by the trainer to make the transition understandable to participants.

The Financial Management Participant’s Workbook is a separate manual that
accompanies the FMIS resource. It includes discussion notes, activities, case studies, answer sheets, PowerPoint slide handouts, list of resources, appendices, list of key terms, and references.

**Participants and Class Size**

This course is designed for school nutrition directors from small to medium sized school districts. Some districts may wish to enroll the school business official in addition to the director. This should be encouraged if class size permits. Directors from large school districts who would like to learn NFSMI’s methods for reporting financial information or reaffirm their accounting procedures also may find the course useful. In states where the NFSMI Financial Management Information System has been adopted by the state agency for all school nutrition programs, any director would benefit from attending this course. The optimum class size is no more than 30 participants because of the nature of the information and intensity of interactions.

**Classroom Arrangement**

Ideally, the classroom should be arranged in a grouping of large, round tables with 5–6 participants at a table and chairs arranged facing the instructor. If class size is small (12 or fewer) an open U arrangement works well and allows for group interaction. The speaker’s podium with microphone should be situated to one side at the front of the room. A small table to the side of the podium provides space for instructor materials and handouts. The projector should be placed in a location that provides a clear view for all participants.
Instructional Time and Agenda

A total of 12 instructional hours are allotted to teach the *Financial Management: A Course for School Nutrition Directors*. The agenda allows for a one-hour lunch, a 15 minute morning break daily, and an afternoon break of 15 minutes on the first day of the course.
## Course at a Glance

<table>
<thead>
<tr>
<th>Time Allowed</th>
<th>Topic</th>
<th>Activity</th>
<th>Materials</th>
</tr>
</thead>
</table>
| 45 minutes   | General | • Housekeeping  
• Ground Rules  
• Welcome  
• Pre assessment  
• Participant Introduction  
• Slide 1 | Participant Workbook |
| 20 minutes   | Introduction to Financial Management to Program Success | • Opening Remarks  
• Introduction to Financial Management  
• Financial Management Competencies  
• Role of Director  
• Lesson Objectives | Slides 2-8 |
| 25 minutes   | Class Opener Activity | • Match Game | Cards with key terms and matching definitions |
| 40 minutes   | Importance of Effective Communication and Ethical Behavior | • Definition of Effective Communication  
• Stakeholders in the School Nutrition Program  
• Definition of Ethics | Slides 9-17  
Participant Workbook |
| 30 minutes   | Development of a Financial Management Information System | • Using Financial Information to Manage School Nutrition Programs  
• GAAP  
• Classification of Revenues  
• Classification of Expenditures | Slides 18-23  
NFSMI Financial Management Information System publication  
Participant Workbook |
| 40 minutes   | Financial Reporting of Revenue and Expenditure Transactions | • Statement of Revenue and Expenditures  
• Statement of Net Assets (Balance Sheet)  
• Budget | Slides 25-30  
Participant Workbook  
Koosh Ball |

**Objective 1:** Know the importance of financial management to nutritional integrity and fiscally sound operations in the school nutrition program.

**Objective 2:** Know how to communicate effectively and behave ethically in the financial management of the school nutrition program.

**Objective 3:** Know the basic financial recording and reporting processes and procedures for directing the operation of a school nutrition program.

**Objective 4:** Know how to use financial reports that are consistent with federal and state guidelines to achieve a financial management system that supports a cost effective program with high integrity.
<table>
<thead>
<tr>
<th>Time Allowed</th>
<th>Topic</th>
<th>Activity</th>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 minutes</td>
<td>Setting a Meal Standard for Financial Management and Analysis</td>
<td>• Meal Equivalent as a Standard • Meal Equivalent Conversion Formula</td>
<td>• Slides 31-33 • Participant Workbook</td>
</tr>
<tr>
<td></td>
<td><strong>Objective 5:</strong> Know how to use financial management tools and standards to operate a financially and nutritionally accountable school nutrition program consistent with federal and state guidelines.</td>
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<tr>
<td>60 minutes</td>
<td>Managing Revenue in School Nutrition Programs</td>
<td>• Revenue Analysis • Revenue Generation per Meal Equivalent • Setting Meal Prices • Pricing Nonreimbursable Food Items</td>
<td>• Slides 34-43 • Participant Workbook • NFSMI Financial Management Information System publication • Calculator Tips</td>
</tr>
<tr>
<td></td>
<td><strong>Objective 6:</strong> Know how to analyze, interpret, and use revenue data for program evaluation and improvement.</td>
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<tr>
<td>55 minutes</td>
<td>Managing Expenditures in the School Nutrition Program</td>
<td>• Expenditure Analysis • Calculating the Cost to Produce a Meal/Meal Equivalent • Determining the Percentage of Operational Costs to Total Revenue • Comparing Revenue Generated with Program Expenditures</td>
<td>• Slides 44–50 • Participant Workbook</td>
</tr>
<tr>
<td></td>
<td><strong>Objective 7:</strong> Know how to analyze, interpret, and use expenditure data for program evaluation and improvement.</td>
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<tr>
<td>60 minutes</td>
<td>Controlling Food and Labor Costs in School Nutrition Programs</td>
<td>• Determining Labor Cost Factors • Productivity • Participation • Determining Food Cost Factors</td>
<td>• Slides 51–57 • Index Cards • NFSMI Financial Management Information System publication • Flip Cart Sheets/ Markers • Participant Workbook</td>
</tr>
<tr>
<td></td>
<td><strong>Objective 8:</strong> Know how to apply cost control measures to operate a financially sound program with nutritional integrity.</td>
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</tbody>
</table>
### Time | Topic | Activity | Materials
--- | --- | --- | ---
65 minutes | Financial Planning and Budget Development | • Customer Satisfaction  
• Internal Organization  
• Financial Aspects  
• Innovation  
• Trends | • Slides 58-59  
• Flip Chart/Markers

#### Objective 9: Know the importance of using forecasted operational revenues and expenditures when developing a financial plan and budget for school nutrition programs.

65 minutes | Developing and Analyzing a School Nutrition Program Budget | • Developing a School Nutrition Program Budget  
• Analyzing the Budget  
• Energizer | • Slide 60  
• Participant Workbook  
• Answer Sheets

#### Objective 10: Understand the importance of using the budget as an analysis tool and control document.

40 minutes | Tools to Analyze the Financial Status of School Nutrition Programs | • Microsoft Excel Spreadsheet  
• Developing a Pie Chart  
• Internet Resources | • Slides 61-62

#### Objective 11: Identify appropriate tools and resources to analyze the school nutrition program's financial status.

45 minutes | Follow-up Suggestions, Post Assessment, and Course Evaluation | • Review of individual questions  
• Resources  
• References  
• Administer Post Assessment  
• Conduct Course Evaluation  
• Class Closer Crossword Puzzle | • Slide 63  
• Post Assessment Forms  
• Resources  
• References  
• NFSMI Course  
• Evaluation Forms  
• Answer to Puzzle

#### Objective 12: Recall the benefits of financial information as it relates to your school nutrition programs.

Total: 615 minutes (10.25 hr.) | **Instructional Time**

**Note:** Time allowed for lunch and breaks during the two day course.

**First Day:**  
Lunch – 1 hour (60 minutes)  
Two Breaks – 15 minutes each (30 minutes)

**Second Day:** One Break – 15 minutes  
Total time allowed for course and breaks: 720 minutes (12 hours)
**SHOW:** Slide #1, Financial Management: A Course for School Nutrition Directors

**Instructor’s Note:** Have slide #1 on the screen as participants enter the classroom.

**SAY:** Welcome to *Financial Management: A Course for School Nutrition Directors*. It’s great to see all of you and I look forward to working with you the next two days. To help guide you through this lesson, the National Food Service Management Institute has provided each of you with a Participant’s Workbook. The workbook contains important information and activities developed to help you gain a better understanding of financial management as it relates to school nutrition programs. The answers to the exercises are in your workbook. We will review and discuss them at the completion of each exercise, but to get the full benefit from these activities, you need to try working them before looking at the answer sheet. Take a minute to look at the content outline and Course at a Glance on pages 3-5. On pages 101-103 in your workbook is a list of resources and the references used in developing this training. The PowerPoint slides are included in the back of your workbook. You also have a copy of the *NFSMI Financial Management Information System* (FMIS) to which we will refer throughout the lessons.

**Housekeeping**

**SAY:** Now, we have a few “housekeeping” items to review.
1. **Instructor’s Note:** Point out the location of the restrooms and water fountain to the group. Encourage them to take care of their own needs.

2. We begin and end on time. If you are late returning from break/lunch, you may miss some information because we will stick to our schedule.

3. You may have questions as we go through the lessons. We have found that often the best way to handle this is for you to write your question on a sticky note and place it in the “parking lot.” Park your questions there; and periodically, we will address these questions with the whole class.

   **Instructor’s Note:** Before beginning, designate a place for the “Parking Lot.” It may be on a flip chart, on the wall, or any place convenient to participants. Point out the location to participants.

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**Ground Rules**

**SAY:** We have a few ground rules. They are posted on the wall around the room, so take a few minutes to read them. It is important for all of us to be considerate of other people.

   **Instructor’s Note:** Briefly mention the following for emphasis.

1. Turn your cell phone off or to vibrate. If you must take a call, leave the room quietly and we encourage you to keep the conversation as short as possible so you don’t miss important topics.

2. **DO NOT** carry on side bar conversations with your neighbor or others in your group. We recognize that most conversations are about the topics we are discussing, but constant talking or whispering interferes with others ability to hear and grasp information that may be extremely important to them. PLEASE BE CONSIDERATE.

3. Always be considerate of other people’s ideas. If you disagree, do so politely.

4. Clear your table of trash such as cups, napkins, or empty water bottles at the end of the morning and afternoon.
Pre Assessment Questionnaire

**SAY:** Before we begin the training, we would like for each of you to complete a brief questionnaire. It is anonymous and is not graded. The purpose is to review what you already know about financial management. Before you begin answering the questions, please write a unique 6-digit number on the ID No. line. You may use any combination of numbers, but it’s important to remember them because you will use the same numbers on the Post Assessment completed at the end of the course. One possibility is using the last 6 digits of your driver’s license. The ID number is used to match Pre Assessment information with Post Assessment answers to determine knowledge gained. You have 20 minutes to complete Parts I and II.

Introductions

**Instructor’s Note:** The participant introductions can be adjusted based on the size of the class. Smaller classes can provide more personal detail and larger classes can be limited to fewer personal/district facts.

**SAY:** Before we begin the lesson, I want to know a little about each of you. Will you introduce yourself by telling us

- your name,
- your school district, and
- years of experience in the school nutrition program.

**Instructor’s Note:** If you have not been previously introduced, take a few minutes after the participants finish to introduce yourself. Give participants a brief overview of your background or interest in school nutrition. Time is critical in this lesson, so keep the pace fast for this activity. If there are 2 trainers, both should introduce themselves.
Chapter 1: Importance of Financial Management

Objective 1: Know the importance of financial management to nutritional integrity and fiscally sound operations in the school nutrition program.

Introduction of Topic

SHOW: Slide #2, Importance of Financial Management

Instructor’s Note: After slide has been viewed, you can click to a blank screen until it is time for the next slide. To call up a blank screen, when you are in PowerPoint-Slide Show-View Show, press B to call up a dark screen. To return, press B again or press the down arrow.

SAY: Look on page 6 in your workbook as we begin our first chapter about the importance of financial management to the school nutrition program. According to a U.S. General Accounting Office report in 2003, the costs of serving students meals at school are increasing faster than the generation of revenue in many school districts, leaving directors with difficult decisions to make about long-term goals for their programs that will ensure sustainability of the program. At the same time, demands are increasing for more accountability in all nutrition programs.
Conventional wisdom tells us that good financial management in a school nutrition program is critical to whether or not the program succeeds in meeting the nutritional needs of the children. In December 2007, *School Nutrition*, the magazine from the School Nutrition Association, devoted most of the issue to financial management and its importance to the ultimate success of feeding children quality, nutritious meals. The ability to interpret the financial outcomes of operational decisions is essential to effective management of school nutrition programs.

**SAY:** To introduce the subject of financial management, I would like to start by having you think about the finances in your school district’s school nutrition program.

**A. Financial Management Questions**

**SHOW:** Slide #3, Do you know the following financial management information about the school nutrition program in your school district?

<table>
<thead>
<tr>
<th>Can you answer these financial management questions about the school nutrition program in your district?</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Main sources of revenue?</td>
</tr>
<tr>
<td>☐ Percentage of total revenue attributed to each source?</td>
</tr>
<tr>
<td>☐ Expenditure categories?</td>
</tr>
</tbody>
</table>

**SAY:** Look on **pages 6 and 7** in your Participant’s Workbook and follow along as I read the questions. If you think you know the answer, write it in your workbook. If time permits, we’ll ask you to share your answers with us at the end of our session tomorrow.
1. What are the main sources of revenue for the nutrition program in your district?
   (Hint – student paid meals? federal reimbursement? a la carte?)

2. Do you know what percentage of total revenue is attributed to each source of revenue?

3. What different expenditure categories are used for the school nutrition program in your district? (Hint – labor, food, and supplies are categories; try to name at least 5 others.)

*Instructor’s Note: Boxed comments/questions/activities are in the Participant’s Workbook.

SHOW: Slide #4, More questions

4. How much does it cost, on an average, to produce a meal in your school district?

5. What percent of revenue is the school nutrition program spending for labor? For food?

6. What is the labor productivity (or meals per labor hour) index in your school district?
SHOW: Slide #5, More questions

![More questions?]

- ☐ Net gain or loss over the past 3 years?
- ☐ How many employees understand the importance of cost controls to the success of the program?

7. What was the net gain or loss in the school nutrition program over the past 3 years?

8. How many employees in your school nutrition program understand the importance of cost controls to the success of the program?

SAY: These are only a few of the questions that must be answered if you are in charge of managing finances in a school nutrition program.

B. Financial Management Competencies

SAY: The purpose of this lesson is to focus on the effective management of financial resources to insure the nutritional integrity and quality of meals served to students at school. The Competencies, Knowledge, and Skills for District Level School Nutrition Professionals in the 21st Century published at the National Food Service Management Institute in 2009 suggests that two competencies in the functional area of financial management are important for school nutrition directors. Look on page 7 in your workbook for the competencies. According to the publication, a school nutrition director that is competent in financial management
• develops financial management guidelines that support school nutrition program operational goals and comply with regulations, and
• establishes cost control goals to effectively manage the school nutrition program.

C. Defining Financial Management

**DO: Workbook Activity - Financial Management Definition**

**SAY:** While there may be a variety of definitions for the term financial management, there are two components that we will address in this lesson. Turn to page 7 in your workbook and fill in the missing information as we discuss the term “financial management” and what it means as it relates to the school nutrition programs.

*Instructor’s Note: The underlined words in the following definitions are blank in the Participant’s Workbook.*

**SHOW:** Slide #6, Defining Financial Management

<table>
<thead>
<tr>
<th>Defining Financial Management</th>
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<tbody>
<tr>
<td>Financial Management can be defined as</td>
</tr>
<tr>
<td>□ The process of defining the financial goals and program objectives for the school nutrition programs, and</td>
</tr>
<tr>
<td>□ Implementing activities to attain those goals through the effective use of resources</td>
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</tbody>
</table>

**SAY:** Financial management includes the process of defining the financial goals and program objectives for the school district nutrition program.
a. For example, a program objective could focus on improving nutrition integrity and a financial goal might be to improve the quality of food or to implement more wellness activities using fresh fruits and vegetables.

b. A long term financial goal could include replacing older equipment with new energy efficient equipment.

**SAY:** Once financial goals are established, the next step in effective financial management means implementing activities to attain those goals through the effective use of resources. Look on page 8 and complete the blanks as we review a few of the activities schools should use.

**SHOW:** Slide #7: Activities for More Effective Financial Management

<table>
<thead>
<tr>
<th>Activities for More Effective Financial Management</th>
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<tbody>
<tr>
<td>School nutrition programs should</td>
</tr>
<tr>
<td>- plan through the budget process,</td>
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<tr>
<td>- apply more efficient cost control measures,</td>
</tr>
<tr>
<td>- increase productivity, and</td>
</tr>
<tr>
<td>- identify ways to increase resources.</td>
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</tbody>
</table>

**SAY:** School nutrition program directors should

- plan through the **budget** process.
- apply more efficient **cost control** measures,
- increase **productivity**, and
- identify ways to increase **resources**.
D. Role of the School Nutrition Director

ASK: Who would you say is the person most responsible in your district for managing the finances of the school nutrition program? (Allow one or two participants to answer the question voluntarily.)

SAY: In most school districts, the school nutrition director or someone who acts in a similar capacity is either entirely or partially responsible for managing the finances of the nutrition program in accordance with the financial expectations of the board of education and other school officials. The achievement of accountability and integrity in school nutrition programs requires strong leadership skills.

DO: Workbook Activity – Review Role of School Nutrition Director

SAY: Look on page 8 in your workbook as we discuss the leadership responsibilities of the school nutrition director.

SHOW: Slide #8, Role of the School Nutrition Director in Managing Finances

SAY: Regardless of the actual job requirements, there are several areas where the school nutrition program director should play a leadership role. As a leader, it is important for the director to
• oversee the **management** of the school nutrition program’s financial resources,

• establish and maintain financial **accountability**,  

• involve administrators, board members, cafeteria **managers**, and nutrition **staff** to identify the desired financial goals for the school nutrition program,

• promote a **team** approach in practicing good financial management principles,

• assess, monitor, and evaluate effective and efficient use of program **funds**, and

• maintain an on-going **training** program.

**SAY:** Studies show trained employees contribute to a better bottom line.

**E. Class Opener Activity**

CLASS OPENER

Warm-Up Exercise

Match Game
Key Terms

Activity: Match Game, Time allowed: 15 minutes

SAY: Before we continue with the Financial Management seminar, it is important to look at some of the terms and definitions that will be covered in the class and have a little fun at the same time.

DO: Distribute the two sets of index cards with (1) financial management terms and (2) the matching definitions among the participants. Each participant should receive one card. Mix the cards several times so that people sitting together do not get matching cards.

Instructor’s Note: A master for the cards with terms and a matching definition are provided as part of the class materials. Prior to class, make a copy of the terms and definitions and cut into cards. Check to ensure that you have the exact number of cards needed for each participant to receive one card. Since the number of participants will vary from workshop to workshop, the instructor will need to carefully select cards to ensure that those distributed have a matching term or definition. If the number of participants is uneven, the instructor should keep one of the cards and participate in the activity. If there are more cards provided than the number of participants in the class, pull the extra “matching” cards and set aside.

SAY: Turn to page 9 in your workbook and follow along as I read the directions for our next activity. You have received a card that has either a general accounting or school foodservice financial management term or definition that is important in managing a school nutrition program. Read your card; then get up and move around the room talking with other participants until you find the person with the card that matches either the term or the definition written on your card. Once you find your “match” card, stand to the side with your partner.
Instructor’s Note: You may want to give an example of a term and a matching definition that is not used in the activity. For example, matching cards could be

- Card 1 – school nutrition programs (term)
- Card 2 – The Federal nutrition programs for school children that include lunch, breakfast, and after school snack service (definition)

SAY: When everyone has a partner, participants with matching terms will share the term and the matching definition. We’ll start on the left side of the room and move around until everyone has an opportunity to tell us your financial term and its definition. After you finish sharing, you may return to your seats. (Keep the activity moving quickly.)

FEEDBACK: (When everyone is seated, continue.) In order to make financial management decisions, school nutrition program directors must have knowledge of basic accounting and financial management key terms as they relate to the operation of a school nutrition program. Many of the terms identified in this exercise will be used throughout the lesson.

SAY: Now that you have completed this exercise, I want you to turn in your workbooks to pages 10–13. You will see the list of key words that will be used in this session. You may want to keep a marker here so you can refer back to it and maybe you will want to add to the list during this lesson.
# Key Terms

<table>
<thead>
<tr>
<th>Key Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accountability</td>
<td>Responsibility to deliver what is expected and willingness to bear the consequences for failure to perform as expected</td>
</tr>
<tr>
<td>Accounts Payable</td>
<td>The amount the school nutrition program owes for goods and services that have been purchased (unpaid bills)</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>The amount of funds earned, but not yet received by the school nutrition program for meal services provided; includes reimbursement, special school events, and contract meals</td>
</tr>
<tr>
<td>Afterschool Care Snacks</td>
<td>Reimbursable snacks served in an afterschool care program operated by a school or school district that participates in the National School Lunch Program</td>
</tr>
<tr>
<td>A la carte Sales</td>
<td>The overall category for food items that are priced separately and sold separately from a reimbursable meal</td>
</tr>
<tr>
<td>Allowable Cost</td>
<td>Expenses which are readily identifiable as costs applicable to the school nutrition program</td>
</tr>
<tr>
<td>Assets</td>
<td>Cash, accounts receivable, funds due from all sources, inventory values, and the net value of large equipment</td>
</tr>
<tr>
<td>Attendance Factor</td>
<td>The average number of students present at school expressed as a percentage</td>
</tr>
<tr>
<td>Average Daily Participation</td>
<td>The average number of students eating meals in the school nutrition program on a daily basis</td>
</tr>
<tr>
<td>Bonus USDA Foods</td>
<td>USDA Foods provided to schools as they are available from surplus agricultural stocks</td>
</tr>
<tr>
<td>Break-even</td>
<td>The point at which expenditures and total revenue are exactly equal. It can be expressed as dollars or a percent of revenue.</td>
</tr>
<tr>
<td>Budget</td>
<td>A financial plan that projects revenue and expenditures for a specified period of time</td>
</tr>
<tr>
<td>Capital Equipment</td>
<td>Equipment or furniture that costs over a specified dollar amount, as specified by the state, with a life expectancy greater than one year. The item is recorded to a fixed asset account.</td>
</tr>
<tr>
<td>Communication</td>
<td>The exchange of ideas, messages, and information by speech, signals, writing, and behavior</td>
</tr>
<tr>
<td>Competitive Foods</td>
<td>Foods sold to students at school during a meal period in competition with the National School Lunch or School Breakfast Programs</td>
</tr>
<tr>
<td>Cost Controls</td>
<td>Keeping operational costs within limits needed to generate a positive bottom line while providing customers with a level of service to generate repeat business</td>
</tr>
<tr>
<td>Cost of Food Used</td>
<td>The value or cost of food used in a specific accounting period</td>
</tr>
<tr>
<td>Term</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Deferred Income</td>
<td>A liability account that represents revenues collected before they become due. An example of this is revenue received as prepaid for school meals.</td>
</tr>
<tr>
<td>Encumbrances</td>
<td>The amount of the fund balance reserved for outstanding purchase orders.</td>
</tr>
<tr>
<td>Entitlement USDA Foods</td>
<td>Level of USDA Foods assistance mandated by federal laws provided to schools based on number of reimbursable lunches served during a school year</td>
</tr>
<tr>
<td>Ethics</td>
<td>Involves principles of right or good conduct.</td>
</tr>
<tr>
<td>Expenditures</td>
<td>Expenditures in the school nutrition program are those allowable costs that can be identified specifically with the production and service of meals to school children.</td>
</tr>
<tr>
<td>Federal Revenue Sources</td>
<td>Payments received from federal funds for reimbursable meals, afterschool care snacks, grants, and cash in lieu of USDA Foods. The value of donated USDA Foods received is also considered a federal revenue source.</td>
</tr>
<tr>
<td>Financial Goals/Objectives</td>
<td>Establishment of a framework for making deliberate financial decisions that enable the school nutrition program to better manage finances.</td>
</tr>
<tr>
<td>Financial Integrity</td>
<td>Maintaining a fiscally sound school nutrition program by continually monitoring the revenue and expenditures of the program.</td>
</tr>
<tr>
<td>Financial Management</td>
<td>A standard system of data collection and financial analyses that can be used as a management tool and to evaluate financial management decisions.</td>
</tr>
<tr>
<td>Information System</td>
<td></td>
</tr>
<tr>
<td>Forecasting</td>
<td>Monitoring current revenue and expenditures of a school nutrition program and studying trends that will impact both.</td>
</tr>
<tr>
<td>Fringe Benefits</td>
<td>Compensation for employees that is in addition to salaries/wages, such as health insurance, retirement, or paid vacation.</td>
</tr>
<tr>
<td>Fund Balance</td>
<td>Funds that are reserved or designated for purposes such as encumbrances and inventory and unreserved funds. Unreserved funds represent the excess of funds over liabilities that are not restricted for specific purposes.</td>
</tr>
<tr>
<td>Indirect Cost</td>
<td>The school nutrition program’s share of general school districts’ costs that are incurred for common or joint purposes and cannot be readily identified as a direct cost. The amount recovered must be through an approved cost allocation plan.</td>
</tr>
<tr>
<td>Inventory</td>
<td>The value of food and supplies that are being held for future use.</td>
</tr>
<tr>
<td>Liabilities</td>
<td>Accounts payable, accrued salaries and benefits, amounts due to other school district funds, deferred income, and state income taxes owed.</td>
</tr>
<tr>
<td><strong>Loss Leader</strong></td>
<td>Loss leaders are items offered at discounts (generally below cost) in order to introduce the product with the hopes of increasing customer demand.</td>
</tr>
<tr>
<td><strong>Meal Equivalency</strong></td>
<td>Conversion of different meal services – snacks, breakfast, extra sales, and lunch – to a lunch equivalent. All reimbursable lunches served to children and full paid adult lunches are considered to be one meal equivalent. In some state agencies, adult lunches may be considered as other food sales.</td>
</tr>
<tr>
<td><strong>Meals Per Labor Hour</strong></td>
<td>A productivity index used by school nutrition program administrators to monitor the efficiency of the operation and to determine appropriate staffing.</td>
</tr>
<tr>
<td><strong>Meal Reimbursement</strong></td>
<td>Federal cash payment received for breakfast and lunch meals that meet federal standards and are served to eligible children.</td>
</tr>
<tr>
<td><strong>Nonreimbursable Food Sales</strong></td>
<td>Meals and other food items sold in the school nutrition programs but are not eligible for reimbursement through federal funds.</td>
</tr>
<tr>
<td><strong>Operational Costs</strong></td>
<td>Costs directly attributable to the production and service of meals and other foods in the school nutrition programs.</td>
</tr>
<tr>
<td><strong>Operating Ratios</strong></td>
<td>An analysis of financial data in terms of relationships to measure the efficiency of the operation of the school nutrition program. Expenditures as a percentage of revenue (food cost percentage) is an example of an operating ratio.</td>
</tr>
<tr>
<td><strong>Productivity</strong></td>
<td>The rate at which goods or services are produced, especially output per unit of labor.</td>
</tr>
<tr>
<td><strong>Rebate</strong></td>
<td>Money received from a company as an incentive to use a product. If the rebate is received during the year in which the food is purchased, it is recorded as a reduction to food costs. Rebates from the prior school year are recorded as revenue.</td>
</tr>
<tr>
<td><strong>Reduced Priced Meals</strong></td>
<td>Meals served to students who are eligible to receive reduced price meal benefits under USDA eligibility guidelines.</td>
</tr>
<tr>
<td><strong>Revenue</strong></td>
<td>Income received in exchange for goods or services provided by the school nutrition program.</td>
</tr>
<tr>
<td><strong>School Food Authority</strong></td>
<td>The local governing body that has the legal authority for the administration of USDA school nutrition programs.</td>
</tr>
<tr>
<td><strong>Special Functions</strong></td>
<td>Meals or refreshments provided to groups outside the school nutrition program. Examples are athletic banquets, faculty functions, and PTA refreshments.</td>
</tr>
<tr>
<td><strong>Stakeholder</strong></td>
<td>Individuals or groups that have a strong interest in the success of the school nutrition program’s services.</td>
</tr>
<tr>
<td><strong>State Matching Funds</strong></td>
<td>State appropriated revenue that is required by USDA to be paid to school districts for use in the school nutrition program.</td>
</tr>
<tr>
<td>Statement of Net Assets</td>
<td>A financial statement that reflects the financial position of the operation on any given day; also known as a Balance Sheet</td>
</tr>
<tr>
<td>Statement of Revenues and Expenditures</td>
<td>The financial report of all revenues and expenditures earned and expended for a given period of time. The report tells program administrators whether the school nutrition program is operating at a profit or a loss.</td>
</tr>
<tr>
<td>Unreserved/Undesignated Funds</td>
<td>Funds that have not been allocated and are available for new expenditures not already encumbered.</td>
</tr>
</tbody>
</table>
Objective 2: Know how to communicate effectively and behave ethically in the financial management of the school nutrition program.

Introduction to Topic

SAY: Communication and ethical behavior are both important to effective financial management. Effective financial management and communication in the school nutrition program relies on maintaining two-way lines of ethical communication with stakeholders. It is successful only when both the sender and receiver understand the same information.

SHOW: Slide #9, Importance of Effective Communication

SAY: In this segment of our course, we are going to look at both communication and ethical behavior and how they are important to effective financial management. We communicate constantly to exchange information. Effective communication is conveying your message to others clearly and unambiguously and receiving information others send you with as little distortion as possible. In fact, communication is successful only when both the sender and receiver understand the information the sender intended to transmit. As Lee Iacocca has said, “You can have brilliant ideas, but if you can’t get them across, your ideas won’t get you anywhere.” Many stakeholders are interested and involved in the activities and operations of the school nutrition program, and successful management relies on maintaining two-way lines of ethical communication with these stakeholders.
A. Definition of Communication

**DO:** Workbook Activity: Definition of Communication

**SAY:** Look on page 14 of your workbook and fill in the blanks as we discuss the definition of communication.

**SHOW:** Slide #10, Communication

- Communication is the **exchange** of ideas, messages, and information by speech, signals, writing, and behavior.
- **Effective** communication occurs only when the receiver **understands** the information or idea that the sender **intended** to transmit.

B. How Much Do We Remember?

**SAY:** Let’s take a minute and think about how we remember what is communicated to us.

*Instructor’s Note:* Show Slide #11, “How Much Do We Remember?” Ask participants to volunteer answers to the questions on the slide. Then show Slide #12, “We Remember....” and show answers one by one.
SHOW: Slide #11, How Much Do We Remember...?

How Much Do We Remember?

___ of what we hear?
___ of what we see?
___ of what we see and hear?
___ of what we see, hear, and say?
___ of what we see, hear, say, and do?

SAY: Your may want to note the answers on page 14 in your workbook.

SHOW: Slide #12, We Remember...

We Remember...

20% of what we hear.
30% of what we see.
50% of what we see and hear.
70% of what we see, hear, and say.
90% of what we see, hear, say, and do.

C. Importance of Effective Communication

SAY: Complete the blanks in your workbook on page 15 as we discuss the importance of effective communication.

SHOW: Slide #13, Importance of Effective Communication

Importance of Effective Communication

- Communication is important to identify existing political issues in the district as they relate to school nutrition program finances
Communication is important to identify existing political issues in the district as they relate to school nutrition program finances.

SAY: It is so critical that former President Gerald Ford said, “Nothing is more important than the ability to communicate effectively.”

D. Stakeholders in the School Nutrition Program

ASK: What do we mean when we use the term “stakeholders” in the school nutrition program? (Allow one or two participants to respond.)

SHOW: Slide #14, Stakeholders in the School Nutrition Program

SAY: Fill in the blank with any that are missing from your list on page 15.

Stakeholders are individuals with an interest in the success of the school nutrition program such as district administrators, school board members, school business officials, principals, teachers, cafeteria managers, foodservice employees, students, parents, and the community.
### E: Stakeholder Activity

**Activity:** Stakeholder Communication  
**Time Allowed:** 15 minutes

**SAY:** We have been talking about communication with various stakeholders. Let’s look at some of the specific financial management information that is communicated both to and from school nutrition program stakeholders. I am assigning each table the name of one of the stakeholders we identified.

**Instructor’s Note:** Use the list of stakeholders on slide #14 to make assignments. If there are not enough stakeholders to assign to a table, the same stakeholder can be assigned to more than one table. Be sure participants understand they are to identify 3 types of communication from the SN director to a stakeholder, and then also identify 3 types of communication back to the SN director from the stakeholder.

**SAY:** Participants at each table should work together to identify three specific financial communications that are sent from the school nutrition director to the assigned stakeholder and three that are transmitted from the stakeholder to the school nutrition director. The tallest person at each table will record their results on the flip chart paper provided, post the list on available wall space, and present their table’s results to the entire group.

**FEEDBACK:** Answers may include the following:

**From School Board and Superintendents to School Nutrition Director**

- Financial goals
- Board goals
- District goals
- Policies on price increases
From School Nutrition Director to School Board and Superintendents

- Student satisfaction data
- Cost containment initiatives
- Monthly financial reports on operating expenses and budget variances
- Requests for price increases

From Principal to School Nutrition Director

- School activities that affect participation (field trips)
- Wellness activities
- Vending policies

From School Nutrition Director to Principal

- Information on free and reduced-price meal numbers
- Menu information
- Merchandising activities planned for the cafeteria

From Cafeteria Manager and Employees to School Nutrition Director

- Meal counts
- Food and supply orders
- Student acceptance of new menu items
- Inventory values

From School Nutrition Director to Cafeteria Managers and Employees

- Policies and procedures on financial issues (change, banking procedures, theft records)
- Price changes
- Budget for school
- Yearly projections of revenues and expenditures
From Students, Parents, and Community to School Nutrition Director

- Menu likes and dislikes
- Pricing
- Promotions

From School Nutrition Director to Students, Parents, and Community

- Menus
- Pricing
- Wellness initiatives
- Promotions

SAY: These are only a few examples of communication of financial information with stakeholders. Each day, everyone must practice effective communication to further the objectives of the school nutrition program. It is important that a team approach is fostered and that stakeholders view the school nutrition program director as a **Trusted Advisor**. The concept of the school nutrition director as **Trusted Advisor** captures the vision of the school nutrition director as a professional administrator, savvy business person, skilled content expert, and the nutrition expert. Stakeholders can rely on the **Trusted Advisor** to be a strategic planner, critical thinker, collaborator, articulate presenter, macro-manager, and confident leader.
Importance of Ethics

SHOW: Slide #15, Importance of Ethics

SAY: We all know the importance of conducting school nutrition business in a legal and ethical manner. Ethics should be the foundation of all financial management practices. Even small infractions can affect the integrity and reputation of the School Nutrition Program.

F. Definition of Ethics

ASK: What is your definition of ethics? (Pause to allow several participants to offer their ideas.)

FEEDBACK: Answers might include the following:

- Right and wrong
- Legal and illegal
- Following or breaking the law
- Rules that must be followed

SHOW: Slide #16, Definition of Ethics

Definition of Ethics

Webster defines ethics as...

Principles of right or good conduct
SAY: Ethics has many definitions.

Webster defines ethics as principles of right or good conduct.

Others suggest that if you question an action, you should not proceed. Make a note of this definition on page 15 in your workbook.

G: The 3 R’s of Ethics

Use the three R’s shown on the slide to provide a framework for ethical business behavior. You may want to take notes on page 16 in your workbook.

SHOW: Slide #17, Three R’s of Business Ethics

- **Respect** - Treat everyone in the school district with respect, dignity, and courtesy. This includes customers, school nutrition staff, administrators, teachers, parents, and support staff.

- **Responsibility** - We have a responsibility to our stakeholders and ourselves to provide high quality meals at an affordable price to the customer. The time and money to complete job responsibilities should reflect efficiency and appropriate behaviors.

- **Result** - Achieving positive outcomes for your program and students must be reached ethically. The methods used to achieve results are just as important as the results themselves.
**DO:** Handout#1 - Ethics

Allow 10 minutes for this activity.

**Instructor’s Note:** Remind participants that illegal and unethical activities are not always the same. A legal behavior may be considered unethical.

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**H. Ethics Activity**

**SAY:** Turn to page 17 in your workbook and read the brief scenarios. Decide if the example depicts an ethical, unethical, or an illegal behavior, then mark each as E (ethical), U (unethical), or I (illegal) in the space provided. Take 10 minutes to complete the activity. For the purposes of this activity, we will use the following definitions.

**Ethical:** In accordance with the accepted principles of right and wrong that govern the conduct of a profession.

**Illegal:** Prohibited by law.
Handout #1 - Ethics Answers

Directions: Rate each action using the following scale: E = ethical, U = unethical, I = illegal, BBP=bad business practice

Regulations and policies differ from state to state. It is important that you check with your state agency and comply with the regulations and policies of the state in which your program resides.

Please read the “Discussion of Answers” in the answer section of your workbook to clarify the responses appropriately.

<table>
<thead>
<tr>
<th>ACTION</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Intentionally over/understating financial data on state reports</td>
<td>I/U</td>
</tr>
<tr>
<td>2. Using the department copier for personal use</td>
<td>U</td>
</tr>
<tr>
<td>3. The same individual collects cash, reconciles cash receipts to sales, makes the bank deposit, and receives the deposit slip</td>
<td>E/BBP</td>
</tr>
<tr>
<td>4. Ignoring local school board, city, and/or county policies</td>
<td>U/I</td>
</tr>
<tr>
<td>5. You have used all your allowed personal days so you use your sick days as extra personal days (You have earned them.)</td>
<td>U/I</td>
</tr>
<tr>
<td>6. Claiming second lunches as reimbursable meals</td>
<td>I</td>
</tr>
<tr>
<td>7. Items, such as an I-pod, to be used for the benefit of the school nutrition program, accepted in place of a monetary rebate on a purchased product</td>
<td>E</td>
</tr>
<tr>
<td>8. Accepting a trip/vacation from a supplier</td>
<td>U/I</td>
</tr>
<tr>
<td>9. Giving a wedding present to the district superintendent</td>
<td>E</td>
</tr>
<tr>
<td>10. Accepting a loan of $100 from a foodservice employee</td>
<td>U</td>
</tr>
</tbody>
</table>

SAY: I would like one person from the table furthest back in the room to tell us the answer to the first question. Then they get to choose the person from the next table to answer the following question. Continue around the room until we have discussed all the scenarios.
Discussion of Answers

1. Intentionally over/understating financial data on state reports is a fraudulent activity and illegal.

2. Using the department copier for a personal use is unethical and, depending on the school district’s policy and the amount of copying, one might have to reimburse the district for this expense.

3. If only one person does the claim or the bank deposit, it may be ethical unless there is a specific regulation against such a practice, but it is an unwise or bad business practice. This allows employees to be tempted by dishonesty and may be against school district policy.

4. Ignoring local school board, city, and/or county policies is unethical and depending on the specific situation, might be illegal.

5. Using sick days for personal days when you have used up all your allowed personal days (You have earned them.) is unethical unless school district policy sanctions this use of sick days. If regulations specify that sick days can only be used for illnesses, then the practice is both illegal and unethical.

6. Claiming second lunches as reimbursable meals is illegal.

7. Choosing items, such as an I-pod to be used for the benefit of the school nutrition program, in place of a monetary rebate on a purchased product is ethical as long as the equipment is used for school nutrition program purposes such as a student prize associated with a promotion.

8. Accepting a trip/vacation from a supplier probably involves more than a $20 cost and is unethical. Some states have rules that disallow such activities.

9. Giving a wedding present to the district superintendent is a onetime occasion so even though this person may be the person who decides your raise, it’s ethical.

10. Accepting a loan of $100 from a foodservice employee is unwise and unethical. You conduct this person’s performance review and decide raises. You should not be beholden to your subordinates.

SAY: Throughout this segment of the course, we have discussed the importance of communication and ethics to the financial integrity of the school nutrition program. Both elements are important to all school nutrition employees and woven throughout all activities, but remember – it’s the school nutrition program director that is accountable for the financial integrity of the school nutrition program.
Chapter 3: Development of a Financial Management Information System

Objective 3: Know the basic financial recording and reporting processes and procedures for directing the operation of a school nutrition program.

Introduction to Topic

Show: Slide #18, Development of a Financial Management System

SAY: As a school nutrition director, you should know the basic financial recording and reporting processes and procedures for directing the operation of a school nutrition program. This is the objective of our third chapter as it relates to the development and use of a financial management information system. The basis for any financial management information system is a well defined set of reports that provides reliable and useful information about the school nutrition program. The value of financial reports to document accountability is directly related to how revenues and expenditures are classified.

A. Using Financial Information to Manage

SAY: Look on page 18 in your workbook as we discuss the importance of classifying revenue and expenditures in a financial management information system.

DO: Workbook Activity – Fill in the blanks

SAY: Fill in the blanks about a useful financial management system as we discuss the importance of classifying revenue and expenditures in a financial management information system.
SHOW: Slide #19, Financial Management Information System

A useful financial management information system

- provides a uniform and consistent financial reporting structure,
- provides meaningful and timely financial management information, and
- supports federal reporting requirements.

SHOW: Slide #20, Financial Management Information System (cont.)

A useful financial management system also

- adheres to generally accepted accounting principles (known as GAAP), and
- provides a basis for determining accountability.
B. Generally Accepted Accounting Principles (GAAP)

**SAY:** We should pause a moment to define what we mean by **Generally Accepted Accounting Principles** also known as **GAAP**. Fill in the missing words in the definition on page 18 in your workbook.

**SHOW:** Slide #21, Generally Accepted Accounting Principles

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**Definition**

- The term “generally accepted accounting principles” represents a uniform standard of guidelines for financial accounting established by the **Governmental Accounting Standards Board** which you may know as GASB.
- The principles are used in **school districts** for compliance with the Federal Department of Education requirements.

**SAY:** This means that all financial reports contain the same categories for comparison purposes at the local, state, and federal levels. In keeping with these accounting principles, the source and amounts of revenues are shown first in financial reports and followed by categories and amounts of expenditures.
C. NFSMI Financial Management Information System

SHOW: Slide #22, NFSMI Financial Management Information System

SAY: To assist school nutrition programs with the financial reporting requirements of GAAP, the National Food Service Management Institute developed and published the NFSMI Financial Management Information System. For purposes of this course, we will refer to the system as FMIS. While the FMIS model provides guidance for developing a district financial management system, school districts should consider adapting the model to each school in the district for better site evaluation.

Instructor’s Note: This document is provided to each participant as part of the seminar materials. It should be placed at participant tables before they arrive on the morning of the Financial Management session.

SHOW: Display a copy of the NFSMI Financial Management Information System as you present information on the publication.

SAY: NFSMI is providing one copy of the document for you as part of this seminar. If you want more copies you can download the document from the document library at www.nfsmi.org. During this lesson, we will look at several areas of specific information in the publication that can help you do a better job of managing the finances of the school nutrition operation. I encourage you to read the document
when you return to your school districts. **You may also want to use the publication to work with your business and accounting person to set up school nutrition program accounting categories and subcategories for revenue and expenditures. Use of the model will facilitate meaningful recordkeeping and provide guidelines for more detailed reports.**

**D. Classification of Revenue**

**SAY:** The source of revenue determines its classification. If you look in our list of key words starting on page 10 in your workbook, you will see that in school nutrition, revenue may be defined as income received in exchange for goods or services provided by the program.

**DO:** *NFSMI Financial Management Information System Activity*

**SAY:** The two major sources of revenue in most school districts are local sources in the form of student payment for meals and the sale of other food items and federal reimbursement payments. However, there are other sources.

**SAY:** Look on page 25 in the FMIS publication for a list of the sources most often used to classify revenue in school nutrition programs. You may want to make notes in the margin as we discuss the various classifications and sources of funds.

1. **Local Sources** – As you can see, student and adult meal sales, contract meal sales, other food sales, and interest on bank deposits are considered local sources. FMIS is a good place to identify new sources of revenue for your program by looking at the revenue classifications definitions. If you look on page 32 in the NFSMI publication, you see that revenue received from sources such as local grants or contributions are considered “Other Local” funds.

2. **State Sources** is defined on page 25 in the NFSMI publication as matching funds or state reimbursement provided from your state agency.

3. **Federal Sources** are reimbursement funds, donated USDA Foods, and federal grants.
4. **Miscellaneous Sources** include the sale of surplus equipment and rebates on food purchased in the prior year. If a rebate is received during the year in which the food is purchased, it is recorded as a reduction to food expenditures.

5. **Fund Transfer-In** are funds transferred to the school nutrition program from other school funds.

**SAY:** FMIS helps identify where to place revenue or expenditures so that it is the same every time and year after year. This allows financial reports to be consistent and comparable.

### E. Worksheet Activity on Classification of Revenue

**DO:** Handout #2

**SAY:** Turn to Handout #2 on page 20 in your workbook. Test your knowledge of revenue classification by completing the worksheet on classification of revenue. Match the descriptions of revenue received in column A with the revenue sources in column B. Work as a team with others at your table for about 3 minutes. *(Call time after 3 minutes or before if participants finish the exercise.)*

**Instructor's Note:** The answer sheet to all handout worksheets are inserted in the teaching portion of the Instructor’s Manual to assist the instructor. *(See Handout 2 answer sheet below.)* Answer sheets for participants are provided in the back section of the Participant’s Workbook.
Handout # 2 - Worksheet on Classification of Revenue

Answer Sheet

Match the revenue category described in Column A with the best matching source provided in Column B. Sources in Column B may be used more than one time.

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue Received</td>
<td>Revenue Source</td>
</tr>
<tr>
<td>Money earned on bank deposits and investments</td>
<td>A. Local</td>
</tr>
<tr>
<td>Monetary value of food donated to schools by USDA</td>
<td>B. State</td>
</tr>
<tr>
<td>Cash rebates from food companies received by the school nutrition program after the fiscal year has closed</td>
<td>C. Federal</td>
</tr>
<tr>
<td>Revenue received from students for the sale of a la carte food items</td>
<td>D. Miscellaneous</td>
</tr>
<tr>
<td>Grant money awarded to school districts who submit successful proposals for special projects such as Team Nutrition.*</td>
<td>E. Fund Transfer</td>
</tr>
<tr>
<td>Money received from the sale of surplus equipment</td>
<td>A. Local</td>
</tr>
<tr>
<td>Revenues paid to school districts by the state for use in school nutrition programs</td>
<td>B. State</td>
</tr>
<tr>
<td>Cash payment received for free meals that meet federal standards and are served to eligible children</td>
<td>C. Federal</td>
</tr>
<tr>
<td>Revenue received from contract meals provided to the local YMCA</td>
<td>D. Miscellaneous</td>
</tr>
<tr>
<td>Funds transferred to the school nutrition program from the school district’s general fund</td>
<td>E. Fund Transfer</td>
</tr>
</tbody>
</table>

*Instructor Note: If participants ask about grant money from community or company sources, remind them that such grant money is considered a local source.

SAY: Let’s review the answers. (Quickly recap the revenue category and matching source from the worksheet shown above.)
SAY: In addition to the revenue classification categories, most school nutrition programs use subcategories to provide added detail about revenue sources. For example, Student Meal Sales is a subcategory of Local Revenue.

ASK: Can someone tell me what a subcategory of Student Sales might be? (Pause and allow 1 or 2 participants to volunteer)

FEEDBACK: Breakfast Sales, Lunch Sales, and Afterschool Snack Sales are examples.

ASK: Are there questions about any of the revenue classifications? (Pause and allow 1 or 2 questions.)

SAY: Remember the level of revenue received must be sufficient to ensure funds are available to meet obligations on a timely basis. Sufficient funds to cover costs are important to maintaining food quality and the nutrition integrity of meals served at school. The school nutrition program director must provide due diligence in effectively managing and maximizing revenue available to the school nutrition program.

F. Classification of Expenditures

DO: Activity – Name that Expenditure

SAY: As we begin our discussion about expenditures, remember that FMIS can help you identify where to record expenditures, so they are recorded the same year after year. Before we look at the classification of expenditures, I would like to ask that each one of you think about an expenditure that you have in your program. I will ask some of you to share that expenditure through an activity. I will start the activity by throwing this ball to one of you. If you are the lucky person, you will name the expenditure you are thinking about and then get to toss the ball to the next person. The only rule is that you can’t name an expenditure that someone else has already shared.

Instructor’s Note: Begin the activity by naming an expenditure and then throwing the ball. Allow a minute or two for the activity and then call time.

SAY: Turn to page 21 in your workbook and read along as we define the term expenditure as it relates to school nutrition programs.
Expenditures in the school nutrition program are those allowable costs that can be identified specifically with the production and service of meals to school children.

SHOW: Slide #23, Classification of Expenditures

<table>
<thead>
<tr>
<th>Classification of Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor</td>
</tr>
<tr>
<td>Employee Benefits</td>
</tr>
<tr>
<td>Purchased Professional and Technical Services</td>
</tr>
<tr>
<td>Food and USDA Foods</td>
</tr>
<tr>
<td>Supplies</td>
</tr>
<tr>
<td>Capital Equipment</td>
</tr>
<tr>
<td>Miscellaneous</td>
</tr>
<tr>
<td>Indirect Costs</td>
</tr>
<tr>
<td>Fund Transfer-Out</td>
</tr>
</tbody>
</table>

SAY: Expenditures should be classified into categories consistent with governmental financial reporting requirements. FMIS uses the governmental reporting classifications shown on the slide to categorized expenditures. Turn to page 41 in the financial management publication and highlight the various categories as we identify them.

Expenditures are classified as:

1. Labor (Salaries and wages)
2. Employee Benefits
3. Purchased Professional and Technical Services
4. Purchased Property Services (Operation, Maintenance, and Energy)
5. Purchased Food and Donated USDA Foods
6. Supplies (General and Food Production)
7. Capital Equipment
8. Miscellaneous Expenditures
9. Indirect Costs
10. Fund Transfer-Out
SAY: If you look at the Supply category, you see two types of supplies listed; general and food production. Sometimes it is desirable to identify food production and service supplies as a separate category because some states require separate identification of these for the purpose of establishing a cost allocation plan for indirect cost. Page 57 illustrates the items generally recognized as food production supplies.

SAY: It is important to mention that the Financial Accounting for Local and State School Systems handbook identifies an additional category of expenditures labeled as “Other Purchased Services.” This category was omitted from the FMIS model because it is generally reserved for a school district’s expenditures related to student transportation, tuition expenses, or for “expenditures for the operation of a local foodservice facility by other than employees of the school district.” Certainly, any school nutrition program that deems the category important can add it to their accounting system.

Example:

“Other Purchased Services” could be the funds paid by a school district to a Food Service Management Company (FSMC).

SAY: In addition to expenditure categories, many school districts add subcategories to get more detail in their financial reports. For example, labor may be divided according to central office staff, management, warehouse, student helpers, and many others. You can find examples of subcategories starting on page 43 in the FMIS document.
G. Expenditure Category Questions

**DO:** Team Activity

**SAY:** Review the expenditures on the slide and answer the two questions on page 21 in your workbook. Work together as a team and write your final answer. After you finish, we will ask you to share your answers. You have about 2 minutes for table discussion.

**Instructor’s Note:** Have participants number off at each table. Select a number (i.e. #3) and ask participants with that number at each table to report the group’s finding. Remind the groups to read the question and then share their answer. Get responses from several tables.

Q #1: If you are conducting a financial analysis of your program, which expenditure categories would you most likely look at first?

**Answer:** While there are no research-based standards in school nutrition programs for relating costs to revenue, past industry guidelines have suggested that approximately 80% of funds expended were for food and labor leaving about 20% for all other program costs. Later in the course, we will look at a new costs study by USDA that may suggest a change in these percentages.

Q #2: In a program analysis, which expenditure categories could be combined as “overhead expenses” for purposes of program analysis?

**Answer:** There are no right or wrong answers, however, categories such as purchased professional services, property services, other services, miscellaneous, and fund-transfer are usually considered overhead since individually they represent such a small percentage of total revenue.
H. Indirect Costs

SAY: The last expenditure category, indirect costs, is often combined with overhead expenditures in some school districts. Although indirect cost usually represents a small percentage of total revenue, the category should be analyzed separately because of the possible impact on the school nutrition program. School nutrition directors need to know exactly how paying indirect cost will affect the bottom line of their program. This helps the school nutrition director when discussing financial management decisions with the business manager and other school officials.

ASK: How many of you pay indirect costs? (Pause to allow participants to raise their hands.)

SAY: Some of you may be thinking, “What is indirect cost?” Turn to page 22 in your workbook and follow along as we review what we mean by the term “indirect cost.”

**Indirect cost** is the school nutrition program’s share of general school district costs incurred for joint purposes. A joint purpose cost refers to expenditures that are

- shared by the school nutrition program and the district, and
- are not readily assignable to the cost objective specifically benefited.

**Direct costs** can be specifically identified to the benefiting program with a particular cost objective, such as

- a grant, contract,
- project, functions, or
- activities.

**Indirect costs** are not readily identifiable, but are necessary to the general operation of the program. For example

- costs incurred in operating and maintaining building and equipment, and
- district administrative salaries.
SAY:

More information on indirect costs is provided in OMB Circular A-87. It can be accessed at www.whitehouse.gov/omb/rewrite/circulars/a087/a087-all.html

DO: Workbook Activity – Example of Indirect Costs

SAY: Write examples of costs you think can be considered as incurred for joint purposes on page 22 in your workbook. (Pause)

ASK: Who would like to share an example of indirect costs? (Allow 2 or 3 participants to share examples.)

FEEDBACK: Answers should include the following:

- space used for the program's meal services,
- utilities,
- grounds and landscaping, and
- certain categories of shared labor (janitorial, etc.) when it is not billed directly to the school nutrition program.
I. Key Points to Remember

SAY: There are three key points about indirect costs that you need to remember as a school nutrition director. Follow along as I review these important facts listed on page 23 in your workbook.

1. Costs that are charged to the school nutrition program as indirect costs cannot also be charged as direct costs. For example, the district cannot place an electric meter on the school cafeteria and have the nutrition program pay the metered bill and continue to charge full indirect cost.

2. Districts may or may not charge the school nutrition program any indirect costs. Districts also have the option of charging only a portion of the indirect costs generated by the program.

3. School nutrition directors should check with their state agencies for more information regarding
   • examples of costs that are considered indirect, and
   • how indirect costs are calculated.
Objective 4: Know how to use financial reports that are consistent with federal and state guidelines to achieve a financial management system that supports a cost effective program with high integrity.

Introduction to Topic

Show: Slide #24, Financial Reporting Revenue and Expenditure Transactions

SAY: Our objective for this chapter is that you will know how to use financial reports that are consistent with federal and state guidelines to achieve a financial management system that supports a cost effective program with high integrity. To achieve this, all transactions in the revenue and expenditure accounts must be presented using a financial management information system that provides a variety of reporting formats and level of financial detail that can be used for program analysis and evaluation. Although the levels of detail may vary from school district to school district, it is absolutely vital that school nutrition programs produce accurate and timely financial reports that adhere to governmental guidelines.

A. Three Types of Financial Reports Used in School Nutrition Programs

DO: Workbook Activity – List Financial Reports

SAY: Turn to page 24 in your workbook and list the three financial reports most often used in school nutrition programs as we view the slide.
SHOW: Slide #25, Types of Financial Reports

SAY: There are three categories of financial reports found in a financial management information system that can be used to measure the school nutrition program’s financial performance. They are

- Statement of Revenue and Expenditures (Net Gain/Loss Statement)
- Statement of Net Assets (Balance Sheet). Note: Under guidelines issued by Governmental Accounting Standards Board, the Balance Sheet is now referred to as Statement of Net Assets.
- Budget

B. Statement of Revenues and Expenditures

DO: Workbook Activity – Fill in the blanks

SAY: Today we are going to first look at a Statement of Revenues and Expenditures. Follow along in your workbook and complete the blanks on page 24 as we review the types of information found on the Statement of Revenue and Expenditures.

Instructor’s Note: The underlined words in the following definitions are blank in the Participant’s Workbook.
SHOW: Slide #26, Statement of Revenue and Expenditures

SAY: The Statement of Revenue and Expenditures is the financial statement most often used by school nutrition program directors to analyze whether the expenses of the operation are being managed within the revenues received. The Statement of Revenue and Expenditures is important because it provides four major elements of financial information to the director.

The four elements of the Statement of Revenue and Expenditures are -

- total revenue available to the program by source,
- total expenditures by category,
- net gain/loss to the program for the period of the statement, and
- comparison of current month with previous month’s financial information and year-to-date information.

SAY: Whether this report can be generated by the school nutrition department varies among school districts. In many school districts, it is generated by the school business office. In these cases, it is extremely important for the nutrition program director to foster a positive working relationship with the business manager in order to get the report in a timely manner.
C. Sample Statement of Revenue and Expenditures

SAY: Turn to page 25 in your workbook as we review the sample Statement of Revenue and Expenditures on Handout #3. This financial statement provides the user with the total revenue and total expenditures for a given period, usually a month or year-end total. The statement provides financial information for the current period, previous period, and year-to-date. Some districts may add columns that show percent of change from month to month.

DO: Handout #3
### Handout #3 - Example
### Statement of Revenue and Expenditures

School Nutrition Program Ending November (Year)

*Note: Assume 4 months data shown on this statement*

<table>
<thead>
<tr>
<th>Revenue Source</th>
<th>Current Month</th>
<th>Previous Month</th>
<th>YTD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Sources</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Meal Sales</td>
<td>$ 24,978</td>
<td>$ 23,025</td>
<td>$ 96,150</td>
</tr>
<tr>
<td>Adult Meal Sales</td>
<td>2,376</td>
<td>2,175</td>
<td>9,102</td>
</tr>
<tr>
<td>Other Food Sales</td>
<td>11,326</td>
<td>10,785</td>
<td>44,222</td>
</tr>
<tr>
<td>Contract Meals</td>
<td>1,575</td>
<td>1,560</td>
<td>6,250</td>
</tr>
<tr>
<td>Interest</td>
<td>260</td>
<td>255</td>
<td>1,030</td>
</tr>
<tr>
<td>State Sources</td>
<td>18,831</td>
<td>0</td>
<td>18,831</td>
</tr>
<tr>
<td>Federal Sources (includes USDA Foods value)</td>
<td>186,639</td>
<td>182,220</td>
<td>737,718</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>0</td>
<td>8,010</td>
<td>8,010</td>
</tr>
<tr>
<td>Fund Transfer-In</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td><strong>$ 245,985</strong></td>
<td><strong>$ 228,030</strong></td>
<td><strong>$ 921,313</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expenditures</th>
<th>Current Month</th>
<th>Previous Month</th>
<th>YTD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries and Wages</td>
<td>$ 65,875</td>
<td>$ 63,900</td>
<td>$ 259,550</td>
</tr>
<tr>
<td>Employee Benefits</td>
<td>28,975</td>
<td>25,364</td>
<td>108,678</td>
</tr>
<tr>
<td>Purchased Services</td>
<td>375</td>
<td>326</td>
<td>1,402</td>
</tr>
<tr>
<td>Property Services</td>
<td>305</td>
<td>280</td>
<td>1,170</td>
</tr>
<tr>
<td>Purchased Food/Donated USDA Foods</td>
<td>96,190</td>
<td>90,183</td>
<td>372,746</td>
</tr>
<tr>
<td>Supplies</td>
<td>24,750</td>
<td>21,360</td>
<td>92,220</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>625</td>
<td>0</td>
<td>950</td>
</tr>
<tr>
<td>Capital Equipment</td>
<td>0</td>
<td>55,000</td>
<td>70,000</td>
</tr>
<tr>
<td>Indirect Costs</td>
<td>5,835</td>
<td>5,830</td>
<td>23,330</td>
</tr>
<tr>
<td>Fund Transfer-Out</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Expenditures</strong></td>
<td><strong>222,930</strong></td>
<td><strong>262,243</strong></td>
<td><strong>930,046</strong></td>
</tr>
<tr>
<td><strong>Net Excess/Deficit</strong></td>
<td><strong>$ 23,055</strong></td>
<td><strong>($ 34,213)</strong></td>
<td><strong>($ 8,733)</strong></td>
</tr>
</tbody>
</table>

**Notes:**

1. School Nutrition Program directors should modify the Statement of Revenues and Expenditures to meet the local and state requirements.
2. The dollar amounts shown in this statement are for a hypothetical school district and are illustrative only. They are not tied to any other activity in this lesson.
SAY: Look at the examples in this handout and compare the total revenues, total expenditures, and change in net assets for the current month, previous month, and year-to-date. If you compare the current month’s revenue of $245,985 with the previous month’s revenue of $228,030, you see the district received almost $18,000 more revenue during the current month than in the previous month.

ASK: Can you identify the most likely source of the increased revenue by comparing the current and previous month’s individual sources? (Pause for participants to look at the revenue sources. Allow 1 or 2 participants to respond.)

FEEDBACK: Answers should include a response that the district received over $18,000 from State Sources during the current month but received $0 the previous month.

SAY: Now look at expenditures. Notice that in the previous month, there was a deficit of $34,213.

ASK: Can you identify what may have contributed to this deficit by looking at individual categories of expenditures? (Give several participants an opportunity to volunteer answers.)

FEEDBACK: Answers should include the observation that there was an expenditure of $55,000 for Capital Equipment in the previous month as compared to $0 in the current month.

ASK: Do these categories of revenues and expenditures reflect the ones used in your district?

Instructor’s Note: Allow participants to respond voluntarily. If participants want to make comments or ask questions, allow 2 or 3 minutes for discussion.

SAY: Expenditure categories and subcategories can be tailored to a school district, but must remain constant from one accounting period to the next during the fiscal year for analysis purposes. It is also important to prepare revenue and expenditure reports for each individual school site to get an accurate picture of the school district’s financial status and to establish best practices for the school nutrition program.
D. Statement of Net Assets (Balance Sheet)

SAY: A second financial report, the Statement of Net Assets, previously called the Balance Sheet, is a financial statement prepared at the end of each accounting period to reflect the financial position of the school nutrition program at a particular point in time. The Statement of Net Assets includes information on assets, liabilities, and the fund balance.

DO: Workbook Activity – Matching Net Asset Terms to Definitions

SAY: Take a minute to match the components to definitions in your workbook on page 26. (Pause no more than one minute.)

SHOW: Slide #27, Statement of Net Assets (Balance Sheet)

SAY: Compare your answers with the slide as we review the components and their definitions.

- **Assets** include the cash balance, receivables due, and the value of inventories.
- **Liabilities** include outstanding payables, deferred revenue, and sales tax owed.
- The **Fund Balance** shows how much money is reserved for encumbrances and how much is available for expenditures.

DO: Handout #4

SAY: Turn to page 27 in your workbook and review the Statement of Net Assets on Handout #4. This statement reflects the financial position of the school nutrition operation at a particular point in time.
### E. Sample Statement of Net Assets (Balance Sheet)

Total Assets = Total Liabilities + Fund Balance

#### Handout #4 - Example Statement of Net Assets (Balance Sheet)

School Nutrition Program

<table>
<thead>
<tr>
<th>Assets</th>
<th>Ending</th>
<th>Month or Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and Cash Equivalents</td>
<td>$ 205,230</td>
<td></td>
</tr>
<tr>
<td>Sales Tax Collection</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Investments</td>
<td>10,225</td>
<td></td>
</tr>
<tr>
<td>Due from Federal Funds</td>
<td>185,365</td>
<td></td>
</tr>
<tr>
<td>Due from State Funds</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Due from Other Funds</td>
<td>1,525</td>
<td></td>
</tr>
<tr>
<td>Other Receivables</td>
<td>260</td>
<td></td>
</tr>
<tr>
<td><strong>Total Current Assets</strong></td>
<td>414,160</td>
<td></td>
</tr>
<tr>
<td><strong>Inventories</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchased Food and USDA Foods</td>
<td>8,500</td>
<td></td>
</tr>
<tr>
<td>Supplies</td>
<td>3,055</td>
<td></td>
</tr>
<tr>
<td><strong>Total Current Assets</strong></td>
<td>414,160</td>
<td></td>
</tr>
<tr>
<td><strong>Noncurrent Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Furniture and Equipment</td>
<td>425,456</td>
<td></td>
</tr>
<tr>
<td>Less Accumulated Depreciation</td>
<td>(400,124)</td>
<td></td>
</tr>
<tr>
<td><strong>Total Noncurrent Assets</strong></td>
<td>25,332</td>
<td></td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td>$ 439,492</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current Liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts Payable</td>
<td>$ 172,695</td>
<td></td>
</tr>
<tr>
<td>Accrued Salaries</td>
<td>70,500</td>
<td></td>
</tr>
<tr>
<td>Accrued Payroll Deductions</td>
<td>19,050</td>
<td></td>
</tr>
<tr>
<td>Due to Other Funds</td>
<td>975</td>
<td></td>
</tr>
<tr>
<td>Deferred Revenue</td>
<td>2,225</td>
<td></td>
</tr>
<tr>
<td>Sales Tax Owed</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>Total Current Liabilities</strong></td>
<td>265,445</td>
<td></td>
</tr>
</tbody>
</table>
### Fund Balance

<table>
<thead>
<tr>
<th>Fund Balance</th>
<th>Ending</th>
<th>Month or Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invested in Capital Assets (minus depreciation)</td>
<td>25,332</td>
<td></td>
</tr>
<tr>
<td>Reserved for Encumbrances</td>
<td>24,670</td>
<td></td>
</tr>
<tr>
<td>Reserved for Inventory</td>
<td>11,555</td>
<td></td>
</tr>
<tr>
<td>Unreserved/Undesignated Funds</td>
<td>112,490</td>
<td></td>
</tr>
<tr>
<td><strong>Total Fund Balance</strong></td>
<td><strong>174,047</strong></td>
<td></td>
</tr>
</tbody>
</table>

#### Total Liabilities and Fund Balance

| Total Liabilities and Fund Balance | $ 439,492 |

**Note:** The dollar amounts shown in this statement are for a hypothetical school district and are illustrative only. They are not tied to any other activity in this lesson.

**SAY:** As you review the Statement of Net Assets, you will note that Total Assets is equal to Total Liabilities plus Fund Balance. Notice in the handout that the total Fund Balance is $174,047 and the unreserved/undesignated fund makes up $112,490 of the total fund balance.

**F. Fund Balance**

**SAY:** The Fund Balance consists of several line items:

- “Invested in Capital Assets (minus depreciation) is from “Noncurrent Assets” under “Assets”
- “Reserved for Encumbrances” are amounts a School Nutrition Director has set aside for contract obligations, purchase orders, etc.
- “Reserved for Inventory” is taken from the ‘Inventories’ category under “Assets”
- The “Unreserved/Undesignated Funds” category is the amount available to spend in school nutrition programs.

**ASK:** Who can tell me how the “Unreserved/Undesignated Funds” line item is calculated? *(Allow one or two participants to respond.)*
**FEEDBACK:** Look on page 28 in your workbook to review the formula.

Total Fund Balance

- Minus “Invested in Capital Assets”
- Minus “Reserved for Encumbrances”
- Minus “Reserved for Inventory”

= “Unreserved/Undesignated Funds”

**DO:** Table/Group Assignment – Importance of Fund Balance

**SAY:** The Fund Balance is important to the school nutrition director as a tool for program management. Work as a team at each table to list three reasons why the Fund Balance is important information. Write your ideas on page 28 in the Participant’s Workbook. *(Allow 2 minutes for team discussion.)*

**SAY:** Will the person with the birthday nearest the current date share team results? Write key points omitted from your list in your workbook.

**FEEDBACK:** Bring up the following key points if they are not mentioned by participants. The school nutrition director can use the Fund Balance reported on the Statement of Net Assets to

- verify how much of the fund balance is reserved for encumbrances,
- determine how much of the fund balance is in inventory value,
- determine how much money is unreserved/undesignated and therefore available for expenditures, and
- gauge how the program is performing financially.
SAY:

- A drop in fund balance over a period of time may be a red flag to examine the amount of spending in each of the specific categories of expenditures.
- A significant increase in funds may be an indication that the nutrition program is not spending funds for program improvements in areas such as food quality.

G. School Nutrition Program Budget

SAY: A third financial report we will discuss that is important for effective management is the budget. Although the budget is being discussed here as a financial report, it is a beginning and ending statement generally prepared prior to the budget year. The budget should be a cooperative effort of the school nutrition department and the business office with input from site level managers.

ASK: Why should the budget be a cooperative effort? (Allow 1 or 2 volunteers to answer.)

FEEDBACK: Look on page 29 as we review the importance of the budget being a cooperative effort.

1. Business office officials can provide guidance in accounting and business functions. Budgets should be based on accurate financial information that can often be provided by the business office.

2. Site level managers can provide information concerning participation trends, changes in student eating habits, equipment and labor needs, and other factors that influence the budget process.

ASK: If you are actively involved in the budget process, please raise your hands. (Make a mental note of the percent of participants who indicate they are involved in budgeting.)

FEEDBACK: I see that approximately ____ percent of you either prepare the budget or help with the process. Those of you who are not involved might want to arrange for a discussion with your immediate supervisor about the budgeting process when you return to your district.
H. The Budget as a Control Document

SAY: The budget is used by the school nutrition program as a control document that charts the course for future financial management actions.

SHOW: Slide #28, The Budget as a Management Tool

DO: Workbook activity – Fill in the blanks

SAY: Fill in the blanks on page 29 of your workbook as we discuss how the budget can be used to assist in managing the operational aspects of the school nutrition program by

- forecasting the amount of revenue that will be available,
- identifying how the revenue will be allocated for expenditures, and
- predicting how much money will be in the fund balance at year’s end.

SAY: Probably no other financial management tool contributes more directly to both the financial and nutritional integrity of a school nutrition program than a well-planned budget.

ASK: Although most of us probably understand the importance of budget planning to the financial integrity of school nutrition programs, can any of you tell us ways the budget contributes to nutritional integrity? (Allow approximately 3 participants to volunteer answers.) You may want to write some of the answers on page 29 in your workbook.
FEEDBACK: Summarize all answers provided. Make the following points if omitted by participants.

- Wellness policy implementation such as offering more fresh fruits and vegetables should be given high priority during budget planning.
- Good financial management is essential to the school nutrition program having the resources to offer nutritious meals that emphasize student wellness.
- Budget planners may need to consider menu analysis software to ensure menus meet nutritional standards. This could mean a significant investment of dollars.

I. Methods of Budgeting

DO: Workbook Activity: Matching

SAY: There are three methods used when planning budgets. They are defined on page 30 in your workbook. Complete the exercise by matching each budget method to its definition as we discuss budget considerations. (Allow one minute or less.)

SHOW: Slide #29, Methods of Budgeting

Methods of Budgeting

1. **Incremental** (baseline) – Previous year’s budget is starting point. Adjustments made to each line item to reflect expected changes.
2. **Zero** – Start with zero for each line item and build according to expectations.
3. **Combination** – Uses zero for some items and incremental for other items.
SAY: The budget methods are

1. **Incremental (baseline) budgeting** – The starting point is the previous year’s budget. Adjustments are made to each line item to reflect expected changes in revenues and expenditures. Incremental budgeting is less time consuming, but less planning may go into the budgeting process.

2. **Zero-budgeting** – The basic concept for zero-based budgeting is to start with zero and build the budget for each line item. It requires that the operation take a fresh look at each revenue and expenditure. It is especially helpful when budgeting for new programs such as afterschool care sites or new school sites. The disadvantages to Zero-based budgeting are that it is time consuming and some budget categories are best estimated based on the previous budget.

3. **Combination of Incremental and Zero** – A combination that uses zero-based for some items and incremental for other items. This method is most often used in school nutrition programs.

ASK: Will someone give me an example of revenue that might be budgeted using the zero-based method? (Allow one or two participants to respond.)

**Instructor Note:** Keep this discussion brief – the main purpose is to remind participants that some items such as company rebates or the purchase of equipment should not be based on the previous year’s revenue or expenditures. Instead, the revenue or expenditure should be based on expectations or need during the coming year.

**FEEDBACK:** Answers could include the following:

Revenues that might be budgeted using the zero-based method are

- Revenue associated with opening a new school in the district or adding a new service such as afterschool snacks
- Revenue generated by student meals (Use participation averages multiplied by new reimbursement rates.)
- State sources when state provides an annual one time lump set based on a predetermined criteria
**ASK:** What categories of expenditures might best be budgeted using a zero-based method? *(Allow one or two participants to respond.)*

**FEEDBACK:** Expenditures that might be budgeted using the zero-based method are

- Expenses associated with opening a new school in the district or adding a new service such as afterschool snacks,
- capital equipment, and
- indirect cost if the school board prefers to charge a set amount which is less than the full amount generated.

**SAY:** Since the budget process often varies from school district to school district and state to state, it is important to remember that circumstances often dictate which revenues and expenditures are budgeted using the zero-based method. For example, calculations for state funding may differ among state agencies, and in some cases it may be a percent increase over the previous year.

**J. Budgets are Public Documents**

**SAY:** Look on page 30 in your workbook for an important statement to remember about your budget. The statement reads:

> School budgets are considered public documents that represent plans for the use of public funds and should reflect accountability in accordance with local, state, and federal laws.

**ASK:** Why is this important information for a school nutrition director to remember? *(Allow 1 or 2 participants to respond.)*
**SHOW:** Slide #30, School Budgets

**FEEDBACK:** The public has a right to see the school nutrition program budget because

- The school nutrition program is a nonprofit operation conducted principally for the benefit of children.

- The program is tax-supported; therefore, the public is viewed as the owner with the right to expect that the nutritional needs of children are met in the most cost-effective way.

- It is important to provide the public with documentation of accountability through the preparation and analysis of financial reports on a monthly basis.
Chapter 5: Setting a Meal Standard for Financial Management and Analysis

Objective 5: Know how to use financial management tools and standards to operate a financially and nutritionally accountable school nutrition program consistent with federal and state guidelines.

Introduction to Topic

SHOW: Slide #31, Setting a Meal Standard for Financial Management and Analysis

SAY: In this segment of our class, starting on page 31, we are going to explore ways financial management tools can be used by the director to operate an accountable program. Our objective for the chapter is to know how to use financial management tools and standards to operate a financially and nutritionally accountable school nutrition program consistent with federal and state guidelines.

A. Standard Unit of Measurement

SAY: In order to use financial statements and reports as tools to evaluate the financial activities of the school nutrition program, a standard must first be established to measure program services.

ASK: Can someone tell me what unit of measurement is used to gauge the effectiveness and efficiency of the school nutrition program operation? (Allow one or two participants to respond.)
FEEDBACK:

In most school districts, the **production of the reimbursable student lunch** is the measurement used to evaluate efficiency of the school nutrition program.

SAY: This means that all other reimbursable meal types as well as nonreimbursable food sales must be converted to a unit of production equivalent to a reimbursable student lunch.

B. Performance Measures

**DO:** Workbook Activity – List Performance Measures

SAY: There are several important financial performance measures that can be determined with meal equivalents. List the performance measures on page 31 in your workbook as we review the next slide.

**SHOW:** Slide #32, Using Meal Equivalents in Program Analysis to Measure Performance

---

Using Meal Equivalents in Program Analysis to Measure Performance

By converting food sales to meal equivalents, the school nutrition director can determine

- meal cost,
- labor productivity ratios, and
- the average revenue earned per meal/meal equivalent.

---

SAY: By converting food sales to meal equivalents, the school nutrition director can determine such performance measures as

- a per meal cost,
- labor productivity ratios or meal per labor hour, and
- the average revenue earned per meal/meal equivalent.
C. Meal Equivalent Conversion Formulas

SAY: In order to convert meal sales to a unit of production, a meal equivalent formula must be adopted. The conversion formulas used in this course were developed by a national task force convened by the National Food Service Management Institute to determine the content and format for the NFSMI Financial Management Information System. A nationwide panel reviewed the formulas prior to publication. You can find them on pages 65 and 66 in the publication.

SAY: Look on page 31 in your workbook for a reminder that these conversion formulas are recommendations only.

The NFSMI formulas used for converting breakfasts, snacks, and other food sales to a student lunch are only recommendations. There are other formulas used in some states and school districts. You should check with your state before making a decision about meal equivalent conversions.

DO: Workbook Activity – Fill in the blanks

SAY: Fill in the missing information in the Conversion Formulas on page 32 in your workbook as we view the next slide.

SHOW: Slide #33, Meal Equivalents Conversion Formulas

---

<table>
<thead>
<tr>
<th>Meal Equivalent Conversion Formulas</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 1 lunch = 1 lunch</td>
</tr>
<tr>
<td>2. ( 3 \text{ breakfasts} = 2 \text{ lunches} \quad (2/3 = .67) )</td>
</tr>
<tr>
<td>3. ( 3 \text{ snacks} = 1 \text{ lunch} \quad (1/3 = .33) )</td>
</tr>
<tr>
<td>4. other food sales</td>
</tr>
</tbody>
</table>

(First row: Revenue from sales)
(Second row: Current free lunch reimbursement • Current USDA foods value per lunch)
SAY: The conversion formulas used in this lesson are

- 1 lunch = 1 lunch
- 3 breakfasts = 2 lunches (2 divided by 3 = .67)
- 3 snacks = 1 lunch (1 divided by 3 = .33)
- all other food sales = revenue from food sales ÷ (current free lunch reimbursement + current USDA Foods value/lunch)

SAY: Notice that in the breakfast and afterschool snack conversion formula we rounded to two decimal places. This is for your convenience only. You may carry the decimal to four places (.6666 or .3333) if you like. It will be more accurate when determining the number of exact meal equivalents; however, the difference in the final productivity or meal calculations will be minor. I suggest that if you use a spreadsheet, carry the calculations to four decimals. If not, round to two decimals. Just remember to be consistent.

SAY: The formula changes annually while other meal conversion formulas remain the same from year to year.

ASK: Who can tell me why it changes?

FEEDBACK: Both free reimbursement and USDA Foods values change each year to reflect new government rates.

Instructor’s Note: Leave the slide with the conversion formulas on the screen for the next exercise.

D. Converting Adult Meals to Meal Equivalents

SAY: It is important to recognize that not all states and school districts convert adult meals to meal equivalents using the same method. Look on page 32 for an important consideration when calculating adult meals.
Important Point

Although in most states, adult meals are counted with student meals when determining meal equivalents, in other states adult meals are considered “other” food sales. Either consideration is acceptable for determining meal equivalents as long as the method stays consistent throughout the school year.

E. Meal Equivalent Conversion Examples

**DO:** Handout #5

**SAY:** Look at Handout #5, a worksheet on “Meal Equivalent Conversions,” on page 33 in the Participant's Workbook. Follow along with me as we review the school information at the top of the handout.

*Instructor’s Note:* Point out the number of reimbursable student and adult lunches, breakfast, snack, and amount of nonreimbursable food sales in Handout #5. Notice they are underlined for your convenience.
**Handout #5**  
Worksheet on Meal Equivalent Conversions

**Answer Sheet**

**Meal Equivalent Conversions – SAMPLE**

Participation data for the current school year

Maple School District served 699,314 reimbursable student lunches, 10,110 adult lunches, 309,485 reimbursable student breakfasts, and 29,873 reimbursable afterschool snacks during the past year. In addition, the school district received a total of $128,155 for the sale of nonreimbursable foods. Calculations for converting the participation data into meal equivalents are provided in the sample below.

<table>
<thead>
<tr>
<th>Meal Categories</th>
<th>Total meals/ Sales</th>
<th>Conversion Factor</th>
<th>Meal Equivalents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Lunch</td>
<td>699,314</td>
<td>1</td>
<td>699,314</td>
</tr>
<tr>
<td>Adult Lunch</td>
<td>10,110</td>
<td>1</td>
<td>10,110</td>
</tr>
<tr>
<td>Student Breakfast</td>
<td>309,485</td>
<td>.67</td>
<td>(309,485 x .67)</td>
</tr>
<tr>
<td>Snacks</td>
<td>29,873</td>
<td>.33</td>
<td>(29,873 x .33)</td>
</tr>
<tr>
<td>Nonreimbursable food sales</td>
<td>$ 128,155</td>
<td>*</td>
<td>($128,155/2.7775)</td>
</tr>
<tr>
<td>Total Meal Equivalents</td>
<td></td>
<td></td>
<td>972,777</td>
</tr>
</tbody>
</table>

*Food Sales divided by Free Lunch Reimbursement ($2.57) + USDA Foods Value per Lunch ($0.2075). Note these are the 2008-2009 reimbursement rates.

**Review:** Using the formulas provided in this lesson, answer the following questions:

1. If an elementary school served 485 breakfasts one morning, how many breakfast meal equivalents were served?
   
   \[485 \times .67 = 325\] meal equivalents

2. A school nutrition program served 168 reimbursable snacks for the day in the district’s afterschool care program. Convert the afterschool snacks to meal equivalents.
   
   \[168 \times .33 = 55\] meal equivalents

3. A high school nutrition program sold $250 in extra menu items for the day. Convert the revenue from the food sales to meal equivalents using the formula above.
   
   \[\$250.00 \div 2.7775 (2.57 + 0.2075) = 90\] meal equivalents

**Instructor’s Note:** The shaded areas on the answer sheet represent the answers that must be completed by participants.
SAY: Now let’s review the sample calculations shown in the handout used for converting meals/meal sales to meal equivalents.

1. Both student and adult lunches were converted using one standard lunch equals one meal equivalent.

2. Breakfasts were converted by multiplying the total number of breakfast served by .67 (.6666 rounded), a factor determined by dividing two lunches by three breakfasts.

3. Snacks were converted by multiplying the total number of snacks served by 0.33 (.3333 rounded).

4. Extra food sales were converted to meal equivalents by dividing the $128,155 in revenue by the free lunch reimbursement of $2.57 plus the $0.2075 USDA Foods value or $2.7775.

ASK: Are there questions about the conversion formulas? (Pause and allow one or two questions.) If there are no questions, use the conversion formulas shown in the sample as a guide to answer questions 1-3 on Handout #5. Work together as a team for about 5 minutes. (Allow no more than 5 minutes, less if it appears participants have finished.)

ASK: Will someone at Table ___ tell us your answer to question 1? (Continue with another table for questions 2 and 3.)

FEEDBACK: Revisit the activity by reminding participants of the following:

- The meal equivalent is a unit of measurement used by school nutrition directors to determine labor productivity and the costs of producing meals.

- Consistency is the main factor. If a meal equivalent formula is changed, it should be in the beginning of a school year and remain in practice for several years for comparison purposes.
Chapter 6: Managing Revenue in School Nutrition Programs

Objective 6: Know how to analyze, interpret, and use revenue data for program evaluation and improvement.

Introduction to Topic

SHOW: Slide #34, Managing Revenue in School Nutrition Programs

SAY: In our next chapter we are going to look at managing revenue. Our objective is to learn how analyzing and interpreting information about revenue generation can be used for program improvement. The management of the school nutrition program’s revenue is crucial to its success in meeting the nutritional needs of children in the school district. Follow along in your workbook on page 34 as we discuss revenue management.

A. Revenue Management Accountability

SHOW: Slide #35, Revenue Accountability
SAY: USDA mandates that in the management of school nutrition programs, the school food authority must maintain a high level of accountability

- for all revenue received,
- how that revenue is dispersed, and
- to insure revenue is sufficient to sustain a nutrition program that serves food high in quality and nutritional value.

ASK: What do we mean by accountability? (*Allow one or two participants to volunteer answer.*)

FEEDBACK: In the list of key terms starting on page 10 in your workbook, accountability is defined as the responsibility to deliver what is expected and willingness to bear the consequences for failure to perform as expected.

DO: Workbook Activity – Fill in the blanks

SAY: Remember, good financial management decisions begin with inquiry and analysis. There are several ways to analyze the revenues generated by the school nutrition programs. Turn to page 34 in your workbook and fill in the blanks as we identify ways to analyze revenue.

SHOW: Slide #36, Revenue Analysis

```
Revenue Analysis

☐ Calculate average revenue per meal or meal equivalent
☐ Establish consistent guidelines for pricing meals and other food items for sale
☐ Compare revenue generated per meal with costs per meal
```
Managing and analyzing revenue include:

- calculating the average revenue generated per meal or **meal equivalent**, 
- establishing consistent guidelines for **pricing** meals and nonreimbursable food items, and 
- **comparing** revenue generated per meal with costs per meal or meal equivalent.

### B. Revenue Generation per Meal/Meal Equivalent

**ASK:** Why is it important to calculate revenue per meal? (*Allow one or two participants to respond.*)

**DO:** Workbook Activity: Fill in the blanks

**SAY:** Fill in the blanks in your workbook on page 35 as we look at the slide.

**SHOW:** Slide #37, Why it’s important to compare revenue earned with meal cost

**SAY:** If you know the average revenue generated per meal or meal equivalent, you can compare that with the average cost to produce a meal. This comparison is important because:

- it helps determine if and where revenue needs to be **increased**, 
- it allows analysis of revenue by **source**, and 
- it allows the director to better identify areas in which revenue should be monitored for revenue **loss**.
C. Calculating Revenue per Meal Equivalent

**DO:** Handout #6

**SAY:** Turn to Handout #6 on page 36 in your workbook. In this activity you are going to calculate the average revenue per meal equivalent by dividing the dollar amount received from each source by the total meal equivalents. This activity can be streamlined by using the repetitive divisor method outlined in Calculator Tips on page 37 of your Participant’s Workbook. Review this before you begin your calculations.

**Calculator Tips**

Time saving tip when using a repetitive multiplier or a repetitive divisor when using a Calculator (repetitive multipliers or divisors are retained in memory automatically by default):

**Repetitive Multiplier**

Enter your multiplier first

- Followed by the “X” sign
- Followed by the number you want to multiply
- Hit “=” sign for answer
- Enter the second number you want to multiply
- Hit “=” sign for answer
- Etc.

**Example with repetitive multiplier “5”**

5 X 9 = 45

6 = {30}

8 = {40}

**Repetitive Divisor**

Enter the number you want to divide

- Followed by the division sign, ÷ or /
- Followed by your divisor
- Hit “=” sign for answer
- Enter the second number you want to divide
- Hit “=” sign for answer
- Etc.

**Example with repetitive divisor “200”**

20 ÷ 200 = .10

40 = {.20}

100 = {.50}
ASK: Can someone tell me the number of meal equivalents served in 2008-2009?
(Pause, then repeat the answer – 972,777 - second paragraph on Handout 6.)

SAY: Before you begin the worksheet, follow along as we review the instructions. Look at the example in the first line under revenue.

1. Note that the dollar amount received for student meal sales was $281,832. Divide that by the 972,777 meal equivalents served during the school year and you can see that the average revenue earned per meal equivalent was $0.2897 or about $0.29 per meal/meal equivalent.

2. Work as a team to make all calculations in the blank cells.

3. After you complete the calculations, check your answers by adding the average revenue per meal equivalent from all sources and comparing them to the total provided in the worksheet.

4. You have about 5 or 6 minutes for the exercise. We will review the answers when you finish.

5. Feel free to ask questions as I move around the room to check your progress.
Calculating the projected average revenue earned per meal equivalent is important in the management of school nutrition programs. Complete the following activity to determine how much average revenue per meal equivalent is projected from each revenue source. Calculate the amount received from each revenue source four decimal places. If the 5th decimal place is 5 or higher, round UP; if 4 or less, round DOWN.

**Given:**
Formula – Revenue/Total Meal Equivalents

There were 972,777 meal equivalents served in 2008-2009

### Revenue Analysis

<table>
<thead>
<tr>
<th>Revenue Account</th>
<th>Dollar Amount Received</th>
<th>Average revenue per Meal Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Meal Sales</td>
<td>$ 281,832</td>
<td>$ 0.2897</td>
</tr>
<tr>
<td>Adult Meal Sales</td>
<td>25,275</td>
<td>0.0260</td>
</tr>
<tr>
<td>Other Food Sales</td>
<td>113,955</td>
<td>0.1171</td>
</tr>
<tr>
<td>Contract Food Sales</td>
<td>14,200</td>
<td>0.0146</td>
</tr>
<tr>
<td>Federal Reimbursement</td>
<td>1,883,524</td>
<td>1.9362</td>
</tr>
<tr>
<td>Donated USDA Foods</td>
<td>145,108</td>
<td>0.1492</td>
</tr>
<tr>
<td>State Supplement</td>
<td>18,835</td>
<td>0.0194</td>
</tr>
<tr>
<td>Interest</td>
<td>3,155</td>
<td>0.0032</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>5,800</td>
<td>0.0060</td>
</tr>
<tr>
<td>Total Revenue</td>
<td>$ 2,491,684</td>
<td>$ 2.5614</td>
</tr>
</tbody>
</table>

**Instructor’s Note:** The shaded areas on the answer sheet represent the blank cells that must be calculated by participants. Answers that are not shaded were provided to participants on the handout worksheet.
SAY: Calculating revenue per meal equivalent can provide important information. It can be compared to budgeted projections, to the previous month’s revenue per meal equivalent, and to previous year’s figures. Trends and directions for improvement can be identified so that better financial decisions are made.

SAY: Let’s review! Look at the amount of revenue generated from each student meal in the “paid” category and compare with the amount generated per meal by federal reimbursement for each meal served. The calculations on the worksheet indicate that the average revenue generated from paying students was between 28 and 29 cents per meal while the average revenue generated from federal reimbursement was approximately $1.94.

ASK: Will someone share your ideas on what this might suggest about the school nutrition program? (Allow no more than 2 or 3 participants to respond.)

FEEDBACK: Possible answers could include

1. There is a large free/reduced eligibility among students.
2. The participation rate among paying students may be low.
3. If the district is undercharging paying students, that could be a contributing factor.
4. There could be a large amount of meal charges not collected.

SAY: It is important to point out that the majority of revenue comes from a combination of free, reduced, and paid student meals in most school districts. Look on page 37 in your workbook for another important point to remember.

Point to Remember:

Because serving meals to students while they are at school is the foundation of the school nutrition program, it is our responsibility to provide quality and appealing meals that students want to purchase and consume. The reimbursable school meal continues to be the focus of sound financial management.
D. Setting Meal Prices

**SAY:** Several factors are important to remember during the process of setting prices for meals served to school children.

**DO:** Workbook Activity: True or False Survey

**SAY:** Turn to page 38 in your workbook and answer True or False to each of the five statements. (*Allow participants a couple of minutes to complete the activity and then go over the statements. Allow discussion as necessary to explain the answers.*)

### True or False Survey

#### True or False

1. To ensure the financial stability of the school nutrition department, the director must develop a sound method for setting meal prices. *(True)*

2. Establishing a reasonable price for meals classified as “free” is essential to both student participation and program accountability. *(False) The word free should be “paid.”*

3. Setting prices for student and adult meals is generally a collaborative effort involving the school nutrition director, superintendent, and the school board. *(True)*

4. It is important to remember that in accordance with the federal regulations, reimbursable meals served in school nutrition programs must be priced as individual components. *(False) Reimbursable meals must be priced as a unit.*

5. The meal price should, as a rule, cover previous year costs for meals served less federal reimbursement and the value of USDA entitlement Foods. *(False) The word previous should be replaced with current.*
Establishing a reasonable price for meals is essential to both student participation and program accountability. The meal price should cover current costs for meals served, less federal reimbursement, and the value of entitlement USDA Foods.

**Do:** Workbook Activity: Fill in the blanks

**Show:** Slide #38, Setting Meal Prices

**Formula:**

Average Projected Lunch Cost minus Section 4 Reimbursement minus USDA Foods Value = Base Price

**Example:** $2.56 minus $0.24 minus $0.2075 = $2.1125

*The rates shown are for lunches served in the school year 2008-2009.

**Instructor’s Note:** As you read the formula on the slide, correspond the formula components with values provided under the formula.
SAY: Three points to remember when using the formula to set meal prices are:

1. USDA Foods value and reimbursement amounts will change each year.
2. The actual USDA Foods value received may be more or less than the USDA Foods Value due to bonus USDA Foods or the option to refuse certain USDA Foods.
3. Participants should check with their state agencies regarding value of donated USDA Foods sent to their school district.

SAY: The projected average lunch cost will vary from district to district and year to year. Many school districts project meal costs for the new school year based on anticipated increases in food, labor, and other considerations and then use the formula to determine a base price for each meal served.

E. Section 4 and Section 11 Reimbursement

ASK: Before we continue our discussion of setting meal prices, is everyone familiar with what we mean by Section 4 reimbursement? (Allow a minute for comments.)

FEEDBACK: The definitions for both Section 4 and Section 11 funding provisions are provided on page 39 in your workbook and are from the book by Martin and Oakley, *Managing Child Nutrition Programs: Leadership for Excellence*, 2nd edition, published in 2008. You can read more about the funding provisions on page 164 in the book.

Definition:

“Section 4: General Cash for Food Assistance provides a basic cash reimbursement for all lunches served. Section 4 funds support the program infrastructure.

Section 11 provides additional cash reimbursement for lunches served to needy children. Reimbursement rates are established by Congress and adjusted annually for inflations.”
F: Consideration of State Funds when Pricing School Meals

SAY: As we return our thoughts to setting meal prices, please remember that the formula shown in this slide is used to determine the **base price** only and may or may not be the final price. The price may be higher due to a number of reasons or even lower on occasion. For example, notice the formula does not take into account state subsidy or matching funds. Whether or not state revenue should be considered when calculating the **base price** for school meals depends on circumstances and the decision of the local district management team.

SHOW: Slide #39, Considering State Funds When Setting Meal Price

<table>
<thead>
<tr>
<th>Considering State Funds When Setting Meal Prices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consider...</td>
</tr>
<tr>
<td>□ Is the state subsidy provided as</td>
</tr>
<tr>
<td>■ a guaranteed reimbursement per meal,</td>
</tr>
<tr>
<td>■ lump sum that is subject to annual change,</td>
</tr>
<tr>
<td>■ or/and</td>
</tr>
<tr>
<td>■ supplement funds to cover specific costs?</td>
</tr>
<tr>
<td>□ Is the school district nutrition program financially viable?</td>
</tr>
</tbody>
</table>

SAY: Look on page 40 in your workbook for a couple of examples of how the type of state subsidy might be a factor in setting meal prices.

**Examples:**

- If the school district is located in a state that provides a state-funded reimbursement for each meal served and the program is financially viable, then school district officials could justify a lower base price by subtracting the state meal reimbursement when setting meal prices.

- If the school district is in a state that provides matching funds in a lump sum or supplemental funds to cover specific costs such as labor, then it may be advantageous to the school nutrition program to omit the state reimbursement in the calculation and charge the higher price.
G. Main Focus of School Nutrition Program

**DO:** Workbook Activity – Main Focus of School Nutrition Program

**SAY:** Regardless of the pricing method used, keeping meal prices affordable is a priority in most school districts because the main focus of the school nutrition program is the same today as it was when the National School Lunch Act was signed into law in 1946. Look on page 40 in your workbook and see how many of the missing words in the statement you can identify regarding the focus of school nutrition programs.

*Instructor’s Note:* Pause about one minute before reading the statement from the slide. The underlined words in the statement are blank in the workbook.

**SHOW:** #40, Focus of School Nutrition Programs

![Focus of School Nutrition Programs](image)

**SAY:** Check your answers as I read the statement from the slide.

We should remember that the main focus of the school nutrition program is to provide **good nutrition** that promotes the **health** and **wellness** of students so they can be more **productive** in the classroom.

**SAY:** Providing a nutritious meal of exceptional quality at a reasonable price allows the school nutrition program to accomplish that goal.
H. Setting the Final Meal Price

**DO:** Handout #7

**SAY:** Turn to Handout #7 on page 41 in your workbook. This handout is a worksheet that can be used when setting meal prices. In this scenario, the average lunch costs $2.56 and the average breakfast costs $1.58. Section 4 Reimbursement is $0.24 per lunch and the value of USDA Foods provided per meal is $0.2075. Section 4 reimbursement for breakfast is $0.25.

**ASK:** Before we continue with the worksheet, can anyone tell me why do we not show a USDA Food value for breakfast? (*Allow one or two participants to volunteer an answer.*)

**SAY:** The value of donated USDA Food is based on the number of lunches served in the prior year. No donated USDA Foods are allocated for the breakfast program. However, USDA Foods are often used in the breakfast program.

**SAY:** Let’s return to the worksheet on setting meal prices.

1. Use the information provided and the formula for setting meal prices to calculate the base price for a student lunch, an adult lunch, a student breakfast, and an adult breakfast.

2. You may work as a team.

3. After you calculate the base price, decide on a possible final price. Be able to justify your final price.

4. When you finish the calculations, answer the four questions at the bottom of the worksheet. You have about 10 minutes.

**Instructor’s Note:** The base price and final price are both blank on the participant worksheet.
Handout #7
Worksheet on Setting Meal Prices

Answer Sheet

Maple School District established meal prices based on the average projected costs of the meal minus (-) Section 4 reimbursement minus (-) USDA Foods value. Prices are usually set with board approval at the end of July for the following school year.

Using the values given below, calculate the base meal prices for students and adults for both breakfast and lunch. Recommend and justify a final price to charge for student and adult meals.

Lunch: Projected meal cost is $2.56. The Section 4 base reimbursement rate for the coming year will be $0.24 per lunch and $0.2075 for USDA Foods.

Breakfast: The projected meal cost for breakfast is $1.58 and the Section 4 reimbursement is $0.25 for each breakfast served.

### Meal Prices

#### LUNCH

<table>
<thead>
<tr>
<th>Projected Average Meal Cost</th>
<th>-Section 4 Reimbursement</th>
<th>-USDA Foods Value</th>
<th>=Base Price</th>
<th>Possible Final Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student</td>
<td>$2.56</td>
<td>$0.24</td>
<td>$0.2075</td>
<td>$2.11</td>
</tr>
<tr>
<td>Adult</td>
<td>$2.56</td>
<td></td>
<td></td>
<td>$2.56</td>
</tr>
</tbody>
</table>

#### BREAKFAST

<table>
<thead>
<tr>
<th>Student</th>
<th>$1.58</th>
<th>$0.25</th>
<th>$1.33</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult</td>
<td>$1.58</td>
<td></td>
<td>$1.58</td>
</tr>
</tbody>
</table>

**Formula for Determining Projected Average Student Breakfast Cost**

Average projected student lunch cost ($2.56)  
Minus USDA Foods value ($0.2075)  
Multiplied by meal equivalent conversion formula for breakfast (.67)  
**Equals** Projected Average Student Breakfast Cost ($1.58)

1. When setting the final meal price, should considerations be given to whether a school is elementary or secondary? If so, why? *(shaded answers below)*

If the district offers more services or larger portion sizes, and students are willing to pay more, then reimbursable meals served at the secondary level could be priced higher.
2. What considerations should be given to rounding when setting meal prices?

*Prices should be set for ease in collecting payment and making change. For example, the final price could be rounded so the students and cashier handle as few coins as possible during the collection process. Rounded prices are also easier to track in the accounting system when shortages or overages occur.*

3. How would a significant increase in student participation (population increasing faster than normal due to new industry or annexation) impact the process of setting meal prices?

*School districts should consider the value of entitlement USDA Foods the school nutrition program is scheduled to receive. Donated USDA Foods are based on the previous year’s lunches served. Should there be a significant increase in student population, the USDA Foods value per plate will actually decrease. If the district nutrition program is operating on a marginal basis, then it might be necessary to consider raising the price of a student lunch.*

4. Why should a district consider setting adult prices higher than a break-even cost if the district anticipates an increase in operational costs due to large equipment purchases?

*If the school district anticipates an increase in operational costs due to large equipment purchases, then it may be prudent to set the adult meal price higher than break-even status. This prevents a sudden and substantial increase in adult prices if analysis indicates a significant increase in meal costs.*

**Instructor’s Note:** After all groups complete the worksheet, have participants number themselves at each table, i.e. 1 through 4 (or higher). Use the numbers to randomly select participants to answer the questions. Use a different number for each table.

**SAY:** (1) Will the person who is number ___ at table ___ give us possible final prices for a student lunch and an adult lunch. Tell us how your team determined the price.

(2) Will the person who is number ___ at table ___ tell us possible final prices for a student and adult breakfast and how your team determined the price?

**ASK:** Would any of the other teams like to share final prices that are different from these two teams? Remember to justify why your team chose the price. (*Allow all teams to volunteer answers.*)

**SAY:** Next we want you to share some of your answers to questions 1 – 4. First, read the question, and then give us your team answer.
Instructor's Note: Continue using the same number system to select participants to answer questions 1-4 on the worksheet. For example, “Will the person who is #____ at table ___ answer the first question?” (Hint: Vary the numbers.)

SAY: Regardless of how a school district arrives at a final meal price for the paying student, it is important that the customer perceives the price of a school meal as “value for the money.” Your district may wish to consider providing parents with a cost comparison of the school lunch with local fast food meals to emphasize both the nutritional and financial value of school meals to the students.

I. Pricing Nonreimbursable Food Items

SAY: In addition to setting prices for meals, school nutrition programs must set prices for all nonreimbursable food items. Food items that are sold in addition to the unit-priced reimbursable school meals are referred to as “other food sales” and cannot be claimed for reimbursement. Nonreimbursable food items sold by the school nutrition program during school hours must meet minimum nutrition standards set by federal, state, and local agencies. Examples of standards are on page 42 in your workbook.

- USDA Competitive Food Rule or any USDA guidance on extra food
- State agencies
- Local school district wellness policies

SAY: Pricing nonreimbursable food items should be taken very seriously.

The USDA School Lunch and Breakfast Cost Study found that the average school nutrition program in the study used revenues from reimbursable meals to offset the cost of producing a la carte and other nonreimbursable food items.

These study results are shown in the bar graph on page 43 in your workbook. Notice there are four horizontal bars that represent revenue to costs.
1. The first bar represents a *hypothetical* break-even ratio to provide you with a visual comparison.

2. The second bar indicates revenue from reimbursable lunches exceeded the reported costs of producing those meals by an average of 15 percent in the schools in the study.

3. By contrast, the third bar indicates revenue from reimbursable breakfasts fell short of covering costs by 4 percent, generating only enough revenue to cover 96 percent of costs.

4. According to the last bar, revenues from nonreimbursable sales generated revenue to cover only about 71 percent of the cost to produce the food items, falling short of covering costs by an average of 29 percent.
J. Types of Nonreimbursable Food Items

**DO:** Workbook Activity – List Types of Nonreimbursable Foods

**SAY:** There are generally four types of nonreimbursable foods that school nutrition programs elect to sell during the school day. Complete the blank for each type sale on page 44 in your workbook.

**SHOW:** Slide #41, Types of Nonreimbursable School Day Food Sales

<table>
<thead>
<tr>
<th>Types of Nonreimbursable School Day Food Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Adult</strong> meals</td>
</tr>
<tr>
<td>2. Sale of a <strong>second</strong> meal to a student</td>
</tr>
<tr>
<td>3. Individual <strong>components</strong> of the reimbursable meal such as milk</td>
</tr>
<tr>
<td>4. Other food items not on the <strong>menu</strong> (a la carte)</td>
</tr>
</tbody>
</table>

**SAY:** These food sales include

- **adult** meals,
- sale of a **second** meal to a student,
- individual **components** of the reimbursable meal (i.e., milk), and
- other food items not on the **menu** (a la carte).

**SAY:** School districts should carefully calculate the costs of selling nonreimbursable food items and set prices to cover all costs associated with storing, producing, and serving the product to students. The prices established for extra food and a la carte should be high enough so as not to compete with the reimbursable meal price.
K. Desired Food Cost Percent Mark-up

SAY: The desired food cost percent mark-up is one of the simplest methods used to determine the price of a nonreimbursable food item. This disadvantage of the method is that it only establishes a base selling price and may not reflect other considerations.

SHOW: Slide #42, Desired Food Cost Percent Mark-up

**Desired Food Cost Percent Mark-up**

- Steps to establish a base selling price
  1. Determine raw food costs.
  2. Identify the desired food-cost percentage for school nutrition program.
  3. Divide the food item raw cost by the desired food cost percent.

SAY: The three steps shown on this slide can be used to establish the base selling price using the desired food cost percent mark-up. Fill in the blanks on page 44 in your workbook as we review the slide.

1. Determine the **raw** food cost of the item offered for sale.
2. Identify the desired food-cost **percentage** for the school nutrition program operation.
3. To establish a base selling price, **divide** the item’s food cost by the desired food cost percent.

**Instructor’s Note:** Leave the slide on the screen for the next exercise.
**DO: Handout #8**

**SAY:** Look at Handout #8, a worksheet on pricing nonreimbursable food items using the Desired Food Cost Percent Markup, on page 45 in your workbook. The foods to be priced are listed in the first column and raw food costs are listed in the second column. The school district set a goal of 38% for a desirable food cost percentage (purchased food cost less USDA Foods) for the year.

1. Using the formula given on the handout, calculate the base selling price for each item.
2. Recommend a final selling price.
3. Justify the final selling price.
4. Take about 8 minutes. Work as a team with others at your table.

**Instructor’s Note:** Emphasize to participants that a 38% food cost percentage for the year is a goal set by the district and may not be the actual outcome.
**Handout #8**
**Worksheet for Pricing Nonreimbursable Food Items**

**Answer Sheet**

**Pricing Method: Desired Food Cost Percent Markup Method**

The formula for determining a base price using the desired food cost percent markup method is

\[
\text{Raw Food Cost} ÷ \text{Desired Food Cost Percent Markup}
\]

Reminder: Convert percent to decimal (i.e., \(38\% ÷ 100 = .38\)).

Using the formula, determine the base selling price for each of the following nonreimbursable food items offered for sale if the desirable food cost percentage for a school nutrition program is 38% for the school year.

**Calculation Example:** If raw food cost is $0.20 and desired food cost percentage is 38%: $0.20 ÷ .38 = 0.5263 or 0.53 base selling price.

Recommend as a final selling price and summarize how you arrived at the price.

<table>
<thead>
<tr>
<th>Food</th>
<th>Raw Food Cost</th>
<th>Base Selling Price</th>
<th>Final Selling Price</th>
<th>Justification for Final Selling Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bottled Water</td>
<td>$0.13</td>
<td>$0.3421</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pizza Slice</td>
<td>$0.45</td>
<td>$1.1842</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fresh Apple</td>
<td>$0.22</td>
<td>$0.5789</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ice Cream Cup</td>
<td>$0.19</td>
<td>$0.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baked Corn Chips</td>
<td>$0.16</td>
<td>$0.4210</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Shaded cells are blank in the Participant’s Workbook*

**Instructor’s Note:** Emphasize to participants that raw food costs and the selling price of food items can vary from district to district, region to region, or state to state, therefore directors should always calculate prices based on the raw food cost to their district. Do not rely on prices charged in other districts.
ASK: Will the person with the most experience in school nutrition at table ___ tell us your team’s base selling price and final selling price for the bottled water? Please justify the final selling price. (Continue around the room, asking each table to contribute a base and selling price for one food item.)

ASK: Can you think of any circumstances in which the school nutrition program might want to charge less for an extra food or a la carte item than it cost to purchase the item?

FEEDBACK: Look on page 45 in your workbook for the answer.

Many school districts are encouraging students to consume more fresh fruits and vegetables as part of the wellness policy. In this case, a school district could price extra food items such as the apple or other fresh fruits lower than the necessary mark-up because they want to encourage students to consume the food. However, it is important to remember that the loss would need to be covered by selling a popular item at a price higher than the base selling price in order to cover the loss.

SHOW: Hold up the NFSMI Financial Management Information System publication.

SAY: For more information on methods of pricing nonreimbursable food items, look on pages 73 and 74 in the NFSMI Financial Management Information System publication in your spare time or when you return home.

SAY: A second method that uses the overhead contribution with a desired profit percentage is provided and examples are easy to follow. Other methods may also be used and some states may provide guidelines for schools. The formulas provided in the publication are suggestions only.
L. Nonreimbursable Foods Sold Away from Campus or Outside School Day

**DO:** Workbook Activity – Example of other nonreimbursable food sales

**SAY:** In addition to nonreimbursable food sales at school, many districts provide food for special functions outside the school day or away from the school campus. Turn to page 46 in your workbook and write examples of nonreimbursable food sales that might occur off campus. (*Pause for no more than 30 seconds.*)

**SHOW:** Slide #43, Nonreimbursable Foods Sold Away from Campus or Outside School Day

**SAY:** Nonreimbursable food sales that may occur either outside the school day or away from the campus include

- catered meals to outside groups,
- contract meals served on a regular basis, and
- special school function meals such as athletic banquets.

**SAY:** It is critical that school nutrition directors set prices to adequately cover food and other costs when preparing these types of food functions so there is no loss to the school nutrition program.

**ASK:** Why is this important? (*Allow 2 or 3 participants to volunteer answers.*)
FEEDBACK: Look on page 46 in your workbook for the answer.

Federal regulations do not allow the school nutrition program to supplement other food sales outside the reimbursable student meal. Loss leader items must be covered by other nonreimbursable food item sales. Special functions must be priced high enough to cover the entire costs of the food function.

SAY: This may not be popular in some school districts that expect the nutrition department to underwrite part of the costs for special functions.
Chapter 7: Managing Expenditures in the School Nutrition Program

Objective 7: Know how to analyze, interpret, and use expenditure data for program evaluation and improvement.

Introduction to Topic

SHOW: Slide #44, Managing Expenditures in School Nutrition Program

SAY: In our next chapter starting on page 47 in your workbook, we are going to look at how analyzing and interpreting expenditure data can help us do a better job of managing school nutrition programs. Properly managing funds allocated to covering the cost of operating a school nutrition program is critical to the success of maintaining quality standards and ensuring nutritious meals are served to children.

A. Analysis of Financial Reports

SAY: School districts are faced with finding ways to reduce costs while meeting increasing demand for more services. Before good financial decisions can be made on ways to improve expenditure management, careful analysis of financial reports must take place.

DO: Workbook Activity – Fill in the blanks

SAY: Fill in the blanks on page 47 in your workbook as we discuss the types of information provided on financial reports.
SHOW: Slide #45, Expenditure Analysis

SAY: Analyzing financial reports can provide us with the following information:

1. **Patterns** or **trends** might suggest an avenue for improvement. An example could be a trend downward in participation, indicating a need for possible improvement.

2. Significant **changes** in specific cost categories is a red flag to monitor spending in that area.

3. **Deviations** from financial goals (budget), such as a higher food cost percentage, alerts the school nutrition director to evaluate food purchases.

4. Possible **abuse** or **theft** within expenditure categories such as food or supplies may be easier to spot.

5. Transaction or accounting **errors** will likely standout in financial analysis.
SHOW: Slide #46, Types of Expenditure Analysis

There are several types of analysis appropriate for evaluating how effective the school nutrition program is in managing expenditures. To assure that program priorities are achieved within funds available, analysis must occur on a regular basis. You are going to learn to calculate the four shown in your workbook on page 47.

They are:

- total costs to produce a meal or meal equivalent,
- meal cost per expenditure category,
- percentages of operational costs to total revenue, and
- costs to produce a meal compared with the average revenue generated per meal.

B. Evaluating Meal Costs

The first analysis we are going to discuss is how to calculate the average cost to produce a meal.

How many of you calculate your school or district’s average cost per meal on a monthly basis? (Pause and make a mental note of the approximate percentage of participants that indicate they make the calculation.)
SAY: I see that approximately ___ of you calculate your average cost per meal. Calculating the cost of producing a meal or meal equivalent is essential to measuring the performance of the school nutrition program. The calculation must be determined on a regular basis, preferably monthly. This allows the district to take the necessary action to correct the situation in a timelier manner when the costs to produce a meal exceed the revenue received to cover those costs.

C. Meal Costs Deviations

SAY: It is important to remember there may be times during the school year when the cost to produce a meal will fluctuate depending on circumstances.

ASK: Can someone tell me one reason meal costs might deviate from the average at various times during the school year? (Allow no more than two participants to answer.)

SHOW: Slide #47, Meal Costs Deviations

- Higher food costs at the beginning of the year due to larger than normal food purchases
- Purchase of a large ticket item
- Unplanned large repair bills

SAY: The cost of producing a meal or meal equivalent may deviate from the normal average at various times during the year. In some cases this is justifiable due to circumstances.

DO: Workbook Activity – Fill in the blanks

SAY: Fill in the missing information in the examples provided on page 48 in your notebook. Three examples are
• higher food costs at the beginning of the school year due to higher than normal food purchases,

• a one time purchase of a large ticket item (USDA requires major equipment to be expended at the time of payment.), and

• unplanned large repair bills.

D. Calculating the Cost to Produce a Meal/Meal Equivalent

DO: Handout #9

SAY: Turn to Handout #9, Calculating the Cost to Produce a Meal/Meal Equivalent, on page 49 in your workbook. Before we begin the worksheet, let’s review the instructions.

1. You are to calculate the cost per meal equivalent for each expenditure category that has a blank cell and then total the meal cost.

2. Remember: divide expenditures by the total meal equivalents to calculate the costs of producing a meal equivalent. Carry your decimals to the fourth place.

3. We have calculated salaries and wages for you. By dividing the dollar amount, $742,000 by the total number of meal equivalents, 972,777, one can calculate that salaries and wages cost $0.7628 per meal equivalent.

4. You should work with your team to calculate employee benefits, purchased food, and total meal cost per meal equivalent. You will have 7 to 8 minutes to finish.

5. You can use the Repetitive Divisor method when completing Handout #9. See the sheet provided to you titled “Calculator Tips.”
### Handout #9
Worksheet on Calculating the Cost to Produce a Meal/Meal Equivalent

**Answer Sheet**

**Instructions:** Calculate the cost per meal equivalent for each expenditure category listed. Include the total cost of a meal equivalent. Remember: To calculate the costs to produce a meal equivalent, divide expenditures in each category by the total number of meal equivalents.

Given: Meal Equivalents served for the year totaled 972,777

<table>
<thead>
<tr>
<th>Expenditure Category</th>
<th>Dollar Amount</th>
<th>Cost Per Meal Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries and Wages</td>
<td>$742,000</td>
<td>$0.7628</td>
</tr>
<tr>
<td>Employee Benefits</td>
<td>308,500</td>
<td>0.3171</td>
</tr>
<tr>
<td>Purchased Food</td>
<td>909,370</td>
<td>0.9348</td>
</tr>
<tr>
<td>USDA Foods Value</td>
<td>145,108</td>
<td>0.1492</td>
</tr>
<tr>
<td>Supplies</td>
<td>229,870</td>
<td>0.2363</td>
</tr>
<tr>
<td>Capital Equipment</td>
<td>90,000</td>
<td>0.0925</td>
</tr>
<tr>
<td>Indirect Cost</td>
<td>75,000</td>
<td>0.0771</td>
</tr>
<tr>
<td>Overhead*</td>
<td>82,395</td>
<td>0.0847</td>
</tr>
<tr>
<td><strong>Total Expenditures</strong></td>
<td><strong>$2,582,243</strong></td>
<td><strong>$2.6545</strong></td>
</tr>
</tbody>
</table>

* Overhead combines several smaller categories of expenditures for purposes of analysis.

**DO:** Answer Check. Go over the worksheet with participants and allow 2 or 3 minutes for comments or questions.

**ASK:** What category of expenditures in this exercise had the highest cost per meal?  
*(allow participants to volunteer the answer)*

**FEEDBACK:** If you consider the categories as they are listed, the answer is food which has a cost per meal equivalent of approximately 93 cents per meal. Some of you may be thinking that labor costs are higher when you add salaries and wages to the employee benefits. If you add $0.3171 to $0.7628, the cost of labor per meal equivalent is approximately $1.08. Another point
to consider is the value of donated USDA Foods. If you add $0.9348 for purchased food cost to the USDA Foods value of $0.1492 the total food cost for a meal equivalent is approximate $1.08, so the two categories are actually similar in costs.

**ASK:** What is important to remember from this activity? (*Pause and allow one or two participants to respond.*)

**SAY:** Look on page 50 in your workbook for reasons this type of analysis is important.

1. Managing expenditures within the revenues received is critical to responsible use of the school nutrition program’s resources and in maintaining customer satisfaction.

2. Every program, regardless of size or method of service, must evaluate expenditures on a regular basis to control costs.

3. When the costs to produce a meal equivalent exceed the average revenue generated per meal, a corrective action plan should be implemented immediately.

**E. Food Cost Percentage to Total Revenue**

**SAY:** Another important measurement of program efficiency is the analysis of operational cost percentages to total revenue, sometimes called operating ratios.

**SAY:** Turn to page 50 in your workbook as we discuss operating ratios. These percentages relate expenses to revenue and are useful to management because they allow comparison of actual results against the budget.
**SHOW:** Slide #48, Food Cost Percentage to Total Revenue

<table>
<thead>
<tr>
<th>Food Cost Percentage to Total Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Formula:</strong> Costs of Purchased Food</td>
</tr>
<tr>
<td>Total Revenue</td>
</tr>
</tbody>
</table>

**Example:**

If the cost of purchased food totaled $16,500 for one month and revenue totaled $30,000, then 55% of the revenue was used to purchase food. In dollar terms, this tells us that $0.55 out of every $1.00 generated in revenue was spent for food during the period examined. If the school nutrition program has set a goal that no more than 45% of revenue should be spent on purchased food and there are no exceptional circumstances, then the school nutrition director should quickly take steps to adjust food costs.

**SAY:** If a school nutrition director wants to know what percent of revenue is being spent for purchased food during a given period, the formula shown on the slide can be used to yield that information. Cost percentages are calculated by dividing the expenditure in a given period by the total revenue generated during that same period.
F. Calculating Percentages of Costs to Total Revenue

**DO:** Handout #10

**SAY:** Please turn to Handout #10 on page 51 in your workbook. Before you begin, let's review instructions for the activity. Let me point out that this worksheet is a continuation of the previous worksheet. In this worksheet you are to

1. Calculate the cost percentage to total revenue for each category by dividing the amount in each expenditure category by total revenue ($2,491,684) and convert to percentages by multiplying times 100.

2. Write your answers in the last column.

3. Add the cost percentages for each category to determine a total for all cost percentages.

4. Work as a team. You have about 7 minutes to complete the worksheet.
**Handout #10**  
Worksheet on Calculating Percentages of Costs to Total Revenue

**Answer Sheet**

Calculate the cost percentages to total revenue for each category. Write your answers in the last column of the table. Remember: Calculate the percentages of operational costs to total revenue by dividing the amount in each expenditure category by total revenue and multiplying times 100 to get the percent.

Given: Total revenue for the year totaled $2,491,684.

<table>
<thead>
<tr>
<th>Expenditure Category</th>
<th>Dollar Amount</th>
<th>% of Total Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries and wages</td>
<td>$ 742,000</td>
<td>(.2978 x 100) 30%</td>
</tr>
<tr>
<td>Employee Benefits</td>
<td>308,500</td>
<td>12%</td>
</tr>
<tr>
<td>Purchased Food</td>
<td>909,370</td>
<td>37%</td>
</tr>
<tr>
<td>USDA Foods Value</td>
<td>145,108</td>
<td>6%</td>
</tr>
<tr>
<td>Supplies</td>
<td>229,870</td>
<td>9%</td>
</tr>
<tr>
<td>Capital Equipment</td>
<td>90,000</td>
<td>4%</td>
</tr>
<tr>
<td>Indirect Cost</td>
<td>75,000</td>
<td>3%</td>
</tr>
<tr>
<td>Overhead*</td>
<td>82,395</td>
<td>3%</td>
</tr>
<tr>
<td><strong>Total Expenditures</strong></td>
<td><strong>$ 2,582,243</strong></td>
<td><strong>104%</strong></td>
</tr>
</tbody>
</table>

* Overhead combines several smaller categories of expenditures for purposes of analysis.

*The shaded cells in the last column are blank in the Participants’ Workbook.*

**ASK:** What is the percentage for total expenditures? (*Allow 1 or 2 participants to answer.*)

**SAY:** In this exercise the percentage of expenditures to total revenue is 104%.

**ASK:** Since this is more than 100%, what does this tell you about the operation? (*Allow 2-3 participants to volunteer their answers.*)

**FEEDBACK:** Possible comments could include

- program lost money during the period analyzed, and
- operating balance decreased by 4% during the accounting period.
ASK: What do cost percentages tell us?

DO: Workbook Activity: Fill in the blank.

SAY: Fill in the blanks on page 51 in your workbook as we review what cost percentages tell us about the bottom line.

SHOW: Slide #49, What do Cost Percentages Mean?

SAY: If the total of all cost percentages is

- Less than 100% - operating balance increases (more revenue than expenditures)
- Equal to 100% - operation breaks-even (Revenue and expenditures are equal.)
- More than 100% - operating balance decreases (more expenditures than revenues)

The pitfall of being satisfied with breaking even is that when expenditures and revenues are equal, there is no surplus money for program improvement, expansion, or unexpected costs.
G. Comparing Revenue Generated with Program Expenditures

SAY: Another performance measure that can be used to analyze the finances of a school nutrition program is to compare revenue generated with program expenditures. A quick comparative review can be helpful in making decisions about increasing revenue and controlling costs in school nutrition programs. Turn to page 52 in your workbook for a list of benefits of making comparisons.

SHOW: Slide #50, Comparing Revenue to Expenditures

Comparing Revenue to Expenditures

Comparing revenue to expenditures tells us:
1. total net gain/loss to the school nutrition program expressed in dollars,
2. percent of gain/loss expressed in percentage of revenue, and
3. net gain/loss per meal or meal equivalent.

SAY: By comparing revenue and expenditure financial reports, the school nutrition director can determine the:

1. total net gain/loss to the school nutrition program expressed in dollars,
2. percent of gain/loss expressed in percentage of revenue, and
3. net gain/loss per meal or meal equivalent served.

SAY: Careful evaluation of revenues and expenditures can help the school nutrition program director optimize financial opportunities to increase program integrity and customer satisfaction.
H. Worksheet Comparing Revenues to Expenditures

**DO:** Handout #11

**SAY:** Look at Handout #11, Comparing Revenues to Expenditures, on page 53 in your workbook. Notice the information is a continuation of previous worksheets. At the bottom of the handout, compare revenue with expenditures for the year 2008-2009. Take a couple of minutes to fill in the two empty cells by calculating both the gain/loss in income and the difference in revenue generated and costs per meal equivalent. Also, answer the three questions at the bottom of the table.
Handout #11
Worksheet on Comparing Revenues to Expenditures

Answer Sheet

Fill in the empty cells in the table at the bottom of the page by calculating the gain/loss in income for the 2008-2009 school year and the gain/loss per meal equivalent.

Given: Revenue and Expenditure information from Handouts 6 and 9.

<table>
<thead>
<tr>
<th>Revenues</th>
<th>Dollar Amount</th>
<th>Per Meal Equivalent</th>
<th>Expenditures</th>
<th>Dollar Amount</th>
<th>Per Meal Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Sales</td>
<td>$ 281,831</td>
<td>$ 0.2897</td>
<td>Salaries/Wages</td>
<td>$ 742,000</td>
<td>$ 0.7628</td>
</tr>
<tr>
<td>Adult Sales</td>
<td>25,275</td>
<td>0.0260</td>
<td>Benefits</td>
<td>308,500</td>
<td>0.3171</td>
</tr>
<tr>
<td>Other Sales</td>
<td>128,155</td>
<td>0.1317</td>
<td>Purchased Food</td>
<td>909,370</td>
<td>0.9348</td>
</tr>
<tr>
<td>Federal</td>
<td>1,883,524</td>
<td>1.9362</td>
<td>USDA Foods</td>
<td>145,108</td>
<td>0.1492</td>
</tr>
<tr>
<td>USDA Foods</td>
<td>145,108</td>
<td>0.1492</td>
<td>Supplies</td>
<td>229,870</td>
<td>0.2362</td>
</tr>
<tr>
<td>State</td>
<td>18,835</td>
<td>0.0194</td>
<td>Capital Equipment</td>
<td>90,000</td>
<td>0.0925</td>
</tr>
<tr>
<td>Bank Interest</td>
<td>3,155</td>
<td>0.0032</td>
<td>Indirect Cost</td>
<td>75,000</td>
<td>0.0771</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>5,800</td>
<td>0.0060</td>
<td>Overhead</td>
<td>82,395</td>
<td>0.0847</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$2,491,684</td>
<td>$ 2.5614</td>
<td><strong>Total</strong></td>
<td>$2,582,243</td>
<td>$ 2.6545</td>
</tr>
</tbody>
</table>

* Overhead combines several smaller categories of expenditures for purposes of analysis.

Comparing Revenue with Expenditures
School Year 2008-2009

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Per Meal Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>$2,491,684</td>
<td>2.5614</td>
</tr>
<tr>
<td>Expenditures</td>
<td>2,582,243</td>
<td>2.6545</td>
</tr>
<tr>
<td>Net Gain/Loss</td>
<td>(90,559)</td>
<td>(0.0931)</td>
</tr>
</tbody>
</table>

Worksheet Questions

1. Was there a gain or loss for the year? If so, how much? **$90,599**

2. What percentage of total revenue was this? The loss of $90,559 divided by the total revenue of $2,491,684 multiplied by 100 gives us a loss of 3.63% (rounded to 4%). The loss percentage can also be calculated by dividing the loss per meal equivalent ($0.0931) by the revenue earned per meal equivalent ($2.5614) and then entering the % key.

3. What was the loss per meal/meal equivalent? **$0.0931** or a loss of over 9 cents per meal equivalent.

*Hint: If expenditures are more than revenues, the program experienced a loss.*
SAY: How can school nutrition directors use the information in this exercise to improve program operations? (Allow two or three participants to volunteer answers.)

FEEDBACK: Possible comments should include the following: The information can be used to

• determine whether or not immediate corrective action should be taken to increase revenue or reduce costs,

• guide budget development for the following year, and

• make recommendations for program improvement.
Objective 8: Know how to apply cost control measures to operate a financially sound program with nutritional integrity.

Introduction to Topic

SAY: Our next chapter is about controlling costs. Turn to page 54 in your workbook as we look at the objective.

SHOW: Slide #51, Controlling Food and Labor Costs in School Nutrition Programs

SAY: While time does not permit an in depth discussion of cost controls, it is important to know how to apply cost control measures to operate a financially sound program with nutritional integrity.

A. USDA Lunch and Breakfast Cost Study

SAY: Based on a new study by the Food and Nutrition Services, USDA, school nutrition professionals may need to rethink meal cost guidelines.

The School Lunch and Breakfast Cost Study-II, released in April 2008 provides a detailed examination of the cost of producing the reimbursable meal. The study was for the school year 2005-06.
SAY: Look on page 54 in your workbook at the table which shows the breakdown of food, labor, and all other costs as they relate to total cost reported by school districts in the study. The financial information was grouped according to district size, small (1-999), medium (1,000-4,999), and large (5,000+).

Instructor’s Note: Go over the table with participants, pointing out that cost percentages are ratios of cost to total costs.

<table>
<thead>
<tr>
<th>School District Size/Enrollment</th>
<th>Food Cost Percentage</th>
<th>Labor Cost Percentage</th>
<th>Other Cost Percentage</th>
<th>Total Cost Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – 999</td>
<td>46.0</td>
<td>46.3</td>
<td>7.7</td>
<td>100.0</td>
</tr>
<tr>
<td>1,000-4,999</td>
<td>46.6</td>
<td>41.9</td>
<td>11.5</td>
<td>100.0</td>
</tr>
<tr>
<td>5,000+</td>
<td>42.8</td>
<td>45.8</td>
<td>11.4</td>
<td>100.0</td>
</tr>
</tbody>
</table>

* The food cost included the value of USDA Foods.

SAY: Notice these calculations represent percentages of cost to total cost and not cost to total revenue. However, the study found that reported costs were essentially equal to revenues, indicating that on the average school districts in the study operated slightly above a break-even level. In a break-even situation where the revenue and expenditure are equal, then it is reasonable to assume that food and labor combined accounted for almost 91% of revenue, and all other costs for overhead and supplies accounted for about 9%.
B. Controlling Food and Labor Costs

**DO:** Workbook Activity – Review

**SAY:** Turn to page 55 in your workbook and follow along as we think about several important factors that guide us in developing strategies to control food and labor costs in school nutrition programs.

**Factor #1** While there are no research-based industry standards, generally accepted guidelines suggest that no more than 80–85 percent of the school nutrition program’s revenue should be spent on labor and food. This may vary from district to district. Remember these guidelines may change based on the USDA School Lunch and Breakfast Costs Study-II.

**Factor #2** The school nutrition program director should work together with upper administration and school site managers to set goals for food and labor costs as part of the budget planning process.

**Factor #3** The school district’s success in keeping labor and food costs within the established guidelines depends on the financial management skills of the entire school nutrition program department, including the school nutrition program director, the site level managers, and the kitchen staff.

C. Determining Labor Costs

**SAY:** Some labor costs, such as raises for employees or increases in the costs of health care, may be beyond control of the school nutrition director. However, the use of labor hours and the number of employees hired at each school site is most often a decision that can be made by the school nutrition department. Most school nutrition programs use the productivity index of meals per labor hour to monitor the efficiency of an operation and as a guide to determine staffing.

**DO:** Workbook Activity - Calculating Meals per Labor Hour
SHOW: Slide #52, Meals per Labor Hour

Meals Per Labor Hour

<table>
<thead>
<tr>
<th>Number Meals/Meal Equivalents</th>
<th>Number of Paid Productive Labor Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example:</td>
<td></td>
</tr>
<tr>
<td>338 total meals/meal equivalents</td>
<td>24 paid productive labor hours</td>
</tr>
<tr>
<td></td>
<td>= 14.08 or 14 meals per labor hour</td>
</tr>
</tbody>
</table>

SAY: Write this formula for measuring meals per labor hour on page 55 in your workbook.

Meals per Labor Hour = \( \frac{\text{Number of Meal Equivalents}}{\text{Number of Paid Productive Labor Hours}} \)

SAY: Meals per labor hour is a productivity index that is measured by dividing the total meal equivalents for a given period of time by the total number of productive paid labor hours for the same period. **Productive labor hours are the actual hours assigned to a local school site and include all labor charged to and paid for by the school nutrition program for work performed.** If workers are paid for sick leave and a substitute is paid, then only the substitute labor should be included in the formula. While this may be difficult to calculate, sick leave should not be considered productive labor and will distort the picture. In the example shown on the slide, the school nutrition program served 338 meals/meal equivalents for the day and paid for 24 hours of actual labor on the job. This means the school had a productivity index of 14.08 or 14 meals per labor hour.
D. Analyzing Productivity Using Meals per Labor Hour

**DO:** Handout #12

**SAY:** Turn to Handout #12 on page 56 in your workbook for a mini case study on evaluating meals per labor hour at a school nutrition site. Three steps can be used to analyze meal production at this site.

1. Calculate the current total hours of labor paid daily by multiplying the number of employees by the hours worked and adding for total hours.

2. Calculate the average meal equivalents served using the formulas in Chapter 5.

3. Use the information in steps one and two to determine the productivity index by dividing the number of meal equivalents by the number of paid labor hours.
Maple School District has determined that an elementary school in the district needs to improve productivity. The school nutrition director and school manager performed the following steps to analyze the existing productivity index. Follow the steps and make the necessary calculations to complete the worksheet.

**Step # 1: Calculate the current total hours of labor paid daily in the school nutrition program.**

<table>
<thead>
<tr>
<th>Number of employees</th>
<th>Number hours worked daily</th>
<th>Total number of hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total Paid Labor Hours Assigned Daily</strong></td>
<td><strong>=49</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Step # 2: Calculate the average number of meal equivalents served daily.**

<table>
<thead>
<tr>
<th>Meal Categories</th>
<th>Meal Equivalents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lunch (student and adults)</td>
<td>440</td>
</tr>
<tr>
<td>Breakfast (182 x .67)</td>
<td>122</td>
</tr>
<tr>
<td>Snacks (75 x .33)</td>
<td>25</td>
</tr>
<tr>
<td>Non reimbursable Sales $200 ÷ ($2.57 + 0.2075)*</td>
<td>72</td>
</tr>
<tr>
<td><strong>Total Meal Equivalents</strong></td>
<td><strong>= 659</strong></td>
</tr>
</tbody>
</table>

**Step # 3: Using the information, calculate the meals per labor hour.**

\[
\text{Meals per Labor Hour} = \frac{\text{Number of Meal Equivalents}}{\text{Number of Paid Productive Labor Hours}}
\]

\[
= \frac{659}{49}
\]

\[
= 13.45 \text{ MPLH}
\]

*Based on 2008-2009 reimbursement rates*
ASK: Will someone share your answer? (Allow someone to volunteer the answer.)

FEEDBACK: The answer is 13.45 meals per labor hour.

ASK: What does this mean? (Allow a volunteer to answer the question.)

FEEDBACK: This means if a school site’s goal is to produce 15 meals per labor hour, the director must decide how to trim labor. However, if the school site set a goal of 13 meals per labor hour, the school met the goal.

SAY: One of the important decisions any school nutrition director must make is how to lessen the impact of meals per labor hour on the cost effectiveness of the school meals program. Determining staffing needs is not always the application of a simple formula. Many things may impact staffing in the school nutrition program.

E. Determining Staffing Needs

DO: Table/Group Assignment - Assigning Labor

SAY: Use the index cards on your tables to write at least one factor other than meal equivalents, used in your school district to assign labor at the school site. When you have finished, turn the card over in the center of the table and stand up. (Allow 3-4 minutes. When everyone is finished with the assignment, ask participants to sit.)

SAY: If you were the first person to stand at your table, will you please read all the cards from your table? The rest of you should take notes of the answers from the various groups on page 57 in your workbook.

FEEDBACK: Possible criteria used to assign labor include

- the number of meals or meal equivalents served,
- the number and type of services offered,
- amount of convenience foods used,
- skill level of employees,
- complexity of menu, and
- type of production system.
As you can see, staffing is often complex and requires diligent monitoring by the school nutrition director. Because of this complexity, it is often better to use a range when setting goals.

**F. Using Meals per Labor Hour to Determine Staffing Needs**

Turn to Handout #13 on page 58 in your workbook. In this scenario, the director can use meals per labor hour to determine staffing needs by following these steps.

1. Set a goal for the desired number of meals per labor hour. Check to see if your state agency has set specific goals for meals per labor hour.
2. Divide the total meal equivalents by desired number of meals per labor hour to determine the total labor hours needed per day.
3. Determine difference between current total paid labor hours and desired paid labor.

**DO: Handout #13**

Assume a school district sets a goal of 17 meals per labor hour. Using the average meal equivalents from Handout #12, make the calculations in steps 2 and 3 and answer questions 1 and 2 in Handout #13. You have about 8 minutes. Work together as a team.
Handout #13
Worksheet
Using Meals Per Labor Hour to Determine Staffing Needs

Answer Sheet

After an evaluation of the productivity level is completed, the school nutrition director can make a decision regarding staffing using the following three steps:

**Step 1:** Set a goal for the desired number of meals per labor hour.

**Step 2:** Divide the total meal equivalents by desired number of meals per labor hour to determine the total labor hours needed per day.

**Step 3:** Determine difference between current total paid labor hours and desired paid labor.

**Example**

**Step 1:** Desired number of meals per labor hour – **17**

**Step 2:** Divide the total meal equivalents from Handout #12 (659) by the desired number of meals per labor hour (17). **Answer: 39**.

**Step 3:** Determine the difference between the current total paid labor hours on Handout #12 (49) and the desired number of labor hours in Step 2. **49 – 39 = 10 labor hours**.

**Question 1:** Will the school nutrition director need to add or reduce hours to achieve the goal of 17 meals per labor hour? **Reduce hours**

**Question 2:** What are the choices the director will need to consider to achieve the new goal?

- Reduce hours of employees
- Eliminate positions
- Consider ways to share employees in part time positions.
ASK: Will the tallest person at each table share an answer with us? We will start with the table on my right for the answer to step 2. (Proceed around the room asking for answers to step 2, question 1, and question 2.)

G. Using Daily Participation as a Financial Management Tool

SAY: Another important factor in evaluating productivity and staffing needs is the daily participation of students in the school meals program. A summary participation report at the end of each month and at the end of the year provides valuable financial information to the school nutrition program director. Turn to page 59 in your workbook and fill in missing information as we discuss using participation as a financial management tool.

SHOW: Slide #53, Using Participation as a Financial Management Tool

ASK: Why is the average daily participation useful as a forecasting tool?

FEEDBACK: Using a participation forecasting tool

- prevents waste in excess labor hours and overproduction of food, and
- reduces customer dissatisfaction because of inadequate staff and too little food prepared for the number served.
SHOW: *NFSMI Financial Management Information System* publication.

SAY: Open your copy of the *NFSMI Financial Management Information System* publication to pages 77-78. Please find and highlight the formula for calculating the average daily participation on page 77 and the formula for calculating the average participation rate of enrolled students on page 78. I encourage each of you to calculate the average daily participation rate in your school or school district if you have not already done so.

**Instructor’s Note:** Read the formulas and allow no more than two minutes for participants to find and highlight the formulas.

### H. Analyzing Participation

**DO:** Handout #14

SAY: Look at the year-end summary participation report on page 60 in your workbook. This activity is designed to help you analyze a participation report. Keep in mind that this report, like most financial management reports, may differ from district to district and from state to state. For example, in this report calculations for participation percentages are based on total enrollment. If a district uses average daily attendance as the factor to calculate participation percentages, the district would substitute the average daily attendance for the analysis period for enrollment and then make the appropriate calculations.
Follow along as we review the information provided in the report.

1. Under enrollment in the first column, we see that this district had an enrollment of 29,148 for the year.

2. In the third column, we see there were 14,348 students approved as free and 2,626 approved as reduced.

3. The fourth column tells us that the percent of free applications approved was 49 percent of enrollment and the percent of reduced to enrollment was 9 percent.

4. Other information provided includes
   - total meals served for the year and the average number of meals served daily (columns 5 and 6),
   - the participation rate by eligibility to total enrollment (column 7), and
   - the percent of students in each eligibility category that actually participated in that category (column 8).

**Teaching Suggestion:** If participants need more explanation, provide an example for column 8 – “Of the 2,626 students approved as reduced, only 66.22% of the reduced eligible students actually participated.”

**SAY:** Using the summary report, answer the questions listed at the bottom Handout #14 on page 60. Remember you do not need to make any calculations. All answers to the questions are found in the report. When you finish, analyze the meaning of the data by answering question 5.
Handout #14
Participation Year End Summary Report

Days Served – 180

<table>
<thead>
<tr>
<th></th>
<th>Enrollment</th>
<th>Eligibility Status</th>
<th>Approved Student Eligibility</th>
<th>Eligibility Category/Enrollment</th>
<th>Total Meals Served</th>
<th>Average Served Daily</th>
<th>Average % Participation/Eligibility</th>
<th>Average % Participation/Eligibility Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lunch</td>
<td>29,148</td>
<td>Free</td>
<td>14,348</td>
<td>0.49</td>
<td>1,887,502</td>
<td>10,486</td>
<td>35.98</td>
<td>73.08</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reduced</td>
<td>2,626</td>
<td>0.09</td>
<td>313,030</td>
<td>1,739</td>
<td>5.97</td>
<td>66.22</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Paid</td>
<td>12,174</td>
<td>0.42</td>
<td>715,708</td>
<td>3,976</td>
<td>13.64</td>
<td>32.66</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td></td>
<td>29,148</td>
<td>100.00</td>
<td>2,916,240</td>
<td>16,201</td>
<td>55.58</td>
<td></td>
</tr>
<tr>
<td>Breakfast</td>
<td>29,148</td>
<td>Free</td>
<td>14,348</td>
<td>0.49</td>
<td>1,053,906</td>
<td>5,855</td>
<td>20.09</td>
<td>40.81</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reduced</td>
<td>2,626</td>
<td>0.09</td>
<td>143,608</td>
<td>798</td>
<td>2.74</td>
<td>5.56</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Paid</td>
<td>12,174</td>
<td>0.42</td>
<td>168,413</td>
<td>936</td>
<td>3.21</td>
<td>6.52</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td></td>
<td>29,148</td>
<td>100.00</td>
<td>1,365,927</td>
<td>7,588</td>
<td>26.03</td>
<td></td>
</tr>
</tbody>
</table>

Using the information from the participation report provided above, fill in the blanks with the information requested in each statement below. Sources for the formulas used to calculate participation rates are provided on pages 77-78 in your FMIS publication. **NOTE: You do not need to calculate any of the information asked for in the questions below! You are to read the report and answer the questions based on information provided in the report.**

1. What percent of all students enrolled in the school district participated in the lunch program? **55.58**
   Breakfas program? **26.03**

2. What percent of the total student enrollment qualified for free meals? **49**

3. The report shows that 55.58% of enrolled students participated in the lunch program. What percentage of enrolled student that participated received free lunches? **35.98**

4. What percent of the enrolled students eligible for a free lunch actually participate in the program on an average day? **73.08**
   What percent of students classified in the “paid” category participate: **32.66**

5. If you were the school nutrition program director in the district with this report, what goal or goals might you set for the next school year regarding student lunch and breakfast participation? *(Accept all answers)*

**Note:** The participation and enrollment figures shown in this statement are for a hypothetical school district and are illustrative only. They are not tied to any other activity in this lesson. Sources for the formulas used to calculate participation rates are provided on the **pages 77-78** in FMIS.
SAY: Will the person with the least experience at each table tell us the answer to one question, starting at the table in the back (or another appropriate description.). (Go around the room until all questions are answered.)

I. Determining Food Cost Factors

SAY: One of the most important aspects of administering a school nutrition program is managing food cost. It is important for school nutrition directors to monitor food costs on a regular basis. High food costs often are the problem when a school or school district nutrition program is experiencing a financial loss.

DO: Workbook Activity: Fill in the blanks

SAY: Turn to page 61 and fill in the missing information as we discuss why school nutrition program directors need to know the costs of food used during a given period of time.

SHOW: Slide #54, Calculating the cost of food used helps to

Calculating the cost of food used helps to

- determine if costs are within guidelines,
- ascertain if there are sufficient funds to pay expenditures,
- establish the cost for each meal equivalent served, and
- prevent waste and food theft through monitoring food use.

SAY: This information is vital in order to

- determine whether costs are within guidelines,
- ascertain if there are sufficient funds to pay expenditures,
- establish the cost for each meal equivalent served, and
- prevent waste and food theft through monitoring food use.
J. Calculating the Cost of Food Used

SAY: There are several ways to analyze food costs, but regardless of the method used, management first must calculate the value (cost) of food used in a specific accounting period.

DO: Workbook Activity: Fill in the blanks

SAY: Fill in the missing information in the steps for calculating the cost of food used on page 61 in your workbook as we view the next slide.

SHOW: Slide #55, Calculating Cost of Food Used

```
Calculating Cost of Food Used

Beginning Inventory (purchased and USDA Foods) + Total Purchases (purchased and USDA Foods) = Total Food Available - Ending Inventory (purchased and USDA Foods) = Cost of Food Used
```

SAY: The food inventory is taken at the end of the monthly accounting period, the value of the food inventory is calculated, and the cost of purchased food used for the period is determined as follows:

Beginning Food Inventory (food and USDA Foods)

\[ \text{Beginning Inventory} + \text{Food Purchases} = \text{Total Food Available} - \text{Ending Food Inventory} = \text{Cost of Food Used} \]

SAY: As you can see in the formula given, USDA Foods are included with purchased food. The value of USDA Foods is part of the total cost to the program. Under the single inventory process USDA Foods should be valued at the current commercial purchase cost. This provides a more realistic picture of actual food cost to the program.
SHOW: Slide #56, Example of Calculations for Cost of Food Used

<table>
<thead>
<tr>
<th>Example</th>
<th>Annually</th>
<th>Monthly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning Inventory</td>
<td>$8,000</td>
<td>$8,000</td>
</tr>
<tr>
<td>Food Purchases</td>
<td>+ 300,000</td>
<td>+ 25,000</td>
</tr>
<tr>
<td>Food Available</td>
<td>308,000</td>
<td>33,000</td>
</tr>
<tr>
<td>Less: ending Inventory</td>
<td>- 7,000</td>
<td>- 7,000</td>
</tr>
<tr>
<td>Cost of Food Used</td>
<td>$301,000</td>
<td>$26,000</td>
</tr>
</tbody>
</table>

SAY: The examples in this slide illustrate how to calculate cost of food used. You can see the calculation is the same for either an annual or a monthly cost.

SAY: Remember: To obtain current and accurate results, a physical inventory must be taken on a regular basis. A minimum of a monthly inventory is recommended.

ASK: (Allow participants to volunteer responses. Allow 1-2 minutes for responses.)
- How often do you take inventory in your operation?
- How do you use your inventory as a management tool?
- Which items in a physical inventory do you consider the most important?

DO: Handout #15

SAY: Turn to Handout #15 in your workbook on page 62. Determine the cost of food used for the month of February. Take about 5 minutes to complete your calculations.

Instructor’s Note: The answer sheet for Handout #15 is inserted in the teaching portion of the Instructor’s Manual. See Handout #15 answer sheet below. Answer sheets for participants are provided in the back section of the Participant’s Workbook.
Handout #15
Worksheet for Calculating Cost of Food Used

Answer Sheet

Maple School District has determined that an elementary school in the district needs to improve productivity. The school nutrition director and school manager performed the following steps to analyze the existing productivity index. Follow the steps and make the necessary calculations to complete the worksheet.

<table>
<thead>
<tr>
<th>Month</th>
<th>End of Month Inventory Value</th>
<th>Value of Food Purchases</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>$8,496</td>
<td>$24,021</td>
</tr>
<tr>
<td>February</td>
<td>$7,144</td>
<td>$18,677</td>
</tr>
<tr>
<td>March</td>
<td>$9,297</td>
<td>$21,583</td>
</tr>
</tbody>
</table>

**Step # 1: Determine the beginning inventory for the month of February** $8,496

**Step # 2: Add the food purchases for the month of February** $18,677

Equals food available in February $27,173

**Step # 3: Less ending February inventory** $7,144

Cost of Food Used in February $20,029

*Hint: The beginning inventory of month is the ending inventory of the previous month. For example, the beginning inventory for March is $7,144.*
K. Streamlined USDA Foods Inventory

SAY: USDA no longer requires a separate inventory for USDA Foods. Schools receive donated USDA Foods with commercial labels. USDA uses this packing process to reduce packaging cost and provide more timely deliveries. Distinguishing USDA Foods in the storeroom is now more difficult; however, some states and business officials continue to request that a separate inventory for USDA Foods be maintained. You need to be aware of the policies in your state and district and comply with these policies. Guidelines for the single inventory concept follow.

DO: Workbook Activity: Streamlined Inventory

SAY: Look on page 63 in your workbook and fill in the blanks as we review the slide about USDA Single Inventory Guidance Activity.

SHOW: Slide #57, USDA Single Inventory Guidance

SAY: According to the Single Inventory Guidance issue by USDA -

- Inventories of donated foods no longer must be separate from inventories of other foods.
- Most USDA Foods are packed with commercial labels instead of USDA labels.
- Procedures differ from state to state, and some states continue to maintain two inventories.
- Follow the policies of your state and district.
L. Food Cost Containment

SAY: One of the most pressing issues faced by school nutrition directors is the rising costs of food. Adding to that concern is the challenge of purchasing food products that meet nutrition standards associated with wellness policy implementation. It is important for directors to determine those factors that influence food costs.

DO: Flip Chart Activity – Food Cost Containment

SAY: Our next activity will help us identify food cost containment factors. Turn to “Ways to Lower Food Costs”, on page 65 in your workbook and read over the 15 ways to lower food costs listed on the handout. I invite you to work as a team at your table to identify five additional ways employees in school nutrition programs can help control food costs. You may want to write your answers on page 64 in your workbook. A reporter for each table will record answers on a flip chart sheet and post the sheet on the wall. Here is how we are going to select a reporter.

1. If you are the person at the table who reported last, please raise your hand. (Give a few seconds to do this.)

2. Now, will the person with the raised hand point to the person on your immediate left.

3. That person is the recorder and reporter for this activity.

4. Please pick up your flip chart sheet.

5. When you finish recording on the flip chart, post to the wall using the tape provided. You have 8 minutes to complete the activity.

Instructor’s Note: Allow up to eight minutes, but if the majority of the participants complete the activity before the allotted time, move to the reporting phase.

SAY: Will the reporter from each table stand by your flip chart sheet and review the list of food costs controls identified by your group as we go around the room? Remember, if your idea has already been mentioned, do not repeat it.

Instructor’s Note: Leave the flip chart sheets posted until the end of the session so that participants can read over ideas as time permits.
Handout #16
Ways to Lower Food Costs in School Nutrition Programs

1. Set a goal for managing food costs. Allocate a percentage, for example, 40% of revenue for food costs.

2. Monitor meal costs. Calculate the average food cost per meal on a regular basis.

3. Use standardized recipes. This will ensure more consistent product and shorten training times.

4. Pre-cost and post-cost menus to ensure food items are within predetermined costs levels.

5. Use cycle menus.

6. Reduce plate waste by analyzing reasons for discarded foods. Are menu items unpopular, too large portions, or poor quality?

7. Use portion control tools to ensure accurate serving sizes of menu items.

8. Avoid overproduction of food by careful forecasting. Consider the weather, school activities, and short-day schedules for students.


10. Manage the purchase of food items through bids and keeping specialized purchases to a minimum.

11. Maintain inventory control.

12. Prohibit the removal of food items from the premises. Do not allow “leftovers” to be taken home.

13. Follow receiving and storage procedures to minimize shortages.

14. Decrease food costs through use of USDA Foods.

15. Implement security measures. Product theft can cause major increase in food costs.

16. 

17. 

18. 

19. 

20. 
Objective 9: Know the importance of using forecasted operational revenues and expenditures when developing a financial plan and budget for school nutrition programs.

Introduction to Topic

SHOW: Slide #58, Financial Planning and Budget Development

SAY: Chapters 9 and 10 in today’s financial management course are about financial planning and budgeting. On page 66, you see that the objective for this part of our course is that you will know the importance of using forecasted operational revenues and expenditures when developing a financial plan and budget for your school nutrition program. When budgeting, the term forecasting means to estimate or calculate in advance your estimated revenues and expenditures by analysis of data. The basic underlying principle of financial planning and budgeting is the allocation of resources to the needs of the organization. If the budget is going to be an effective financial management tool, then it is important for the director to work with school business officials, site managers, and the superintendent to ensure that revenue and expenditure forecasts are based on accurate analysis of financial data.

ASK: Can someone tell me what you think are the major areas of influence when considering financial planning and budgeting in your school district nutrition program? (Allow one or two participants to respond.)
Based on what you have shared about your districts, we could say that the most important areas to consider when planning and budgeting fall under five categories. The categories are listed on page 66 in your workbook.

The five categories are (1) Customer Satisfaction, (2) Internal Organization, (3) Financial Aspects, (4) Innovation, and (5) Trends. We will discuss each area in detail starting with customer satisfaction.

A. Customer Satisfaction

I think we can all agree that customer satisfaction provides the base for the school nutrition program’s financial foundation. Without satisfied customers, participation rates drop and the school nutrition program cannot adequately fulfill its obligation to help children grow and learn in a healthy school environment. There are at least seven factors that influence customer satisfaction.

Turn to page 67 in your workbook and see how many of the customer satisfaction factors you can match with their definitions. You have about 3 minutes.
**Handout #17 - Customer Satisfaction Factors and Definitions**

Match each customer satisfaction factor that influences financial planning and budgeting to its definition.

<table>
<thead>
<tr>
<th>Definitions</th>
<th>Customer Satisfaction Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>B</strong> where the customer experience service; areas should be clean, sanitary, and customer-friendly.</td>
<td>A. Delivery</td>
</tr>
<tr>
<td>2. <strong>E</strong> sights, sounds, aromas, emotional reactions, aesthetic features, and the psychological ambience.</td>
<td>B. Environment</td>
</tr>
<tr>
<td>3. <strong>D</strong> interactions experienced by the customer, including friendliness, helpfulness, physical appearance, and competence.</td>
<td>C. Informational</td>
</tr>
<tr>
<td>4. <strong>F</strong> all the things the customer has to do such as complete meal applications, stand in line, return trays, keep money in his or her account.</td>
<td>D. Interpersonal</td>
</tr>
<tr>
<td>5. <strong>A</strong> act of providing healthy, appealing meals and other food items at the peak of freshness and right temperature</td>
<td>E. Sensory</td>
</tr>
<tr>
<td>6. <strong>C</strong> takes into account what the customer needs to know about the product they are purchasing.</td>
<td>F. Procedural</td>
</tr>
</tbody>
</table>

*Instructor’s Note:* Go over the answers with participants by quickly reading the customer satisfaction factor and definition. Start with the first definition on the left side of the handout. Ask participants if they have comments or questions.

*SAY:* You can use this handout to evaluate your district nutrition program as well as school sites and then plan and budget changes that will improve customer satisfaction and student participation.
B. Internal Organization

SAY: Let’s return our attention to the screen for a moment. The second category that influences financial management planning and budgeting in the school district nutrition program is the internal organization. The internal organization is made up of divisions or components that interact to accomplish organizational activities and achieve organizational goals. Look at Handout #18 on page 68 in your workbook and follow along as we review three components of the internal organization that play a role in forecasting future needs of the school nutrition program.

SAY: There are three major components of the Internal Organization. They are (1) people, (2) equipment, and (3) systems.

### Handout # 18 - Internal Organization Considerations

<table>
<thead>
<tr>
<th>Components of the Internal Organization</th>
<th>Considerations for Financial Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. People</td>
<td>Consider employee qualifications, hiring and termination procedures, staff training, and student/staff rapport.</td>
</tr>
<tr>
<td>2. Equipment</td>
<td>Match the needs of the program to equipment selection and purchase to maximum effectiveness of equipment expenditures.</td>
</tr>
</tbody>
</table>
| 3. System                              | 1. *Menu planning – dictates equipment and people considerations*  
|                                        | 2. *Purchasing, receiving, and inventory*  
|                                        | 3. *Storage*  
|                                        | 4. *Production*  
|                                        | 5. *Marketing*  
|                                        | 6. *Financial accountability as it relates to compliance with regulations and an effective reporting system. Examples are cashiering, sales to deposits, and banking.* |

*Instructor’s Note: The shaded areas are blank in the participant’s workbook.*
(1) **People**: Financial planning as it relates to people in the internal organization includes employee qualifications, the hiring and termination process, training, and student/staff rapport.

(2) **Equipment**: When considering equipment, it is important to carefully match the needs of the school nutrition program to the selection and purchase of equipment to maximum effectiveness of equipment expenditures.

**ASK**: The third component of the Internal Organization is the System. What do we mean by systems? *(Allow someone to volunteer answers.)*

**SAY**: You have just heard examples of what the term *systems* means in the school nutrition internal organization. Let’s recap. I suggest you make notes in the blank portion of the table. The systems that make up the internal organization of school nutrition programs include

1. Menu planning –dictates equipment and people considerations  
2. Purchasing, receiving, and inventory  
3. Storage  
4. Production  
5. Marketing  
6. Financial accountability as it relates to compliance with regulations and an effective reporting system - examples: *cashiering, sales to deposits, and banking.*

**SAY**: Continuous evaluation and assessment of the nutrition program systems are essential to improving program efficiency and effectiveness which contributes to the bottom line.
C. Financial Aspects

SAY: If you turn your attention back to the screen, you see the third category that must be considered when forecasting revenue and expenditures for planning and budgeting purposes is referred to as financial aspects.

DO: Table Activity: List potential financial changes in school nutrition programs

SAY: Take the next 3 minutes and work with your table team to identify examples of potential financial changes or adjustments that might impact the school nutrition program. List the examples on page 69 in your workbook.

Workbook Activity: Financial Aspects

List at least 3 examples of changes that could impact the financial aspects of the school nutrition program and influence revenue and expenditure forecasting.

1. ______________________________________________________________________
   ______________________________________________________________________

2. ______________________________________________________________________
   ______________________________________________________________________

3. ______________________________________________________________________
   ______________________________________________________________________

ASK: Will the person at each table whose last name starts with A or the closest letter to A share the potential program changes that might impact financial aspects of the program and forecasting?

Instructor’s Note: If time permits, ask someone to list the program changes on a flip chart sheet.
**FEEDBACK:** If not mentioned by participants, recap by providing the following examples of change or adjustments:

- Meal price increases due to significant loss to school nutrition program in prior year
- Increase in federal and state reimbursement rates
- Increased costs to the program due to uncontrollable events such as the rise in fuel prices or unexpected increase in salaries or benefits due to state legislative mandates
- Significant decrease or an increase in student enrollment (An example might be changes in job opportunities such as new industry opening or closing, natural disasters that create instability in the area, or economic downturn resulting in population shifts.)
- Change in USDA regulations mandated by Congress such as the School Meal Initiative

**D. Innovation**

**SAY:** _Innovation_ is the fourth category important to financial planning and budgeting. It is important for the entire school nutrition department and other school officials to look beyond the current program to keep the organization fresh and in tune with new and emerging innovations. Look on page 69 in your workbook for a definition of innovation.

Innovation refers to changes in thinking, in things, or in services. The goal of innovation is positive change to make something better. Innovation leading to increased productivity is the fundamental source of increasing wealth in an economy.
SAY: There’s more innovation happening than ever before. New brands, new concepts, new products, and new services are flooding a quickly expanding marketplace.

ASK: Can someone tell me what emerging innovations will impact school nutrition programs in the future? (Pause and allow one or two participants to volunteer answers). You may want to list some of these in your workbook on page 69.

FEEDBACK:

1. Improved computerization and software for financial recordkeeping, tracking purchase orders, recording meal counts, monitoring student eligibility, and tracking student food selections

2. Increased access to the Internet that allows school nutrition programs immediate entry into state and national databases, cooperative/other purchasing systems, USDA and state agency guidance, and child nutrition research

3. Accelerated use of voice mail, email, palm pilots, and voice-to-text software that reduces clerical tasks

SAY: Because of new technology and other innovations, school districts can gain important information such as meal benefit eligibility guidelines, reimbursement rates, and USDA Foods values as soon as they are released. Not so long ago, directors had to wait until the information arrived in an envelope by mail from the state agency.

E. Trends

SAY: The fifth category important to financial planning and budgeting in school nutrition is the determination of emerging trends.

Trends are general tendencies or directions in which a market or industry is moving. Identifying trends accurately leads to better forecasting of revenue and expenditures.
**DO:** Handout #19

**SAY:** Look at Handout #19 on page 70 in your workbook for seven trends that could impact a school nutrition program. Let’s review the instructions for completing the handout.

1. **Rank in importance which trends you think will have the most impact on financial management planning and budgeting.** Rank the trend you think will have the greatest impact 7, and rank the trend you think will have the least impact 1.

2. **Do not give any of the trends the same rank.** Even though you may feel that many of the trends will have an impact of 6 or 7, make a decision. All may seem equally important but, we are often called on to set priorities during our work day from equally significant factors. Try that approach here.

3. There are **NO RIGHT OR WRONG** answers in these rankings. We are interested in what trends you think are going to make the greatest impact on school budgets in the future.

4. After you rank the trends, we will tabulate some of the rankings on a flip chart sheet.
Handout #19  
Trends

Listed below are seven trends that are impacting financial management decision-making in school nutrition programs or will in the near future. Rank the impact of the innovation/trend on school nutrition programs in order from 7 to 1 (with 7 having the greatest impact and 1 having the least impact). Do not give any of the trends the same rank.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Highest</th>
<th>Lowest</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>A.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>B.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>C.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>D.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>E.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>F.</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>G.</td>
<td></td>
</tr>
</tbody>
</table>

A. _______ Labor shortages resulting in increased competition for qualified workers to fill positions as workers retire or leave the industry

B. _______ Increased workplace diversity with growing numbers of ethnic groups and social cultures

C. _______ Changing demographic makeup of the population leading to fewer families and children and larger numbers of retirees

D. _______ Continued implementation wellness initiatives that will result in limited non-reimbursable food sales and increased offerings of fruits, vegetables, and whole grain products

E. _______ Changing economy resulting in families with children having less discretionary dollars to spend on nonessentials

F. _______ A focus on “green” issues such as purchasing more energy efficient equipment and increasing eco-friendly practices such as recycling

G. _______ Growing concerns about food safety and food contamination

Instructor Note:

Before Class - Prepare a flip chart sheet for recording class rankings. Use three columns as shown in the example below.

During Class – Poll the participants and record their rankings according to the steps listed below

1. Go down the list of trends, starting with A, and ask participants to raise their hand if they ranked the trend a number 7. Count and record the number of 7 rankings for each trend in the first column. If a trend does not receive a ranking of 7, record 0.

2. Go down the list of trends again and ask participants to raise their hand if they ranked the trend a number 1. Count and record the number of participants voting 1 for each trend in the third column. If a trend does not receive a ranking of 1, record 0.

3. Review rankings of the trends with participants. Note the two trends with the most participants voting 7 and the two trends with the most votes for a rank of 1.
## Flip Chart Sheet (Example)

<table>
<thead>
<tr>
<th>Number of 7 rankings by participants</th>
<th>Trends</th>
<th>Number of 1 rankings by participants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A. Labor Shortages</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B. Work Diversity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C. Changing Demographics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>D. Wellness Initiative</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E. Changing Economy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>F. “Green” Issues</td>
<td></td>
</tr>
<tr>
<td></td>
<td>G. Food Safety</td>
<td></td>
</tr>
</tbody>
</table>

**ASK:** Are there other trends that might mean important changes for school nutrition programs? How might these trends affect the current budget? How will they affect planning and forecasting for next year’s budget?

*(Pause 3 or 4 minutes for participants to engage in a short discussion, and then wrap the session.)*
Objective 10: Understand the importance of using the budget as an analysis tool and control document.

Introduction to Topic

SHOW: Slide #60, Developing and Analyzing a School Nutrition Program Budget

SAY: The objective for this chapter is that upon completion of the activities, school nutrition directors will understand the importance of using the budget as an analysis tool and control document.

The link between financial management and budget preparation gives the budget document a unique role in school nutrition programs. The next activity is designed to help you understand the process of budget planning and serves as a review activity.

SAY: Remember that it is important to work through the calculations before checking your answers. It is the “doing” that imprints the process in your memory and reinforces your understanding.
Teaching Suggestion: The case study in this chapter is rather long and participants will need input from trainers as they work through the various activities. There are several ways to do this and each trainer will need to decide what works best for their teaching style. Regardless of how trainers approach the chapter, it is strongly suggested that they arrest the attention of the working groups periodically and review worksheet answers for accuracy and understanding of the case study activities. For example, budget worksheets (Pages 174 and 175) should be reviewed for accuracy before participants proceed to the section of the case study on analyzing the budget. You may also elect to check accuracy of the revenue worksheet on page 174 before participants proceed to the expenditure worksheet on page 175.

A. Budget Building: A Case Study

**DO:** Handout #20

**SAY:** Turn in your workbooks to Handout #20, Budget Building: A Case Study, starting on page 72. As you work through the case study, you will be required to use financial management tools introduced earlier in the lesson. Since this is a rather lengthy exercise, it will be important for you to work as a team or in pairs. We have only about 35 minutes for the case study exercise, so you may want to assign each team member a different calculation. As you look at the case study, you will likely notice that some of the calculations have been completed for you. This is due to time constraints and should help speed the process.

**SAY:** Before you begin working on the case study, let’s review the information provided to you on pages 72-74 in your workbook.

- The school district served meals 180 days per year.
- The number of meals served in each category is expected to stay the same in the new budget year.
- Due to a loss in the current year some prices are being raised. The new prices are provided on the first page of the case study.
• The federal reimbursement rate has been adjusted to the new rates. The rates are provided in the case study demographics.
• The reimbursement for free snacks increased to 0.74 cents.
• Other food sale prices will increase by 2%.
• Contract meal prices will increase by 3%.
• Interest on bank deposit will increase in July by 1%.
• State Matching funds will increase by 2%.
• It is estimated that the district will receive $3,000 in miscellaneous funds as a result of late disbursement of current year rebates.
• The USDA Foods value will decrease to $0.1950 cents per lunch – The amount received will be based on the number of lunches served in the current year.

**SAY:** We will now review the expenditure side.

• There will be a 4% raise in salaries and a 3% increase in benefits.
• Food costs are expected to increase by 5%.
• Supply costs are expected to go up about 3%.
• The program plans to add two new pieces of equipment for a cost of $50,000.
• The indirect cost charged by the school will remain the same.
• Overhead is expected to increase 4%.
• The annual revenue report for the current year is provided on page 75 in the case study, and expenditures for the year are provided by category on page 76.

**SAY:** Begin work on the case study by calculating the projected revenue and expenditures on pages 77-79. As soon as you finish those calculations, we will stop and review your answers before proceeding with the budget analysis on pages 80-82. Please feel free to ask me questions as I walk around the room to monitor your progress. For an easy reference to help you with the calculations, refer to page 64 in your FMIS manual for examples.
**Instructor’s Note:** It’s important to walk among the groups as they work to keep participants on task! Allow the full 35 minutes if necessary; however, if participants appear to finish the case study, begin the review. Don’t forget to note the beginning time to help participants stay on task.

**B. Budget Analysis**

**DO:** Review Case Study Answers

**SAY:** It’s time to review the budget analysis. If you have not finished all of the calculations, then you may want to do so as we review the answers.

**Instructor’s Note:** As a suggestion only, you may want to use the following process to review the case study. If time is short, it might be best to have participants volunteer.

**SAY:** I would like to ask that that each team alphabetize your group according to last names. The person whose name is LAST in alphabetical order in each group will answer for his team. We will begin the review of the budget analysis starting with case study question #1 on page 77. After I read the question, we will start with table ___ for the answer.

**Instructor’s Note:** Continue this process by moving from table to table until the first 7 questions are answered. If you run out of tables, start over with the person whose name is FIRST on the alphabetized list. If there are more groups than questions, skip around the room to select participants.

**DO:** Final Case Study Question

**SAY:** Now, let’s consider question number 10 which asks if there are there any changes you would recommend and if so, why? As we discuss your ideas for change, you may want to note them in the space provided under the question.

**Instructor’s Note:** The answer to this question should be held until after the discussion as this is a wrap-up activity for the lesson.
FEEDBACK: Possible answers include

(1) Supplies are over 9% of total revenue; possible waste?

(2) Examine expenditures.

(3) Look at revenue sources. If it is costing over $2.70 to prepare a meal equivalent, then the school district may need to increase the price to paying students and adult prices. Reevaluate a la carte and catering prices.

(4) The school nutrition program should examine prices charged for nonreimbursable food items. All items should be priced so there is no loss to the district. Evaluate prices so meal revenues are not supporting nonreimbursable food sales.

(5) Increase breakfast participation without increasing labor.

Instructor's Note: When the cost per meal exceeds the revenue per meal then each revenue source and expenditure category must be evaluated and the budget is recalculated. The revenue per meal is then compared to the cost per meal again.

SAY: Remember, if the cost of serving a meal is more than the revenue being generated per meal, increasing participation is not the correct way to break even. The school district must first analyze expenditures and pricing structure before promoting more meal sales. If more meals can be served without increasing labor and administrative costs, then it may be feasible to promote meal participation.
Maple School District
The school foodservice administrator is preparing the budget for the coming year. Using the information below and the attached revenue and expenditure reports, calculate the financial data needed to prepare the budget. The school district serves meals 180 days per year. Number of meals served is expected to stay the same.

Revenue
Due to a loss during the past year, the price of a student breakfast will be increased from $0.75 to $0.80, a student lunch from $1.75 to $2.00, and adult lunches from $2.50 to $2.75. Federal reimbursement has been adjusted to the new rates.

Meal Prices

<table>
<thead>
<tr>
<th></th>
<th>Breakfast</th>
<th>Lunch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Paid Student</td>
<td>$0.80</td>
<td>$2.00</td>
</tr>
<tr>
<td>Reduced Student</td>
<td>0.30</td>
<td>0.40</td>
</tr>
<tr>
<td>Adult</td>
<td>1.00</td>
<td>2.75</td>
</tr>
</tbody>
</table>

Federal Reimbursement Rates (2009-2010)

<table>
<thead>
<tr>
<th></th>
<th>Breakfast</th>
<th>Lunch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Student</td>
<td>$1.46</td>
<td>$2.68</td>
</tr>
<tr>
<td>Reduced Student</td>
<td>1.16</td>
<td>2.28</td>
</tr>
<tr>
<td>Paid Student</td>
<td>0.26</td>
<td>0.25</td>
</tr>
</tbody>
</table>

Afterschool Care Snack Service
All snack sites qualify as “free” eligible. The federal reimbursement for each free snack in the budget year will be $0.74.

Other Revenue

Other Food Sales
Prices charged for extra foods, a la carte items, and special functions are expected to increase by 2%. The increase will be calculated on the revenue received during the current year.
**Contract Food Sales**

The district plans a 3% increase in contract meal prices. Historical data indicates that the number of contract meals to outside organizations remain constant from year to year.

**Interest**

The school has negotiated a higher interest rate on bank deposits. The increase will amount to an estimated 1% increase in interest for the school foodservice fund.

**State Matching**

According to a state memo, state matching funds will increase by 2%.

**Miscellaneous**

Current year rebates that arrived in July accounted for a larger than usual revenue in the miscellaneous category. Historical data indicates the district received an average of $3,000 in food rebates after June 30 over the past several years.

**Donated USDA Foods**

USDA Foods Value per meal (based on student lunches served) will decrease to $0.1950 per reimbursable lunch. The total number of reimbursable student lunches served in the current year totaled 699,314 (See Revenue Report: Paid – 136,814, Reduced Price – 54,896, and Free - 507,604.)

**Expenditures**

**Salaries and Wages**

The board has given all employees a 4% raise in salaries. The salary increases will also result in an increase in benefits.

**Benefits**

The business manager advised the school nutrition director to budget a 3% increase for benefits.

**Purchased Food**

According to the state agency and market reports, food purchases are expected to rise 5%.
USDA Food Values
For budgeting purposes, USDA Foods received are expected to be expended. The amount budgeted for USDA Foods revenue will also be budgeted as USDA Foods expenditure.

General Supplies
The school nutrition program plans to increase the budget for supplies 3% due to higher bid prices.

Equipment
Because of a decrease in the fund balance over the past year, the school nutrition director is reducing the amount for equipment purchases. The school nutrition department plans to add two new pieces of equipment for an approximate total of $50,000.00.

Indirect Cost
The school board has agreed not to increase the amount for indirect cost charged to the school nutrition program.

Overhead
Due to a general increase in prices, the school nutrition program is planning to budget for an increase of 4% in overhead expenditures.
## Annual Revenue Report (Current Year)

### Maple School District

#### Breakfast

<table>
<thead>
<tr>
<th>Breakfast</th>
<th>Number</th>
<th>Price Charged</th>
<th>Reimbursement</th>
<th>Total $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paid Students</td>
<td>20,291</td>
<td>$ 0.75</td>
<td></td>
<td>$ 15,218</td>
</tr>
<tr>
<td>Reduced Price</td>
<td>17,435</td>
<td>0.30</td>
<td></td>
<td>5,231</td>
</tr>
<tr>
<td>Adult Breakfast</td>
<td>0</td>
<td>1.00</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Paid Student (Fed. R.)</td>
<td>20,291</td>
<td>$ 0.25</td>
<td></td>
<td>5,073</td>
</tr>
<tr>
<td>Reduced Student (Fed. R.)</td>
<td>17,435</td>
<td>1.10</td>
<td></td>
<td>19,179</td>
</tr>
<tr>
<td>Free Student (Fed. R.)</td>
<td>271,759</td>
<td>1.40</td>
<td></td>
<td>380,463</td>
</tr>
<tr>
<td><strong>Total Revenue/Breakfast</strong></td>
<td></td>
<td></td>
<td></td>
<td>$ 425,164</td>
</tr>
</tbody>
</table>

#### Lunch

<table>
<thead>
<tr>
<th>Lunch</th>
<th>Number</th>
<th>Price Charged</th>
<th>Reimbursement</th>
<th>Total $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paid Students</td>
<td>136,814</td>
<td>$ 1.75</td>
<td></td>
<td>$ 239,425</td>
</tr>
<tr>
<td>Reduced Price</td>
<td>54,896</td>
<td>0.40</td>
<td></td>
<td>21,958</td>
</tr>
<tr>
<td>Adult Lunch</td>
<td>10,110</td>
<td>2.50</td>
<td></td>
<td>25,275</td>
</tr>
<tr>
<td>Paid Student (Fed. R.)</td>
<td>136,814</td>
<td>$ 0.24</td>
<td></td>
<td>32,835</td>
</tr>
<tr>
<td>Reduced Student (Fed. R.)</td>
<td>54,896</td>
<td>2.19</td>
<td></td>
<td>120,222</td>
</tr>
<tr>
<td>Free Student (Fed. R.)</td>
<td>507,604</td>
<td>2.57</td>
<td></td>
<td>1,304,542</td>
</tr>
<tr>
<td>Afterschool Snacks (Free Site)</td>
<td>29,873</td>
<td>0.71</td>
<td></td>
<td>21,210</td>
</tr>
<tr>
<td><strong>Total Revenue Lunch/Snacks</strong></td>
<td></td>
<td></td>
<td></td>
<td>$1,765,467</td>
</tr>
</tbody>
</table>

### Other Revenue

<table>
<thead>
<tr>
<th>Revenue Item</th>
<th>Notes</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Food Sales</td>
<td>Extra foods, a la carte, special school events</td>
<td>$ 113,955</td>
</tr>
<tr>
<td>Contract Food Sales</td>
<td>Local organization (lunch for elderly)</td>
<td>14,200</td>
</tr>
<tr>
<td>Interest</td>
<td></td>
<td>3,155</td>
</tr>
<tr>
<td>State Matching</td>
<td>District receives one annual payment</td>
<td>18,835</td>
</tr>
<tr>
<td>*Miscellaneous</td>
<td>*Rebates on food previous year purchases</td>
<td>5,800</td>
</tr>
<tr>
<td>Total Other</td>
<td></td>
<td>$ 155,945</td>
</tr>
<tr>
<td>Sub-Total Revenue</td>
<td>(Breakfast, Lunch, Other)</td>
<td>$ 2,346,576</td>
</tr>
<tr>
<td>USDA Foods Value</td>
<td>Based on reimbursable lunches previous year</td>
<td>145,108</td>
</tr>
<tr>
<td><strong>Total All Revenue</strong></td>
<td></td>
<td>$ 2,491,684</td>
</tr>
</tbody>
</table>

*Note: Check with your state agency for the best method to project revenue from state funds. If state funds are issued on reimbursable meals served, add sections under meal & breakfast categories for state revenue.

Calculations are rounded to nearest whole.
### Annual Expenditure Report (Current Year)

**Maple School District**

<table>
<thead>
<tr>
<th>Expenditure Category</th>
<th>Expenditure Amounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries and Wages</td>
<td>$742,000</td>
</tr>
<tr>
<td>Employee Benefits</td>
<td>$308,500</td>
</tr>
<tr>
<td>Purchased Food</td>
<td>$909,370</td>
</tr>
<tr>
<td>USDA Foods Value</td>
<td>$145,108</td>
</tr>
<tr>
<td>Supplies</td>
<td>$229,870</td>
</tr>
<tr>
<td>Capital Equipment</td>
<td>$90,000</td>
</tr>
<tr>
<td>Indirect Cost</td>
<td>$75,000</td>
</tr>
<tr>
<td>*Overhead</td>
<td>$82,395</td>
</tr>
<tr>
<td><strong>Total Annual Expenditures</strong></td>
<td><strong>$2,582,243</strong></td>
</tr>
</tbody>
</table>

*Overhead combines several smaller categories of expenditures for purposes of analysis.*
**Answer Sheet: Case Study**

**Instructor’s Note:** Shaded cells are blank in the Participant’s Workbook.

Budget Planning: Calculate blank cells using Maple School District Data.

### Revenue Budget Worksheet

<table>
<thead>
<tr>
<th>Breakfast</th>
<th>Number</th>
<th>Price</th>
<th>Reimbursement</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paid Students</td>
<td>20,291</td>
<td>$0.80</td>
<td></td>
<td>$16,233</td>
</tr>
<tr>
<td>Reduced Price</td>
<td>17,435</td>
<td>0.30</td>
<td></td>
<td>5,231</td>
</tr>
<tr>
<td>Adult Breakfast</td>
<td>0</td>
<td>1.00</td>
<td>$0.26</td>
<td>0.00</td>
</tr>
<tr>
<td>Paid Student (Fed. R.)</td>
<td>20,291</td>
<td></td>
<td>$0.26</td>
<td>5,276</td>
</tr>
<tr>
<td>Reduced Student (Fed. R.)</td>
<td>17,435</td>
<td></td>
<td>1.16</td>
<td>20,225</td>
</tr>
<tr>
<td>Free Student (Fed. R.)</td>
<td>271,759</td>
<td></td>
<td>1.46</td>
<td>396,768</td>
</tr>
<tr>
<td><strong>Total Revenue/Breakfast</strong></td>
<td></td>
<td></td>
<td></td>
<td>443,733</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lunch</th>
<th>Number</th>
<th>Price</th>
<th>Reimbursement</th>
<th>Total$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paid Students</td>
<td>136,814</td>
<td>$2.00</td>
<td></td>
<td>273,628</td>
</tr>
<tr>
<td>Reduced Price</td>
<td>54,896</td>
<td>0.40</td>
<td></td>
<td>21,958</td>
</tr>
<tr>
<td>Adult Lunch</td>
<td>10,110</td>
<td>2.75</td>
<td></td>
<td>27,803</td>
</tr>
<tr>
<td>Paid Student (Fed. R.)</td>
<td>136,814</td>
<td></td>
<td>$0.25</td>
<td>34,204</td>
</tr>
<tr>
<td>Reduced Student (Fed. R)</td>
<td>54,896</td>
<td></td>
<td>2.28</td>
<td>125,163</td>
</tr>
<tr>
<td>Free Student (Fed. R.)</td>
<td>507,604</td>
<td></td>
<td>2.68</td>
<td>1,360,379</td>
</tr>
<tr>
<td>Afterschool Snacks (Free sites)</td>
<td>29,873</td>
<td></td>
<td>0.74</td>
<td>22,106</td>
</tr>
<tr>
<td><strong>Total Revenue/ Lunch &amp; Snacks</strong></td>
<td></td>
<td></td>
<td></td>
<td>$1,865,241</td>
</tr>
</tbody>
</table>

---

Financial Management Instructor’s Manual 12 hour course

National Food Service Management Institute
## Other Revenue

<table>
<thead>
<tr>
<th>Revenue Item</th>
<th>Note: Current Year Revenue</th>
<th>100% plus % increase</th>
<th>Budget Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Food Sales</td>
<td>$ 113,955</td>
<td>2% (Multiply x 102 and then hit percent sign instead of equal sign)</td>
<td>$ 116,234</td>
</tr>
<tr>
<td>Contract</td>
<td>14,200</td>
<td>3%</td>
<td>14,626</td>
</tr>
<tr>
<td>Bank Interest</td>
<td>3,155</td>
<td>1%</td>
<td>3,187</td>
</tr>
<tr>
<td>State Matching</td>
<td>18,835</td>
<td>2%</td>
<td>19,212</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>5,800</td>
<td>Based on historical data</td>
<td>3,000</td>
</tr>
<tr>
<td>Total Other</td>
<td>$ 155,945</td>
<td></td>
<td>156,259</td>
</tr>
<tr>
<td>Sub-Total Revenue</td>
<td></td>
<td>Sub total revenue for breakfast, lunch, and other revenue</td>
<td>2,465,233</td>
</tr>
<tr>
<td>USDA Foods Value</td>
<td>$ 145,108</td>
<td>1 $699,314 x $0.1950</td>
<td>136,366</td>
</tr>
<tr>
<td>Total All Revenue</td>
<td></td>
<td></td>
<td>$ 2,601,599</td>
</tr>
</tbody>
</table>

1 Lunches served this year x new donated USDA Foods rate

*Note: Check with your state agency for the best method to project revenue from state funds. If state funds are issued on reimbursable meals served, add sections under meal & breakfast categories for state revenue.*
## Answer Sheet: Case Study

### Budget Planning: Calculate blank cells using Maple School District Data.

<table>
<thead>
<tr>
<th>Expenditure Category</th>
<th>Current Year Expenditure Totals</th>
<th>Project % increase</th>
<th>New Budget Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries and Wages</td>
<td>$742,000</td>
<td>4% (Multiply x 104 and then hit percent sign instead of equal sign)</td>
<td>$771,680</td>
</tr>
<tr>
<td>Employee Benefits</td>
<td>308,500</td>
<td>3%</td>
<td>317,755</td>
</tr>
<tr>
<td>Purchased Food</td>
<td>909,370</td>
<td>5%</td>
<td>954,839</td>
</tr>
<tr>
<td>USDA Foods Value</td>
<td>145,108</td>
<td>699,314 x 0.1950</td>
<td>136,366</td>
</tr>
<tr>
<td>Supplies</td>
<td>229,870</td>
<td>3%</td>
<td>236,766</td>
</tr>
<tr>
<td>Capital Equipment</td>
<td>90,000</td>
<td>Based on need</td>
<td>50,000</td>
</tr>
<tr>
<td>Indirect Cost</td>
<td>75,000</td>
<td>No Change</td>
<td>75,000</td>
</tr>
<tr>
<td>*Overhead</td>
<td>82,395</td>
<td>4%</td>
<td>85,691</td>
</tr>
<tr>
<td><strong>Total Expenditures</strong></td>
<td><strong>$2,582,243</strong></td>
<td></td>
<td><strong>$2,628,097</strong></td>
</tr>
</tbody>
</table>

**Hint:** To calculate projected cost in budget, multiply expenditure x percent increase + 100 (Example 103), and then push **percent key**. If you use the = sign, you will get a decimal, not a percent.
Analyzing the Budget

Answer Sheet

A budget is a tool for financial management. It helps the school foodservice administrator decide when a price increase is needed and when expenditures must be decreased. Analyze the budget you have just completed for Maple School District by answering the following questions.

1. What is the projected bottom line net (excess or deficit) in the budget? Compare the Revenue Budget worksheet with the Expenditure Budget worksheet.

   Total revenue ($2,601,599) – Total expenditures ($2,628,097) = -$26,498

2. Based on the budget worksheets, will there be an improvement in the financial status of the school nutrition program in Maple School District in the next school year? If so, how much?

   Yes. The current year loss is $90,559; budget loss is $26,498.

3. What contributed to the improvement?

   Possible Points: Less money spent on equipment. All other expenditure categories are about the same percent of total revenue as the previous year.

4. How much of the $90,559 loss could be attributed to a loss in the adult meals category?

   Hint: Revenue from adult meals is 2.50 per meal served x 10,110 lunches served = $25,275

   Cost of adult meals is lunches served x cost per meal (10,110 x $2.6545)
   10,110 x $2.6545= $26,837 costs to served adult lunches.
   $26,837(costs) minus-$25,275 (revenue) = $1,562 loss in adult lunches
5. What are the percentages of projected expenditures to total budgeted revenue in the following categories (Total projected revenue in new budget = $2,601,599). Refer to the Expenditure Budget for the amount budgeted in each category.

<table>
<thead>
<tr>
<th>Category</th>
<th>Budgeted Amount</th>
<th>% of Revenue</th>
<th>Rounded Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries and Wages</td>
<td>$771,680</td>
<td>(0.2966 x 100)</td>
<td>29.66%</td>
</tr>
<tr>
<td>Employee Benefits</td>
<td>317,755</td>
<td>12.21%</td>
<td>12%</td>
</tr>
<tr>
<td>Purchased Food</td>
<td>954,839</td>
<td>36.70%</td>
<td>37%</td>
</tr>
<tr>
<td>USDA Foods Value</td>
<td>136,366</td>
<td>5.24%</td>
<td>5%</td>
</tr>
<tr>
<td>Supplies</td>
<td>236,766</td>
<td>9.10%</td>
<td>9%</td>
</tr>
<tr>
<td>Capital Equipment</td>
<td>50,000</td>
<td>1.92%</td>
<td>2%</td>
</tr>
<tr>
<td>Indirect Cost</td>
<td>75,000</td>
<td>2.88%</td>
<td>3%</td>
</tr>
<tr>
<td>Overhead</td>
<td>85,691</td>
<td>3.29%</td>
<td>3%</td>
</tr>
<tr>
<td><strong>Total Expenditures</strong></td>
<td><strong>$2,628,097</strong></td>
<td><strong>101.00%</strong></td>
<td><strong>101%</strong></td>
</tr>
</tbody>
</table>

6. How many total meal equivalents are projected for Maple School District in the new budget? Complete the cells and make the necessary calculations.

<table>
<thead>
<tr>
<th>Meal Category</th>
<th>Meal/Sales</th>
<th>Conversion Factor</th>
<th>Meal Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Lunch</td>
<td>699,314</td>
<td>1</td>
<td>699,314</td>
</tr>
<tr>
<td>Adult Lunch</td>
<td>10,110</td>
<td>1</td>
<td>10,110</td>
</tr>
<tr>
<td>Student Breakfast</td>
<td>309,485</td>
<td>.67</td>
<td>(309,485 x .67)</td>
</tr>
<tr>
<td>Snacks</td>
<td>29,873</td>
<td>.33</td>
<td>(29,873 x .33)</td>
</tr>
<tr>
<td>Non-reimbursable Food Sales/Contract Sales</td>
<td>$130,860</td>
<td>*</td>
<td>($130,860 / 2.875)</td>
</tr>
<tr>
<td><strong>Total Meal Equivalents</strong></td>
<td></td>
<td></td>
<td>972,154</td>
</tr>
</tbody>
</table>

*Food Sales divided by Free Lunch Reimbursement ($2.68) + USDA Foods Value per Meal ($0.1950).

Use new reimbursement rate for calculations.
7. What is the projected revenue per meal equivalent in the budget?
   Formula: Total Projected Revenue/Projected Meal Equivalents
   \[
   \frac{\$2,601,599}{972,154} = \$2.6761
   \]

8. What is the projected cost to produce a meal?
   Formula: Projected Expenditures/Projected Meal Equivalents
   \[
   \frac{\$2,628,097}{972,154} = \$2.7034
   \]

9. Based on the new projected meal cost, will the price for adult lunches be sufficient to cover the cost in the next school year?
   The price budgeted for an adult lunch is $2.75; the projected cost is slightly over $2.70 ($2.7034). This could result in a small gain in adult meals.
   Total Revenue: $2.75 \times 10,110 \text{ adult meals} = \$27,803
   Total Cost: $2.7034 \times 10,110 \text{ adult meals} = \$27,331 (gain of about \$472.00)

10. Are there any changes you would recommend to erase this deficit? Why?

[Make a note of recommendations provided in the follow-up discussion.]
**Energizer (Optional)**

**Mind Mapping Activity**

_Instructor’s Note:_ This Mind Mapping energizer is an optional activity. The instructors may make the decision to include the activity if they are assured that they will have sufficient time. The regular 12 hour schedule does not include enough time to fully complete the Mind Mapping Activity.

**SAY:** It’s time to think about an energizer and the information you have covered in the last two days. We are going to participate in an activity called Mind Mapping. Mind Mapping allows us to see how concepts and information relate. It represents a graphic organizer of connections, relationships, and interactions.

Mind Mapping involves writing down a central idea and thinking of new and related ideas which flow out from the center. By focusing on key concepts that branch and connect, one can map knowledge in a manner that will provide an understanding of the “big picture.”

**DO:** Demonstrate Mind Mapping

**Steps for Mind Mapping**

1. Write down a central idea or topic in the center of the page. Circle the idea. With the main idea or topic in the middle of the page, relationships and connections radiate out from the center.

2. Use lines, colors, arrows, branches, or other ways of showing connections between the ideas generated on the mind map. Personalize the map with symbols and designs so that the map provides a more visual picture between relationships.

3. Draw quickly on the unlined paper without passing judgment or editing. Remember the idea of mind mapping is to think creatively.

**SAY:** We can use such an activity to better understand how communication in the school environment affects relationships and interaction. Let’s try a fun example first.

_Instructor Note:_ Demonstrate as you speak.
SAY: Suppose you are planning a trip to Hawaii. The central topic is “Hawaiian Trip,” so start by writing Hawaii in the center of the sheet. Circle Hawaii, and then branch out the main events of your trip.

For example, you may want to plan for transportation, lodging, entertainment activities, and the budget. (Ask participants for ideas; allow for free flowing discussion.)

ASK: (1) What do you think should be our branches?

(2) Under each branch, what is involved for each event?

SAY: For example, in thinking about lodging, what are the options – hotels, cabins, camping? Transportation might involve flying, car rental, taxis, streetcars, bicycles, etc. Remember you can add to the map at any time.

DO: Mind Mapping Assignment

SAY: Develop a map that depicts the lines of effective communication in the school environment as it relates to the school nutrition director. Identify each player and their responsibilities related to the school nutrition program. Think about relationships, interaction of the players, responsibilities, and types of critical information that need to be communicated. With these ideas each group will need to

1. select a leader to pick up materials and guide the activity,
2. select a recorder to draw the map, and
3. take 5 minutes to organize ideas and map them on paper.
4. After 5 minutes, the groups will stop mapping and begin moving around the room (move to the right) to examine the maps of other groups. Make notes. Take 5 minutes to look over the maps.
5. Each group will return to their seats and compare notes.
ASK:

1. How similar were the maps from each group? *(Allow one or two participants to respond.)*

2. What can we tell about the communication lines from this exercise? *(Allow one or two participants to respond.)*

_Instructor’s Note:_ Because the maps will be different, there are no right or wrong answers to these questions. The idea is to get participants to **think** about communication.
Objective 11: Identify appropriate tools and resources to analyze the school nutrition program’s financial status.

Introduction to Topic

Teaching Suggestion: Keep this demonstration simple. The idea is to show participants how they can utilize spreadsheets to evaluate financial data and to create interest in using charts to assist when presenting financial information. You cannot teach the mechanics of setting up spreadsheets in the short time allotted. If you say this up front, they will enjoy the demonstration.

No more than 30 minutes should be spent on Excel spreadsheets and charts. It’s important for the trainer to partially complete the spreadsheets prior to teaching to facilitate the flow of the demonstration. This will allow the participants to see the advantages of using a spreadsheet and the ease of converting spreadsheet data into charts.

SHOW: Slide #61, Tools to Analyze the Financial Status of School Nutrition Programs
SAY: Our next chapter, “Tools to Analyze the Financial Status of SNPs” starts on page 83 in your workbook. The objective for the chapter is to identify tools and resources to analyze the school nutrition program. The demand of policy makers at the local, state, and federal level for more accountability in school nutrition programs drives the need for data systems and analysis tools that allow school officials to make appropriate, cost-effective, and timely decisions. The benefits are especially apparent in analyzing the relationship between programs and costs. For example, financial reports can be used to compare financial results with adopted budgets; assess financial conditions; assist in evaluating efficiency and effectiveness; and plan for the future.

A. Microsoft Excel Spreadsheet

SAY: Microsoft Excel is a spreadsheet program written and distributed by Microsoft for computers using the Microsoft Windows operating system and Apple Macintosh computers. We are going to demonstrate setting up a very basic and simple Microsoft Excel spreadsheet using Microsoft Office 2003. Please keep in mind that Microsoft Office 2007 has more features and some of the instructions for creating charts will differ significantly from this demonstration. If you decide to use spreadsheets to prepare analysis reports for your school nutrition program and are not familiar with the set-up procedures, you may want to find someone who can give you more in depth instruction than we can provide in this class. There may be teachers or other administrators in your school district who can help or you might want to check whether adult education courses are offered as a community service near your home. If so, a class on Microsoft Office applications may be offered.

Instructor Note: The steps provided in this topic for setting up an Excel spreadsheet are very simple. However, you should practice several times before you demonstrate to a class. The information used to set up the spreadsheet reflects the calculations in Handouts 9 and 10 from Chapter 7 to help participants relate to the speed and accuracy of using a computerized spreadsheet instead of a calculator.
**DO:** Demonstrate setting up a spreadsheet

**SAY:** You will find instructions for creating a Microsoft Excel spreadsheet using Office 2003 starting on page 84 in your workbook. We will create a formula that will allow Excel to make all the calculations that you made using calculators in Handouts #9 and #10 (from Chapter 7, pages 49 and 51, respectively, from your Participant Workbook).

**Instructions and Demonstration**

1. Click on the **Start** button at the bottom of the computer screen.

2. Click on **All programs**.

3. Select and open the **Microsoft Excel** program to display a worksheet on the computer screen.

4. Plan the spreadsheet. You may need to customize the spreadsheet by enlarging column widths. This is important to allow room for typing labels and data entry. To widen columns, place the mouse pointer on the line between Column A and B in the Column Header row. The pointer will change to a double-headed arrow. Click the left mouse button and drag the double-headed arrow to the right to widen the column. We will double the space in each column (columns A, B, C, and D) for this exercise. Widen columns B, C, and D using the same procedure used to widen column A.

5. Next, type a label at the top of each column to explain the information in the spreadsheet.

   **Instructor Note:** Have all labels, but one pre-entered in Row 1. Enter one label to demonstrate. Show participants how to center and bold the label headings.
SAY: To bold the label headings, select (highlight) the headings to put in bold font; go to the Font tab and select B for bold. To center the labels within the cells, select the cells in which you wish the labels to be centered, go to the Alignment Tab and select the diagram of a document with the text centered.

- Column A1 identifies the row titles as Expenditures in A1.
- Column B will contain the data we want to analyze in dollar amounts. Press the right arrow to move to cell B1 and type in Dollar Amount.
- Columns C and D represent what we want Excel to calculate for us. We are using the labels Meal Cost in C1 and Cost % of Revenue in D1. Abbreviate as much as possible. See example 1 in your workbook on page 81.

*(Instructor Note: pre-enter Columns C and D labels)*

Example 1: Column Labels

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Expenditures</td>
<td>Dollar Amount</td>
<td>Meal Cost</td>
<td>Costs % of Revenue</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. The next step in the planning stage is to set the number of decimal places to display in Columns C & D. Because Columns A and B cells will contain data that you enter, there is no need change the decimal setting.

- First, decide the number of decimal places you want to display in column C. We used 4 decimal places in Handout 9.
- Click on cell C2; hold down the left mouse button and move down to highlight rows 2 – 10. These are the cells that Excel will calculate for us. *(Demonstrate the procedure.)*
- On the **Format** menu, click **Cells**, and then click the **Number** tab in the dialogue box. Click on **Number** in the displayed list. A **Decimal places** box will appear. To display 4 decimal places on the spreadsheet, arrow up to 4 and click **OK**.

- Repeat the process for column D, but instead of displaying 4 decimal places, let’s display 2 decimal places for the percentage costs of revenue. Remember, we want to display the number in Column D in the form of a percent.

- Click **OK** to return to the spreadsheet.

7. Now you are ready to enter the row titles. Click cell A2. Type Salaries in A2. Press the down arrow to move to cell A3. Repeat the process until you have typed in all expenditure categories shown on Handout 9.

  **Instructor Note:** Demonstrate by typing in Benefits in A3. Prior to teaching, pre-enter all other rows in the following order: Purchased Food in A4, USDA Foods Value in A5, Supplies in A6, Capital Equipment in A7, Indirect Costs in A8, Overhead in A9, and Total in A10. Abbreviate when possible (i.e., P. Food).

8. **Highlight cells A1 - A10** and **bold** the labels in each cell. See example 2 in your workbook on page 86.

**Example 2: Row Titles**

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Expenditures</td>
<td>Dollar Amount</td>
<td>Meal Cost</td>
<td>Costs % of Revenue</td>
</tr>
<tr>
<td>2</td>
<td>Salaries</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Benefits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>P. Food</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>USDA Foods Value</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Supplies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Capital Equip.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Indirect Cost</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Overhead</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SAY: You are now ready to enter data for financial analysis. See an example of a data entry table on page 87 in your workbook. In this spreadsheet we want Excel to calculate meal costs and cost percentages as shown on Handouts #9 and #10 on pages 49 and 51 in your workbook.

- Click on cell B2 and enter 742,000 for Salaries.
- Press the down arrow key and enter 308,500 in B3.
- **Instructor Note:** All other cells in Column B should be completed prior to class. The trainer might consider making an error purposefully. Acknowledge the error, but leave it until the end of the exercise, then correct the error. This will show participants how the spreadsheet calculates across all cells if an error is found and corrected.
- Pre-entered Data for Column B
  - B4: 909,370,
  - B5: 109,175,
  - B6: 229,870,
  - B7: 90,000,
  - B8: 75,000, and
  - B9: 82,395.

Example 3: Data Entry

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Expenditures</td>
<td>Dollar Amount</td>
<td>Meal Cost</td>
</tr>
<tr>
<td>2</td>
<td>Salaries</td>
<td>742,000</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Benefits</td>
<td>308,500</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>P. Food</td>
<td>909,370</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>USDA Foods Value</td>
<td>145,108</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Supplies</td>
<td>229,870</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Capital Equip.</td>
<td>90,000</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Indirect Cost</td>
<td>75,000</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Overhead</td>
<td>82,395</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SAY: Next we are going to create a formula for Column C that will allow Excel to calculate the average cost per meal equivalent by expenditure category. Remember, meal cost is determined by dividing the dollar amount in each category by the total number of meal equivalents. For this spreadsheet, you will use the 972,777 meal equivalents from Handout #5.

_Instructor Note:_ The trainer should not pre-enter this information. The cells will automatically populate using the formula by using the copy and paste function.

_NOTE:_ Remind participants that if they use Office 2007, a different technique is used to copy and paste formulas.

- Click on cell C2 which represents Salaries.
- Type in the formula =B2/973,777. It is important to remember that Excel formulas start with the equal sign. The equal sign tells Excel what follows is a formula, and not just another number. Notice we did not type a comma in the number representing meal equivalents.
- Hit enter and the cost per meal for salaries will appear in cell C2.
- Paste the formula in the remaining cells by following these instructions. (Trainers will need to practice demonstrating while they are giving instructions to participants.)
  - Click on cell C2. It should contain 0.7628.
  - Move the mouse pointer to Copy at top of screen.
  - Click copy.
  - Move mouse pointer to cell C3, click and hold down the left mouse button highlighting C3 through C9.
  - Move the mouse pointer to Paste at the top of the screen and click.
SAY: Cells for each of the remaining categories in Column C will populate with the meal cost carried to the 4th decimal place. Look at the example on page 88 in your workbook and compare with Handout #9 on page 49 to see if the calculations match.

Example 4: Meal Cost Calculation

Given: Meal Equivalents – 972,777

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditures</td>
<td>Dollar Amount</td>
<td>Meal Costs</td>
<td>Cost % of Revenue</td>
</tr>
<tr>
<td>Salaries</td>
<td>742,000</td>
<td>0.7628</td>
<td></td>
</tr>
<tr>
<td>Benefits</td>
<td>308,500</td>
<td>0.3171</td>
<td></td>
</tr>
<tr>
<td>P. Food</td>
<td>909,370</td>
<td>0.9348</td>
<td></td>
</tr>
<tr>
<td>USDA Foods Value</td>
<td>145,108</td>
<td>0.1492</td>
<td></td>
</tr>
<tr>
<td>Supplies</td>
<td>229,870</td>
<td>0.2363</td>
<td></td>
</tr>
<tr>
<td>Capital Equip.</td>
<td>90,000</td>
<td>0.0925</td>
<td></td>
</tr>
<tr>
<td>Indirect Cost</td>
<td>75,000</td>
<td>0.0771</td>
<td></td>
</tr>
<tr>
<td>Overhead</td>
<td>82,395</td>
<td>0.0847</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>183</td>
</tr>
</tbody>
</table>

*Instructor Note:* If you made an error in typing, show participants how to correct, by clicking on the cell with the error and retyping the correct information, so they can observe how the spreadsheet carries the correction to all cells.

SAY: To insert the formula for calculating the cost percentage of total revenue, repeat the process used in Column C. The formula must tell Excel to divide the dollar amount in each category in Column B by the total amount of revenue and then convert the value to percent. Handout #10 tells us the total revenue was $2,491,684.

- Click on cell D2.
- Type in the formula =B2/2491684*100. This formula converts decimals to percentages.
- Hit enter and the cost percentage to total revenue for salaries will appear in cell D2.
- Paste the formula in the remaining cells by following the instructions for determining meal costs in Column C.
- You can round the calculations in Column E by choosing 0 decimal places.
- Compare with Handout #10 to see if the calculations match.
Example 5: Calculating Percentages of Cost to Total Revenue

Given: Total Revenue - $2,491,684

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditures</td>
<td>Dollar Amount</td>
<td>Meal Costs</td>
<td>Costs % of Revenue</td>
<td>% Rounded</td>
</tr>
<tr>
<td>2 Salaries</td>
<td>742,000</td>
<td>0.7628</td>
<td>29.78</td>
<td>30%</td>
</tr>
<tr>
<td>3 Benefits</td>
<td>308,500</td>
<td>0.3171</td>
<td>12.38</td>
<td>12%</td>
</tr>
<tr>
<td>4 P. Food</td>
<td>909,370</td>
<td>0.9348</td>
<td>36.50</td>
<td>37%</td>
</tr>
<tr>
<td>5 USDA Foods Value</td>
<td>145,108</td>
<td>0.1492</td>
<td>5.82</td>
<td>6%</td>
</tr>
<tr>
<td>6 Supplies</td>
<td>229,870</td>
<td>0.2362</td>
<td>9.23</td>
<td>9%</td>
</tr>
<tr>
<td>7 Capital Equip.</td>
<td>90,000</td>
<td>0.0925</td>
<td>3.61</td>
<td>4%</td>
</tr>
<tr>
<td>8 Indirect Cost</td>
<td>75,000</td>
<td>0.0771</td>
<td>3.01</td>
<td>3%</td>
</tr>
<tr>
<td>9 Overhead</td>
<td>82,395</td>
<td>0.0847</td>
<td>3.31</td>
<td>3%</td>
</tr>
<tr>
<td>10 Total</td>
<td>2,582,243</td>
<td>2.6545</td>
<td>103.64</td>
<td>104%</td>
</tr>
</tbody>
</table>

\[\text{SAY:}\] The last step is to total Columns B, C, D, and E. You could type a formula, but in this case it might be easier to use the \(\Sigma\) symbol \(\Sigma\) at the top of the screen. Notice it looks sort of like a Capital E written backwards.

- Highlight rows B2 thorough E9 with the mouse pointer.
- Move the pointer to \(\Sigma\) at the top of the screen and click. The total of all expenditure categories will appear in B10.
- Repeat the process for Columns C - E.

Example 6: Column Totals
SAY: An alternate method calculates totals for columns in one step.

- Highlight B10 through E10.
- Move the pointer to ∑ at the top of the screen and click.
- The total of each column will appear in B10, C10, D10, and E10.

SAY: Save the spreadsheet under a file name of your choosing. For this spreadsheet we will save the file as “Expenditure Analysis.”

ASK: Are there any questions? If not, we will now create a pie chart.

B. Using Pie Charts as a Way of Summarizing Financial Data

SAY: Pie Charts are a great way to display the contribution of a segment of data in proportion to the whole category.

- The entire pie represents all data in the category and each slice represents segments within the category.
- Pie charts are excellent tools to use when reporting financial data to school officials and school board members because they are in a visual format that is easy to understand.

DO: Demonstrate Creating a Pie Chart with Microsoft Excel

Instructor Note: Remind participants again that if they are creating a pie chart in Microsoft Office 2007 the steps will differ and that a web site address is provided for a tutorial on developing charts using Excel 2007 in the participant workbook on page 87.

Pie Chart Data

**SAY:** The instructions that I am using to create a pie chart are included in your workbook and begin on page 90. To create a pie chart, one must first set up a spreadsheet with a single series of labeled data. It is necessary to use two or more columns on the spreadsheet. Designate the first column for labels of data entries and the following columns for data. An example is provided in your workbook.

**Example:**

<table>
<thead>
<tr>
<th>Column A (labels)</th>
<th>Column B (Data)</th>
<th>Column C (Data)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>B</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>C</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

**SAY:** The spreadsheet we completed for expenditure analysis meets these criteria so we can use that data to create a Pie Chart in Microsoft Excel.

**Instructions and Demonstration**

1. Open Microsoft Excel.
2. Open the spreadsheet file that contains the data you want to display in a Pie Chart.
3. Highlight the labels and data in Columns A and B that you want in the pie chart, i.e., highlight A2 through B9.

**Instructor Note:** Place the mouse pointer to **Salaries** in cell A2, click, and hold the mouse button down while you drag to include Columns A and B ending with **Overhead** in cell A9 and **78,470** in cell B9. Note: We are excluding row 10 (Total) because Excel knows the sum internally when you highlight rows 2-9.

4. Click on the Chart Wizard icon at the top of the screen or go to Insert, then click on Chart to bring up **Step 1 of 4** (Chart Type).
   - Select “pie” under the “Standard” tab.
   - Next select the desired view (i.e., flat, 3-D, etc.) under Chart Sub Type.
5. Select **Next** in the chart wizard. This brings up **Step 2 of 4** (Chart Source Data). This box is for selecting the data range to include in the Pie Chart. There are two tabs, Data Range and Series. You have already selected the data when you highlighted Columns A and B, so you can move to the next step. Note: under “Series In”, “columns” has already been selected. Accept it, and click next.
6. Select **Next** in the chart wizard. This brings up **Step 3 of 4** (Chart Options). There are three tabs under Chart Options: Title, Legend, and Data Labels. Select the following under each tab:

- **Title** tab: Type in chart name (i.e., Expenditures). Move to next tab.
- **Legend** tab: Select the area of the page you want the legend to appear (i.e., left side, right side, above chart or under the chart). Move to next tab.
- **Data Labels** tab: Select the labels you want to appear on the pie slices (i.e., value, name, percentages, etc.)

*Hint* *Try value and percentages. Try right side.*
7. Select **Next** in the chart wizard to bring up **Step 4 of 4** (Chart Location). Choose your preferred location for the chart. If you desire only the pie chart, select “as going new sheet.” If you prefer to have the chart on the spreadsheet data page, select “as object in.” We’re to choose what’s already selected, i.e., we’re choosing “as object in sheet”.

8. Click **Finish**. Pie Chart will appear.
9. You can modify data label alignments by clicking on each individual set of numbers. For instance, percentages can be moved so they appear below the values by placing the cursor after the comma between the sets of numbers and hitting return.

**ASK:** What do these percentages represent?

**FEEDBACK:** It is important to remember that these percentages represent the proportion of each expenditure category to total expenditures and not to total revenue.

**C. Creating a Pie Chart to show Meal Cost in each category**

1. Go back to the Excel Spreadsheet.

2. Before you create the pie chart, you need to change the decimal display to show only 2 decimals for meal costs. This will represent a more meaningful tool to the average viewer. *(Quickly repeat the procedure to change the decimal display and return to the spreadsheet.)*
3. If the cells that you want to select for the chart are not in a continuous range, select the first group of cells that contain the data you want in the pie chart. Hold down **CTRL**, and then select any additional cell groups that you want to include. The nonadjacent selections must form a rectangle. For the pie chart that we are creating
   - Select the Expenditure labels, A2 – A9, and highlight.
   - Hold down **CTRL** and select the meal cost data, C2 – C9.

4. Open the Chart Wizard and repeat all steps. In step 3, type in the total meal cost in the title i.e., Per Meal Costs = $2.65. When you complete the steps, the new chart will appear.

   ![Pie Chart](image)

   **Per Meal Costs = $2.65**

   - Salaries
   - Benefits
   - P. Food
   - USDA Foods Value
   - Supplies
   - Capital Equip.
   - Indirect Cost
   - Overhead

   **SAY:** As you can see, the Pie Chart is a very graphic picture of the cost to produce a meal equivalent and which categories of expenditures are taking more dollars. If you are trying to communicate to a group of faculty members that you are spending 76 cents for labor and another 32 cents for benefits, they may not “get the picture.” However, if you distribute this pie chart, it becomes very clear that a huge “chunk” of the $2.65 cents that it costs to produce a meal equivalent goes for employee salaries and benefits. This type pie chart can be used when communicating the need for increasing the price of meals to school officials, board members, and parents.
ASK: Are there any questions?

SAY: The Pie Charts are ready to print or you can save them in your files for printing later. Instructions for saving and printing your spreadsheet and pie charts are included in your workbook on page 96.

D. Saving and Printing Excel Spreadsheets and Pie Charts

_Instructor’s Note:_ Refer participants to their workbook for instructions for saving and printing their worksheet and pie charts when they work with them at home later. Do not spend any time demonstrating this unless you are in a computer laboratory and participants have access to computers and printers. If time allows, create pie chart for Column D, “Cost % of Revenue”.

Instructions

Saving

- To quickly save a document, click **SAVE** on the standard toolbar at the top of the page.

  **Note:** If you are saving the file for the first time, you will be asked to give it a name.

To save a document to a different location or by a different name;

- On the **FILE** menu, click **SAVE AS**.
- In the **File name** box, enter a new name for the file.
- In the **SAVE IN** box, specify where you want the file saved.
- Click **SAVE**.
Printing (from Excel)

- You can print your document by clicking the PRINT icon on the standard toolbar at the top of the page.

To ensure that gridlines show up on your spreadsheet printout;

- Click on FILE, then click on PAGE SETUP, and then click the SHEET tab.
- Select the GRIDLINES checkbox. (Alternatively, you can highlight cells A1 through D10 and select All Borders from the Borders icon from the menu along the top of the EXCEL spreadsheet). Click PRINT.

Note: Worksheets print faster if you print without gridlines.

E. Using the Internet as a Resource

SHOW: Slide #62, Internet Resources for Child Nutrition Programs

Internet Resources for Child Nutrition Programs
- United States Department of Agriculture (USDA)
- National Food Service Management Institute (NFSMI)
- School Nutrition Association (SNA)

Turn to pages 97-99 in your workbook. Three Web sites are listed that provide a wealth of information to help the school district with forecasting. Helpful Web sites are:

- NFSMI – www.nfsmi.org
- School Nutrition Association – www.schoolnutrition.org
  http://schoolmeals.org
SAY: You can explore in depth the topics that interest you when you return to your district. Learn to maneuver through Home Page menus to find information.

Instructions

• Click the internet icon.

• Type `www.fns.usda.gov/cnd/lunch` in the address bar at the top of the page.

• Click on `Research` in the `See Also` list at the top right of the page.

• Find in the list of research, `School Lunch and Breakfast Cost Study-II`.

• Click on `Report Summary`. If you wish, you can print the 2-page summary.

• Click on `Research` in the `See Also` box at the right side of the page.

• Click on the `Report Summary` under the listing, `School Lunch and Breakfast Cost Study-II`.

• You may wish to print the two page report.
Now, go to the National Food Service Management Institute Web site.

- Type **www.nfsmi.org** in the address bar at the top of the page.
• Now, go to the School Nutrition Association Web site.
• Type www.schoolnutrition.org
Chapter 12: Follow-up Suggestions, Post Assessment, and Course Evaluation

Objective 12: Recall the benefits of financial information as it relates to your school nutrition programs.

SHOW: Slide #63, Follow-up Suggestions, Post Assessment, and Course Evaluation

Instructor's Note: Make closing comments, such as thanking group for participation and reminding them that there is much to learn. Remind them to check nfsmi.org, What's New often as a way to find out what types of training programs are offered by NFSMI.

Follow-Up Suggestions
Financial Management

SAY: At the beginning of this lesson, you were asked whether or not you could answer several basic financial questions about your school district's school nutrition program. As a result of learning about financial management in this seminar, you should be able to find answers to those questions in the district financial statements or reports. Increase your knowledge by looking for answers to the questions on page 100 in your workbook when you return to your district.

Instructor's Note: If time permits, ask for volunteers to share some of the answers about their districts.
Questions

1. What are the main sources of revenue for the nutrition program in your district?
2. What percentage of total revenue is attributed to each source of revenue?
3. List the different expenditure categories used in your district for program costs.
4. How much does it cost, on an average, to produce a meal in your school district?
5. What percent of the revenue is the school nutrition program spending for labor? For food?
6. How many meals per labor hour does it take to produce a meal in your school/school district?
7. What was the net gain or loss in the school nutrition program last year?
8. Compare the average participation in your school/school district for the last three years. Is it the same? Higher? Lower?

Remember, the key to financial integrity and program excellence may lie in the answers to these questions.

Post Assessment

Instructor’s Note: Distribute and collect the posttest. Provide any instructions given to you by the Education and Training staff at the National Food Service Management Institute.

SAY: Please complete the posttest and return to me. This posttest covers the same content as the pretest.

Evaluation

Instructor’s Note: Distribute the Meeting/Session Evaluation Form and ask participants to complete. Encourage participants to fill out the form and return to the front of the room. Evaluations should be turned over face-down or placed in a large envelope provided by NFSMI.
Instructor’s Note: Award each participant a Certification of Completion for participating in the course.
Cost Associated with Providing School Meals for Children with Special Food and Nutrition Needs
This report discusses the research findings on food and labor costs associated with providing school meals for children with special needs. Published 1994. #R12-94.

Effective Financial Management Practices
120-minute satellite teleconference video focuses on financial management. School nutrition directors will gain an understanding of how to manage and meet financial goals while maintaining nutrition integrity in their programs. Panel discussion includes financial management practices in medium and large school districts. Describes the NFSMI research project on financial management. Published 2001. #TT013101

Elements of Effective Financial Management
120-minute satellite teleconference video focuses on how school nutrition directors manage financial data. Panel discussion includes food and labor costs per meal, participation rate, productivity in the management of school nutrition programs, losing money, environmental concerns, and theft. Published 2002. #TT052202

Inventory Management
Breakfast Lunch Training (BLT) module designed for school nutrition directors to use in training managers. Four lessons focus on the general principles of inventory management: Organization for Inventory Control, Record Keeping, Product Safety, and Cost Control. Includes instructor guide, workbook, 24 minute video, and three 8 1/2” x 11” color mini-posters that list maximum food storage times for refrigerator, freezer, and storeroom. Published 2000. English captioned #ET20-00. Spanish captioned video only. #ET20-00(S).

NFSMI Financial Management Information System
This report describes a standard method of data collection and financial analyses developed to assist school nutrition directors evaluate financial management decisions. This standard method includes procedures for consistently recording financial data, recommendations for generating standard financial reports, and guidelines for interpreting the outcome of financial decisions. Published 2005. #R86-05.

NFSMI FUNDamentals
Software tool that can be used to implement standardized financial analysis within the school district. The standardized definitions and formulas are based on the NFSMI Financial Management Information System model. Designed for small-to-moderate-sized school districts. The software requires Windows 98 second edition or later operating system and approximately 60 MG of space. #ET36-02.
NFSMI Insight – Purchasing Decisions for Cost Effective Implementation of the Dietary Guidelines for Americans
This publication describes a research project that analyzed purchasing systems commonly used in Child Nutrition Programs. The study looked at several aspects of the traditional bid and cost-plus-fixed-fee purchasing systems.

NFSMI Insight – Quality Financial Decision Making
This report recaps NFSMI’s development of a financial management information system model that can be used by school nutrition directors to improve financial management decision making at both the school and district level.

NFSMI Insight – Revenue Generation and Cost Control Measures Currently Used in Financially Successful CNPs
This publication summarizes the findings of case study research on four different cost-effective systems for delivering nutritious meals to students. Published 1998. #R110-98.

NFSMI Financial Management Seminar
Instructor Guide for Financial Management Course that identifies sound financial principles as the primary foundation for Child Nutrition Programs. Published 2005. #ET59-05.

NFSMI Financial Management Seminar Workbook
Participant workbook for the Financial Management Course. Published 2005. #ET59-05.

Government Resources

OMB Circular A-87
This circular provides information and general principles for determining allowable costs in federal grant programs including the school nutrition programs. Revised 05/10/04. Available on the web at www.whitehouse.gov/omb/circulars/a087/a87_2004.pdf

Financial Accounting for Local and State School Systems
This National Center for Education Statistics handbook represents a national set of standards and guidance for school system accounting including school nutrition programs. The publication focuses on defining account classifications that provide meaningful financial management information and complying with generally accepted accounting principles established by the Governmental Accounting Standards Board (GASB). Available online from the U.S. Department of Education, National Center for Education Statistics at http://nces.ed.gov/pubs2004/2004318.pdf
References


Class Closer

Activity: Crossword Puzzle    Time allowed: 10 minutes    Purpose: Review Content

SAY: Turn in your workbooks to Handout #21, the Crossword Puzzle, on page 104. The crossword puzzle recaps some of the terms discussed in today's lesson on financial management. Everyone will work alone for about 5 minutes on the puzzle. At the end of that time, consult with others at your table to fill in missing answers.

Instructor’s Note: Note the time and announce to the group when they have worked for five minutes. Allow participants another 5 minutes to work together to complete the puzzle. Call time and ask participants to check their answers with the answer sheet in the Participant’s Workbook. If time permits ask if there are questions.
Handout #21 - Closer
Crossword Puzzle

1

2 3 4

5

6 7

8

9 10 11

12

13

14

15

16 17 18

19

20
Across Clues

2. Responsibility to deliver what is expected and willingness to bear the consequences for failure

6. Federal cash payment received for school meals that meet federal standards and are served to eligible children

10. Money received from a company as an incentive to use a specific product

12. Keeping operational spending within limits needed to generate a positive bottom line is often referred to as __________ control.

13. When the school nutrition program reserves money for an outstanding purchase order so that it’s not spent elsewhere, they are said to _________ the funds.

14. The ______ Balance includes unreserved money in excess of liabilities and encumbrances.

15. Accounts payable, accrued salaries and benefits, and deferred income are known as ______________.

16. Received in exchange for goods and services

19. The average number of students eating meals in the school nutrition program is referred to as the Average Daily ______.

20. A productivity index used to monitor the efficiency of the operation is called Meals per ______ Hour.

Down Clues

1. Reimbursable _____ are available to afterschool care programs operated by a school or school district that participates in the NSLP.

3. __________ foods are sold to students at school during a meal period in competition with the school nutrition program.

4. The school nutrition program’s share of expenses that are incurred for joint purposes are referred to as ________ costs.

5. A meal provided to a group outside the school nutrition program, such as an athletic banquet, is sometimes referred to as a “Special ________.”

7. A meal __________ is the unit of production most often used to measure the efficiency of the school nutrition program’s meal services and to analyze meal costs.
8. The rate at which goods or services are produced, especially output per unit of labor, is sometimes referred to as the _____ index.

9. Expenses which are readily identifiable as applicable to the school nutrition program are referred to as ___________ costs.

11. Cash, accounts receivable, funds due from all sources, inventory values, and the net value of large equipment are known collectively as ____________.

17. Maintaining a fiscally sound school nutrition program by continually monitoring revenue and expenditures is an example of ____________ integrity.

18. USDA requires __________ matching funds to be appropriated and paid to the school districts for use in the school nutrition program.
Handout #21
Worksheet on Crossword Puzzle

Answer Sheet