



Competencies, Knowledge, and Skills Needed by
School Nutrition Managers in the 21st Century

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Competencies, Knowledge, and Skills Needed by School Nutrition Managers in the 21st Century

WRITTEN AND DEVELOPED BY

Jerry Cater, PhD
Researcher

Evelina Cross, PhD, RD
Researcher

Mary Frances Nettles, PhD, RD
Director

Applied Research Division
The University of Southern Mississippi

ACTING EXECUTIVE DIRECTOR
Dr. Aleshia Hall-Campbell, PhD, MPH

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Institute of Child Nutrition

The University of Mississippi

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COMPETENCIES, KNOWLEDGE, AND SKILLS NEEDED BY SCHOOL NUTRITION MANAGERS FOR THE 21ST CENTURY

EXECUTIVE SUMMARY

The Applied Research Division (ARD) of the Institute of Child Nutrition (ICN) initiated a multiphase research project to revise the *Competencies, Knowledge and Skill Statements of Effective School Nutrition Managers* publication used to assist school districts in developing professional standards to improve job performance of school nutrition (SN) managers. Initial research activities spanned a period of approximately four years, culminating in 1995. The second update consisted of a three-phase research project. In the first phase, researchers conducted a national survey of selected SN professionals to determine the relevance of existing knowledge and skill statements, and to evaluate existing experience level (entry-or beyond-entry level) categories for knowledge and skill statements. In the second phase, survey respondents participated in regional work groups to reach consensus on the appropriate update for each statement, and to conduct gap analysis identified in the original document. In the third phase, the revised statements were validated by mail. The updated version of *Competencies, Knowledge, and Skills of Effective School Nutrition Managers* published in 2004, served as the foundation for the first phase of this current research project. For purposes of the previous documents and this research, a school manager is defined as a manager who works in a single school, and reports to a district director.

The purpose of the current research is to identify and update the functional areas that encompass the responsibilities of SN managers, and to develop a draft of research-based knowledge and skill statements related to the revised set of functional areas. An expert panel of

20 SN professionals identified eight functional areas using a modified Delphi technique. Six Delphi rounds were conducted by e-mail, with the questionnaire and summary of the previous round sent as attachments to the expert panel. Panel members completed and returned the questionnaire in each round. Round 1 consisted of open-ended questions asking expert panel members to list functional areas they thought summarized responsibilities of SN managers. In subsequent rounds, the panel members were instructed to review a summary from previous rounds, and to rate their agreement with the groupings or topics listed as a major functional area. Consensus for eight functional areas was reached after six rounds.

A draft of updated knowledge and skill statements, as they apply to today's work environment in SN programs, were identified using focus groups, SN program site visits, and research of related printed material, including *Competencies, Knowledge, and Skills of Effective School Nutrition Managers* (2004). School sites and focus group sites were selected to give representation to United States Department of Agriculture regions, as well as small, urban and large city schools. Researchers used an observation tool and interview questions to analyze day-to-day activities of a typical SN manager. The observations and interview responses were summarized to describe roles and responsibilities of SN site managers. Focus groups were used to determine the perceptions, feelings, and thought processes of group members about issues, products, and services impacting child nutrition programs. Questions were open-ended, and were designed to get specific information about the knowledge and skills needed by effective SN managers. Transcripts of the focus groups were coded by groups, cut apart by comment, and arranged by functional area content. Focus groups ranged from eight to fourteen participants.

Summarizations from the site visits, focus groups, the *Competencies, Knowledge, and Skills of Effective School Nutrition Managers* resource, printed publications, and Internet sources

were used to draft 191 knowledge statements and 384 skill statements. This project lays the groundwork for further research to determine the competencies related to each functional area, and the knowledge and skill statements that detail the duties of an SN manager.

INTRODUCTION

The National School Lunch Act of 1946 (NSLA) initiated on-going partnerships among the federal government, states, and local school districts (Gunderson, 1971) to provide nutritious meals to school children. As outlined in the NSLA, the role of the United States Department of Agriculture (USDA) was to define state responsibility, establish national standards, and maintain general supervision. The state educational agency was assigned responsibility for program administration within the state. States were required to enter into an agreement with the USDA, outlining the receipt and disbursement of funds, food received for distribution, and supervision of the program in schools, to ensure compliance with the NSLA regulations (Martin, 2008).

Additional nutrition assistance programs have been established since the initial passage of the NSLA, such as the School Breakfast Program, Special Milk Program, Fresh Fruit and Vegetable Program, Summer Food Service Program, Afterschool Snack Program, Team Nutrition, and the Child and Adult Care Food Program (Hopgood, 2008).

At the federal level, the USDA both funds and administers the National Child Nutrition Programs; at the state level, the department of education or agriculture administers child nutrition programs. At the district level, a school nutrition (SN) director plans, organizes, directs, and administers the SN program in a school system in accordance with federal and state regulations, as well as policies determined by the local board of education. School nutrition managers are employed by school districts to oversee all aspects of the local site-based SN programs. The manager plans and supervises both the production and service of meals that meet nutrient standards, are safe, and appeal to students and other clients in that school site. In some instances, the manager may be responsible for the SN food and nutrition services at one or more schools in a district. School principals have varying amounts of authority in decisions related to the SN

program. In some cases, the SN manager may report to both the principal and the district SN director (Pannell-Martin & Boettger, 2014).

Since its inception, the Institute of Child Nutrition, Applied Research Division (ICN, ARD) has been in the forefront in identifying the competencies, knowledge, and skills needed by personnel working in the SN arena. School nutrition leaders recognized the benefits of establishing standards for personnel performing at a variety of levels. Subsequent to recognizing the need for reliable and valid information related to these topics, the ICN, ARD conducted research to identify the job functions and duties, competencies, knowledge, and skills needed for effective performance by SN supervisors and directors, SN managers, assistants and technicians, state agency staff, sponsor monitors of family day care homes, and child care professionals (Carr & Oakley, 2002, Cater & Carr, 2004, Cross & Nettles, 2014; Lartey-Rowser, 2016; Nettles & Carr, 2006, Nettles, Carr & Asperin, 2010).

The ICN, ARD developed a model of the competencies, knowledge, and skills needed by SN managers dating back to 1995. A multi-phased research activity spanning four years, and involving over 1,300 SN professionals, yielded the publication, *Competencies, Knowledge, and Skills of Effective School Nutrition Managers* (Conklin, 1995). This document identified 12 functional areas, 31 competencies, 479 knowledge and skill statements, and categorized knowledge and skills needed by managers as entry-level or beyond entry-level. This document was updated in 2003 to reflect changes and regulations and more current operational issues in the management of SN programs at the school-site level. A national panel of 38 SN professionals evaluated the original competencies, knowledge, and skills statements as they applied to the current environment, and the document was revised to reflect their input. The revised document retained 12 functional areas, increased the competencies to 35, and increased the knowledge and

skill statements to 526. The original number of entry-level statements also was increased (Cater & Carr, 2004). This proved to be a useful and valuable contribution to the resources available to SN personnel. In the ensuing years, changing societal trends, and the need for relevant standards, necessitated a revision of the 2003 model. Since then, societal demands in the past ten to 15 years have added to the complexity of the SN manager's job. Contemporary social problems facing SN managers today impact the behavior and success of employees in the workplace. Across the nation, employers must deal with issues such as poverty, sexism, racism, drug and alcohol dependence, and domestic violence (Sandilands, 2017). Trends more specifically related to the SN environment are the epidemic of childhood obesity; the desire for organic and ethnic foods; a scarcity of qualified technicians who are willing to accept the responsibilities of managing a school food service program; concern for the environment; additional demands by the community, parents, and students; and increased regulations all contribute to a challenging operational climate today.

The passage of the Healthy, Hunger-Free Kids Act of 2010 had a significant impact upon child nutrition programs across the country. Key provisions included updated nutrition standards for school breakfast and lunch programs, and professional standards for SN professionals. The professional standards requirement includes a minimum of ten hours training annually for all SN managers, and six hours training annually for SN staff who work 20 hours per week, as well as four hours training for part-time employees. Managers must incorporate this requirement into their professional development activities, and assist employees with completing their required training.

Research Objectives

The overall purpose of this study was to identify the functional areas and draft knowledge and skill statements needed by SN managers working in site-based SN programs to effectively manage the efficient preparation and service of meals, while providing meals that both meet the USDA mandated nutrition requirements and appeal to students. For the purposes of this study, an SN manager is defined as a manager who works in a single school and reports to a district director.

The specific objectives were the following:

- Identify the functional areas that encompass the responsibilities of SN managers;
- Develop a draft of research-based knowledge and skill statements; and
- Identify the draft knowledge and skill statements related to each functional area.

METHOD

Research Plan

This research project is the first of two phases. The second phase will build upon the first phase, and be completed subsequent to this research project. The phase in this study utilized an expert panel consisting of 20 school nutrition (SN) professionals to ascertain the functional areas encompassing the responsibilities of SN managers. The *Competencies, Knowledge, and Skills of Effective School Nutrition Managers* developed in 1995 and revised in 2003, site observations, and focus group responses were the main resources used to draft knowledge and skill statements related to each functional area.

Identification of Functional Areas

Expert Panel

The criteria for identifying potential expert panel members included a variety of approaches. Some panel members were identified from past participation in the Institute of Child Nutrition, Applied Research Division (ICN, ARD) research projects. United States Department of Agriculture (USDA) regions were taken into consideration during the selection process. Potential panel members were also selected based upon their reputations as effective professionals and leaders, recognition as experts, their experience and knowledge of the abilities needed to be an effective SN manager, their willingness to participate, and their ability to complete assignments within the time constraints of the project. Potential participants were e-mailed details of the research study and an invitation to participate.

Twenty-one panelists agreed to participate; one, however, withdrew prior to the start of the first round, and another withdrew after the fourth round, leaving 19 participants to complete the Delphi Process. School nutrition professionals representing all seven USDA regions were

selected to serve on the expert panel for the research project. Participants consisted of SN managers, directors, state agency program directors, consultants, a field manager, a university professor, and a training specialist.

Modified Delphi Technique

A modified Delphi technique of an estimated four to six rounds was used to bring about agreement concerning the functional areas encompassing the job responsibilities of SN managers. Each Delphi round was conducted by e-mail, with the questionnaire and a summary of the previous round sent as attachments to the participants. Expert panel members were asked to open the file, complete the questionnaire, and return it by e-mail as an attachment.

Prior to beginning round 1, the researcher e-mailed the expert panel members an overview of the research process. This e-mail informed panel members of the purpose of the research project, summarized the modified Delphi technique process, emphasized the importance of their participation, assured them of the confidentiality of their responses, and provided the researchers' contact information for questions and concerns. Twenty SN professionals agreed to participate.

Round 1

Each expert panel member received an instructional e-mail with the round 1 questionnaire attached. The e-mail outlined the steps to follow when completing the round 1 questionnaire, and the return date for the questionnaire. The round 1 questionnaire consisted of an open-ended question asking expert panel members to list the functional areas or broad groupings that summarize the responsibilities of SN managers, and a brief description of each. Additionally, six demographic questions were asked of the participants. To ensure consistent understanding of the terms used in the research, the following definitions were provided:

- **School nutrition managers** oversee all aspects of the local site-based SN program.
- **Functional areas** are the broad grouping or divisions of job responsibilities that are performed by managers within the local SN operation.
- **Competencies** are underlying characteristics within each functional area that lead to successful performance. They may include knowledge and skills, as well as various levels of motivation.
- **Knowledge** is the information a person has in specific content areas that is necessary for successful performance in a competency area.
- **Skills** are the abilities to perform certain physical and/or mental tasks that are necessary for successful performance in a competency area.

All 20 (100%) expert panel members returned the round 1 questionnaire. The researcher summarized the expert panel members' responses, and incorporated them into round 2.

Round 2

The researcher e-mailed the round 1 summary and round 2 questionnaire with instructions for completion to each expert panel member. The instructions outlined the steps to use when completing the questionnaire. Expert panel members were asked to review the summary of round 1, in which participants identified the functional areas that described the jobs held by SN managers. The round 2 questionnaire listed the functional areas identified in round 1. Panel members were instructed to rate their agreement with the groupings or topic areas as a primary function for the job of an SN manager by using a 4-point scale, ranging from 1 (strongly disagree) to 4 (strongly agree). Next, panel members determined if each topic was appropriate as a major functional area and if not, to describe the reason. Panel members were asked to decide if the functional area could be combined with another area(s) and to suggest the area(s) with which

it might be combined. Lastly, they were offered the opportunity to propose suggestions for naming the functional area or new functional area, if combined with another area. The researcher summarized the expert panel members' responses to incorporate them into round 3. All twenty (100%) panel members returned round 2.

Round 3

The researcher e-mailed two round 3 questionnaires and instructions to each expert panel member. The instructions outlined the steps to use when completing the two questionnaires. Expert panel members were instructed to review the agreement percentages from the round 2 summary. The first round 3 questionnaire listed the functional areas in descending order based upon round 2 results from the question, "Is this topic appropriate to be a major functional area?" The researcher recommended to "keep" or "delete" the functional area based on a level of 75% agreement of expert panel members. Panel members indicated if they agreed with the recommendation to keep the functional area, and if not, described the reason. Suggested wordings for naming the functional areas were listed, and panel members indicated their preferences. The functional areas below the 75% agreement threshold were listed on the second round 3 questionnaire. Expert panel members were asked to indicate if they agreed with the recommendation to delete the functional area. If they did not agree to delete the functional area, they indicated if the area should be combined with another functional area. If they responded affirmatively, panel members suggested the functional area(s) with which it could be combined. They also proposed suggestions for naming the functional area. Twenty (100%) expert panel members returned the two round 3 questionnaires. The researcher summarized the expert panel members' responses to round 3 to incorporate them into round 4.

Round 4

The researcher e-mailed the round 4 questionnaire and instructions to each expert panel member. Panel members were asked to review the summaries of the two round 3 questionnaires prior to beginning round 4. The round 4 questionnaire was divided into three sections. In the first section, the functional areas listed were above the 75% threshold criterion for retention. Panel members reviewed the suggested names for the functional areas, and indicated their choice for the name of each functional area. The researcher described the guideline for selecting the name of each functional area as the choice of name that received a simple majority (one over 50%). Four functional areas met the 75% threshold for retention. In the remaining two sections of the round 4 questionnaire, the functional areas listed were not deleted in round 3. Many of the expert panel members indicated that these functional areas could be combined. Based on round 3 results, the researcher grouped similar functional areas, and asked specific questions about whether the functional areas should be combined. Expert panel members reviewed the suggested wording for naming the new functional area and listed their choice. All 20 (100%) expert panel members returned the round 4 questionnaire. The researcher summarized the expert panel members' responses to incorporate into round 5.

Round 5

The researcher e-mailed the round 5 questionnaire and instructions to the expert panel. Panel members reviewed the summaries of the round 4 questionnaire prior to beginning round 5. The round 5 questionnaire was divided into two sections. In the first section, four functional areas were listed that were above the 75% agreement threshold, along with the names identified for them that had met the simple majority (one over 50%) guideline. In the second section, panel members were asked to review the suggested names for the remaining un-named functional

areas, and to identify their choice for the name. Nineteen (95%) of the original expert panel members returned the round 5 questionnaire.

Round 6

Consensus had been reached. The researcher e-mailed a letter of thanks and appreciation to each participant for their contribution to the success of the Modified Delphi technique. The eight functional areas selected by the panel were listed along with the names that had been selected for the functional area.

Development of Draft Knowledge and Skill Statements

Site Visits

For the on-site visits, four school districts were chosen to represent small, urban, and large city schools in four USDA regions of the country; Southwest, Southeast, Northeast, and Mountain Plains. Other criteria included willingness of the school administrators to provide a written invitation for the visits, and quality of the school program as determined by participation, financial status, and documented USDA compliance with nutritional standards.

Each observation started and ended with the regular workday. The observation focused on the SN manager's activities during the day, with no preconceived opinion on the part of the researchers as to what the manager should be doing. In addition to the observation, a brief 30-minute interview during the workday (at the convenience of the manager) was utilized to determine the manager's view of his/her responsibilities and duties. The interview stayed within the purpose of the study, which is to determine knowledge and skills needed to be an effective SN manager.

Focus Groups

Researchers met with the ARD director to discuss a procedure for determining a process for participant selection. It was decided that location and participant representation would be the criteria for selection of focus group members. Three states were selected based on areas of the country, and previous participation in activities with the ICN. Researchers contacted state agencies in the states selected, and all agreed to assist with the focus groups and to provide names and contact information for researchers. Invitations via e-mail were sent to potential participants in Minnesota, Louisiana, and New Mexico. The e-mail outlined the purpose of the study, and requirements for participation. Several e-mails were necessary to secure the final number of participants. After the lists of participants were finalized for each state, dates and a site for the focus group discussions were confirmed. A follow-up reminder was sent a few days prior to the scheduled focus group discussions. Focus groups ranged from 8 to 14, for a total of 32 participants. Groups consisted of district SN directors and administrators, SN managers, and state agency personnel.

The focus group research questions were developed to determine the perceptions, feelings, and thinking of the groups about issues, products, or services. Questions were open-ended, and followed a questioning route in which the initial questions were more general in nature to facilitate group discussion and individual reflection about the topic. As the discussions progressed, the questions were more specific, and were designed to understand differences in perspectives between the groups. Questions near the end were designed to bring closure to the discussion, and to enable participants to reflect on previous comments. Focus group questions were developed specifically to assist researchers develop a draft of updated knowledge and skills

needed by effective SN managers in today's work environment. The questions were reviewed by the ARD director and modifications made based on suggestions by the ARD director

The focus group moderator introduced the research team and explained focus group procedures using a prepared script. Focus group participants were then given an informed consent form to read and sign prior to beginning the focus group. The moderator proceeded with the group discussion upon receiving the signed informed consent. An assistant moderator took notes of the discussions, and focus group discussions were audio-taped and transcribed.

The long-table approach methodology of Krueger and Casey (2000) was used to analyze transcripts of the three focus groups. In this method, the transcripts were coded by group, cut apart by comment, and arranged by functional area content. Comments for each question were summarized.

Informed Consent

The University of Southern Mississippi Human Subjects Institutional Review Board approved the protocol for the research project. Participation in the research study was voluntary.

Expert Panel

The researchers followed informed consent procedures for the research established by the Human Subjects Protection Review Committee at The University of Southern Mississippi. Correspondence with expert panel members included a confidentiality statement and contact information for the Human Subjects Protection Review Committee at The University of Southern Mississippi, Hattiesburg, MS. Acceptance of the invitation to become a member of the expert panel signified consent to participate in the study.

Site Visits

A letter of invitation to participate in a site visit was mailed to the SN director in the school in which a visit was desired. A letter of information was sent to the administrator of the school district. Informed consent for the site observations was obtained by formal letters of consent from the district director and the school district administrator. The researcher provided a brief oral presentation of the research to each manager detailing the purpose, description, benefits, risks, confidentiality, and participant assurance. A short-form consent was given to each manager; their signature indicated consent to participate in the interview.

Focus Groups

A long-form consent form was given to each member at the focus group meetings detailing the purpose, description, benefits, risks, confidentiality, and participant assurance. The assistant moderator explained the purpose of the consent form, and provided time for questions. Focus group members signed the forms to indicate consent to participate, and returned the forms to the assistant moderator.

RESULTS AND DISCUSSION

Identification of Functional Areas

Expert Panel

Of the 20 participants who accepted the invitation to participate in the expert panel, 20 participated in rounds 1-4; and 19 in rounds 5 and 6. All seven United States Department of Agriculture (USDA) regions were represented on the panel. The largest number of participants, eight, were school district directors, and five panel members were site-based managers. State Departments of Education were represented, as well as private consultants and academia. The majority of participants were quite experienced, with 58% having worked in school nutrition (SN) for over 20 years. Most had some college experience, with three possessing a doctoral degree. The participants held a variety of certifications and credentials, with the majority being a Registered Dietitian and/or a licensed dietitian/nutritionist. Three of the five managers responded to the question about the size of the school they manage. One school was small (251-500 enrollment), one medium (501-1,000 enrollment), and one large (2,501+ enrollment). Of the nine panel members responding, the size of the district they directed ranged from 3,800 to an enrollment of over 65,000.

Table 1

Personal and Program Characteristics of Review Panel Members

Demographic Question	Frequency	%
What best describes your job title? (<i>n</i> =19)		
Manager	5	27
Director	8	43
Field Coordinator	1	5
State Department Program Director	2	10
Consultant	1	5
Training Specialist	1	5
Professor	1	5
How long have you worked in SN programs? (<i>n</i> =19)		
1-5 years	3	16
6-10 years	3	16
11-15 years	0	0
16-20 years	2	10
Greater than 20 years	11	58
What is your highest level of education? (<i>n</i> =19)		
High school or GED	2	10
Associate's degree	1	5
Bachelor's degree	8	42
Master's degree	4	21
Doctoral degree	3	46
Other (3 semesters college)	1	5
What is your certification/credentialed status? ^a (<i>n</i> =19)		
Not certified	3	16
State Department of Education certified	3	16
School Nutrition Association certification	6	31
School Nutrition specialist credential	6	31
Registered Dietitian	7	37
Licensed Dietitian/Nutritionist	3	16
Other	3	16

^aTotal exceeds 100%, since respondents could select more than once response.

(Table 1 continues)

*(Table 1 continued)**Personal and Program Characteristics of Review Panel Members*

Demographic Question	Frequency	%
What is the size of the school district you direct (<i>n</i> =19)		
2,799 or less enrollment	0	0
2,800-9,999 enrollment	1	11
10,000-19,999 enrollment	2	22
20,000-44,999 enrollment	2	22
45,000-64,999 enrollment	1	11
65,000 or more enrollment	3	33

^aTotal exceeds 100%, since respondents could select more than once response.

Round 1

The expert panel generated a list of functional areas and/or broad groupings during round 1 that they perceived best described the job responsibilities of SN managers. The initial list was composed of 189 suggestions that were broadly summarized into 22 preliminary topic areas.

Round 2

In round 2, expert panel members reviewed the round 1 list of topic areas, descriptions, and instructions. Topic areas had to receive 75% or more agreement to be selected as a functional area and then the naming of each functional area was determined by a vote that exceeded 50% consensus. In this round, panel members indicated whether the topic area was a primary function for the job of SN manager, whether the topic was appropriate to be a major functional area, or whether it could be combined with another/other area(s). Panel members also indicated their choice for naming the topic areas. Seventy-five percent (75%) or greater of the panel members indicated that nine topic areas were appropriately categorized as functional areas. The remaining 13 functional areas received less than 75% agreement.

Round 3

In round 3, expert panel members reviewed the round 2 summary, and completed two round 3 questionnaires. Based on the round 2 results, the researchers provided a recommendation to “keep” or “delete” each of the nine designated functional areas, and listed suggested wording for naming the functional areas. In round 3, a minimum of 75% of the expert panel members recommended to “keep” eight of the nine functional areas, and voted that one functional area was not appropriately categorized. Panelists suggested wording for naming the eight selected functional areas. Eight topic areas from round 2 received less than 75% percent agreement, and were deleted as functional areas. One topic area, “Other,” was deleted by the researchers, as it was not pertaining to the study. An additional three topic areas had less than 75% agreement to keep as a functional area but panel members suggested that they be combined with other topic areas. The participants indicated their choice for naming the combined functional areas. No name suggestion received higher than 50% agreement.

Round 4

In round 4, the expert panel members reviewed the round 3 summaries and the name suggestions. None received higher than 50% agreement. The content of three topic areas was incorporated into a variety of functional areas. An additional topic area was deleted as a functional area.

Round 5

The round 4 section summaries were reviewed by the participants. Eight functional areas were finalized. Agreement was reached on names for four functional areas: Sanitation, Safety, and Security; Marketing, Communication, and Customer Service; Meal Preparation and Service;

and Procurement and Inventory Management. Panel members indicated their preference for the names of the remaining four functional areas.

Round 6

The remaining four functional areas were finalized during round 6. The names for the remaining four functional areas are: Nutrition and Menu Management; Personnel Management; Financial Management and Accountability; and Facility and Property Management. Table 2 lists the eight functional areas and the names selected for each. All panel participants received a final letter of appreciation and thanks for their excellent service in reaching consensus on eight functional areas and naming them.

Table 2

Functional Areas Selected by Expert Panel

Functional Area	Expert Panel Choice for Name
Food Safety/Sanitation, Safety, and Security/Sanitation/Safety/Food Safety and Sanitation/Implementation of Food Safety/Using Hazard Analysis and Critical Control Points (HACCP)/Accident Prevention and Safety in the Workplace/Food Safety Management/Kitchen and Food Safety/Sanitation and Food Safety/Food Security/Food and Employee Safety/Oversee Safety and Sanitation Practices/Safety and Security	Sanitation, Safety, and Security
Marketing/Marketing and Communication/Marketing and Promotion/Marketing/Merchandising	Marketing, Communication, and Customer Service
Production/Food Production/Food Production and Acceptability/Menus and Production/Food Acceptability/Food Preparation and Use of Equipment/Ensure Appetizing and Varied Preparation and Presentation of Food According to SN Program Dietary Guidelines/Food Production and Procurement	Meal Preparation and Service

(Table 2 continues)

Table 2 continued

Functional Areas Selected by Expert Panel

Functional Area	Expert Panel Choice for Name
Procurement/Procurement and Inventory Management/Ordering USDA Commodities, Purchased Food and Supplies/Receiving Food/Inventory Management/Procurement and Ordering/Ordering and Forecasting/Receiving Food and Processing Invoices for Payment/Proper Handling, Ordering, Rotation, and Turnover of Meal Components to Avoid Waste and Maintain Food	Procurement and Inventory Management
Nutrition and Meal Planning/Menu Substitutions/Menu Management/Menu Planning/Nutrition for School-Aged Children/Nutrition and Menu Planning/Meal Pattern and Compliance/Basic Nutrition/Meal Pattern/Special Dietary Needs and Allergies/Make Certain Dietary Guidelines are Adhered To/Nutrition/Nutrition and the Execution of the SN Program	Nutrition and Menu Management
Personnel Management/Employees/Personnel/Human Resources Management/Staff Management/Employee Supervision/Employee Training/Staff Training Regarding Improvement of Procedures and Rates of Production	Personnel Management
Finances/Maintaining Food and Supply Costs /Meal Benefits Processing /Processing invoices for Payment /Receiving Food and Processing Invoices for Payment/Financial Management/Cash Management/Meal Claiming/Financial Management and Record Keeping/Budget Planning and Monitoring/Financial Management/Inventory and Recordkeeping/Money Management/Reimbursable Meals/Free and Reduced applications/Fiscal Management	Financial Management and Accountability
Facility and Property Management/Food and Equipment Purchasing/Equipment Use and Care/Kitchen and Equipment Maintenance/Use and Maintenance of Equipment/Equipment cleaning and Maintenance/Equipment Maintenance and Cleanliness	Facility and Property Management

Development of Draft Knowledge and Skill Statements

Site Visits

Researchers conducted four on-site visits to observe SN managers perform on-the job duties for the duration of one entire day. A structured interview was conducted with each manager at the end of the work day. Researchers summarized comments and interview results to begin the process of identifying and drafting knowledge and skills needed by effective SN managers

Sites were selected based on USDA regions, district size, and grade level, and the demographics are provided in Table 3. To protect the identity of the schools, the four school sites are listed as School A, School B, School C. and School D. The size of school sites visited ranged from an enrollment of 4,000 students to 317 students. Grade levels included one high school, one elementary school, and two K-12 schools.

Table 3

School Site Demographics

Demographics	School A	School B	School C	School D
USDA Region	Southwest	Mountain Plains	Southeast	Northeast
School Enrollment	4,000	1,557 (District)	850	317
Grade Level	9-12	Satellite (K-12)	K-12	K-6
Lunches Served	1450	550	600	160
Breakfasts Served	180	150	300	64
Number of Employees	35	15	8	2

Managers were observed or interviewed about roles and job responsibilities necessary to be an effective SN manager. Although responses varied among sites, several themes emerged as important. General supervision of site employees, placing orders, oversight of meal service, oversight of inventory, orientation and training of new employees, work orders, general documentation and reporting activities for central office were mentioned at all sites. Table 4 summarizes the estimated time each SN site manager reported they spend on operational responsibilities.

Table 4

Time Spent on Task at School Sites

	School A	School B	School C	School D
USDA Region	Southwest	Mountain Plains	Southeast	Northeast
Supervision	3-4 hours	4 hours	3-4 hours	1 hour
Placing Food Orders/forecasting	.5 hour daily	.5 hours weekly	1 hour weekly	1 hour weekly
Oversite of meal service	1 hour per day	2 hours per day	2.5 hours per day	1 hour per day
Oversite of inventory	1 hour twice weekly	1 hour	.25 hour daily	.5 hour daily
Reconciling POS records	20 minutes (computerized)	Completed by Central Office	15 minutes (computerized)	Completed by volunteer
Training	1 hour daily	Supervises on-the-job training as needed	.5 hours daily (ongoing)	On the job training as needed – time varies
Preparing work orders	5 minutes (form sent by e-mail)	10 minutes as needed	Less than 5 minutes; e-mailed	Time varies; orders are prepared as needed
General Reporting/Documentation	Daily – time varies	Approximately 5 minutes a day for staff time cards	Once a week – time varies	Completed by central office

Researchers also observed and interviewed managers about the time spent daily or weekly ensuring compliance with requirements of the SN program. Areas observed included implementing meal standards, certifying compliance with meal count procedures, monitoring food safety procedures, communicating requirements for school fundraising, and school wellness activities. Issues such as employee labor policies and attendance at professional development training were discussed during the course of the observation time.

The major compliance issues for managers included monitoring meal service during serving times to document meal standards were met, certifying compliance with meal count procedures, and monitoring food safety procedures. Managers at all sites indicated they checked recorded temperatures for freezers, refrigerators, and the dry storage area twice daily. Communications for fundraisers were handled by central office staff at all school sites. Most employee labor policies were handled by the central office; however managers were aware of the importance of following policies of the district.

Managers at all sites were asked specific questions about job responsibilities. The interview questions and comment summaries are listed below. Summarized comments or topics provided in response to questions were mentioned by managers at all sites.

1. What do you feel are the top three responsibilities of your job as an SN manager?

Managers mentioned the following topics at all four sites as being major responsibilities in their job as an SN manager.

- Confirming recipes are followed, and quality food is being served.
- Monitoring food preparation.
- Implementing meal standards according to USDA regulations.
- Certifying compliance with meal count procedures.
- Ensuring the kitchen is safe, clean, and friendly to students.
- Direct supervision of employees.
- Forecasting amount of each menu item to prepare.

- Ordering food.
- Communicating with staff and administrators.
- Ensuring required temperatures are recorded correctly.

2. Which job responsibility do you spend the most time performing, on average?

- Overseeing food preparation (batch cooking) during lunch.
- Employee supervision.
- Making sure production record numbers are correct.
- General oversight of compliance procedures, including menu standards, safety requirements, and food production records.

3. Which job responsibility or task is your greatest challenge as an SN manager?

- Delegating tasks to other staff.
- Trying to be fair and consistent.
- Problem solving.
- Making sure food is prepared correctly, and all students have the same choices.
- Working with staff on food presentation.
- Food production record.

4. What job responsibility or task do you enjoy most as an SN manager?

- Serving good food to students.
- Getting good feedback from students on food served.
- Serving students.

5. If you could sort your job responsibilities as an SN manager into groups, what would be the top five?

Managers were not asked to rank the job responsibility groups as to importance, so the list is based on notes made by the researchers that reflect the general answers provided by each manager. The only job responsibility consistently mentioned by all site managers is supervision. Food ordering and inventory were listed by three sites as one of the top responsibilities. Table 5 lists the top responsibilities mentioned by each site manager; however, the order of the list does not suggest importance.

Table 5

Top Job Responsibilities Listed by Site Managers

Southwest	Mountain Plains	Southeast	Northeast
Supervision	Supervision	Supervision	Supervision
Customer Service	Ordering Food	Forecasting/Ordering	Ordering Food/Supplies
HACCP	Daily Production Records	Daily Production Records	Food Safety
Training/Developing employees	Participation Reports	Compliance of meal standards	Compliance of meal standards
Inventory	Inventory	Certifying meal count	Inventory

Focus Groups

The scheduled focus groups took place in Minnesota on February 1, 2017, Louisiana on February 22, 2017, and New Mexico on March 14, 2017. Each focus group was approximately 2.5 hours long. The focus group moderator introduced the research team, and explained focus group procedures using a prepared script. Focus group participants were then given an informed consent form to read and sign prior to beginning the focus group. The moderator proceeded with the group discussion upon receiving the signed informed consent. An assistant moderator took notes of the discussions, and focus group discussions were audio-taped and transcribed. The assistant moderator summarized the focus group discussions immediately following the discussion to discuss overall impressions, key ideas, insights presented and to encourage members to further discuss anything not covered under the key questions. Upon completion of the focus groups, the participants were thanked for their participation.

The moderator began the focus group discussions with an opening question designed to get participants talking, and to establish the need to identify the knowledge and skills needed by SN managers that relate to their daily job responsibility.

1. Please tell us first your name, title, and describe your roles and responsibilities as they relate to the SN program.

Each focus group member introduced themselves using first names and title. Most managers described their role as “managing the school meals program to serve children quality, nutritious food.” Overall responsibilities mentioned were managing employees and producing good food. Directors mostly described their role as the person who oversees the SN program in all the district schools. They described their responsibilities in terms of oversight of regulations, effectively managing finances, and ensuring meals served to students meet USDA standards.

Table 6 provides a summary of job titles of focus group members, by state.

Table 6

Number of Participants Represented in Focus Group Study per Position (n=32)

States	School Nutrition Directors/Assistant Directors	School Nutrition Managers	State Agency Representatives
Louisiana	7	5	2
Minnesota	4	3	1
New Mexico	6	4	1
Total	17	11	4

2. I want you to think back on the first couple of weeks when you were first hired to work in the SN program. What was the greatest challenge or problem you faced?

Each participant was given an opportunity to respond to the question. The following comments represent the most frequent responses in all three groups. For example, at least one respondent in each focus group indicated they had a commercial foodservice background that created a challenge when they began working in an SN program. Other comments, such as dealing with employees, were repeated several times in all three focus group discussions.

- “I was given no direction.”
- “I didn’t feel qualified; I came from a restaurant background. I spent the first month trying to find things.”
- “Staffing was the biggest issue; I didn’t know the process for hiring.”
- “No prior training or experience, so I had to learn everything on the job.”
- “Long-time employees were resentful; they were still loyal to previous manager.”
- “Dealing with employees was much harder than I had anticipated.”
- “Privacy Act issues were a challenge; did not know what a manager can legally ask employees, and what information can be shared.”
- “Production records were a challenge; did not feel there was enough time to do them daily; I got behind.”
- “We had a food recall, and nobody knew what to do.”
- “I needed more training on regulations and guidelines that applied to meal standards.”

- “There were challenges with the staff that prepared the food; over and under production of menu items were common.”

3. As I go around the room, I would like each of you to share your ideas about what you believe SN managers have to do to be successful at their job.

The comments below represent the most consistent themes of what focus group members described as requirements for SN managers to be successful at their jobs.

- “They must understand state and federal guidelines and district policies.”
- “Managers must be able to handle conflict; they must be fair and impartial.”
- “It is important for managers to be firm, but fair with employees.”
- “Managers must be consistent in the way they treat employees.”
- “Managers must be leaders.”
- “Communication skills are important.”
- “Have passion for SN programs”.
- “Love the children; love the job.”
- “Insist on quality service and quality food.”
- “Understand the financial aspects of the job.”
- “Managers should be good leaders and role models.”
- “It is important for managers to know meal standard requirements and importance of high meal or food quality.”

4. Take a minute to think about professional development training for managers. Now, I want each one of you to tell the group what you think the two most important topics are for manager training.

Participants suggested a large number of important topics for manager training. The three areas mentioned most often were related to food production, personnel management, and food safety; however, the number of times each was mentioned varied among focus group sites. More participants in Louisiana thought food production was important, while personnel management was the most suggested topic in Minnesota. Topics were more equally mentioned in New Mexico. See Table 7 below.

Table 7

Frequency of Training Topics Identified by Group Site

Topics	Minnesota	Louisiana	New Mexico	Total
Food Production	4	11	5	20
Personnel Management	10	4	3	17
Food Safety	3	7	2	12
Nutrition/Menu Standards	3	2	4	9
Compliance	3	2	3	8
Organization/Time Management	2	1	5	8
Customer Service	2	1	4	7
Total (Topics Per State)	27	28	26	81

5. What do you perceive as the SN manager's main responsibilities in the daily operation of feeding students?

This question did not generate a significant amount of discussion. Minnesota participants indicated that forecasting the food usage for ordering purposes, and the ability to learn new software programs, such as point-of-service to ensure accurate meal counts, were two major responsibilities related to feeding children. Louisiana participants also mentioned ordering food appropriately as a major responsibility, as well as overseeing food production. New Mexico participants mentioned ordering as important in the daily operations as well as sanitation, food safety, and security.

6. What do you perceive as the manager’s main responsibilities in the area of ensuring the SN program is in compliance with all government regulations?

Ensuring meals served meet nutrition standards, knowing regulations on reimbursable meals, certifying food substitutions meet nutrition standards, and knowing policies and procedures regarding special diet requests were consistently mentioned in all focus group discussions. Participants were especially concerned with meeting meal standards and dietary specifications as compliance issues.

7. We are going to ask you to give us ideas of the skills and knowledge needed for the functional areas. A skill is the specific ability needed to carry out the job responsibilities of an effective SN manager. For example, “Monitors portion sizes of meal components served to students to ensure meals are nutritionally adequate.” Knowledge indicates specific information that an SN manager should possess to be effective. For example, “Knows current USDA nutrition standards that apply to meals served in the SN program.”

What specific skills and knowledge are necessary in the functional area, “Sanitation, Safety, and Security?”

Participants in the three focus groups indicated a need for SN managers to be both knowledgeable and skilled in the area of food safety. During the focus group discussion, participants shared a substantial list of concerns. Representative comments are summarized below.

- “Managers need to know the HACCP plan and practice HACCP procedures.”
- “...knowledge of proper food handling procedures so there is no cross contamination is important.”
- “Managers should not only understand handwashing procedures, but monitor employees to ensure they wash their hands correctly.”

- “Managers need to know proper cooling procedures.”
- “Knowing food recall procedures and documentation as they related to the school site.”
- “Understand why monitoring food temperatures is necessary, and have a procedure for recording temperatures.”
- “Storing food properly is important.”
- “Implementing dress codes related to food safety, such as wearing jewelry.”
- “Managers should make sure the kitchen is always ready for a health inspection so it receives a high score.”
- “Know and practice good sanitation procedures.”
- “Procedures for food allergies and food safety concerns related to accommodating students with food allergies – Some kids have to be separated from the other students during meal service.”

All three focus group discussions included comments related to workplace safety and security. Typical comments are summarized below.

- “Managers should know how to use a fire extinguisher.”
- “Train employees on basic safety procedures in lifting and wearing proper shoes to prevent slipping.”
- “Monitor the work environment for safety hazards related to the facility.”
- “Keep the door locked; follow district crisis management plan.”
- “Know security measures to take when unauthorized personnel enter kitchen.”
- “Ask for identification if you don’t know the delivery driver.”
- “Know the basic emergency response and who to call.”
- “Emergency food preparation when natural disasters occur – what do you do if you realize that half the items in warehouse may not be safe – what are our options?”

What specific skills and knowledge are necessary in the functional area, “Nutrition and Menu Planning?”

The comments in this area related mainly to operational and compliance issues, such as menu substitutions. Comments regarding actual menu planning related more to knowledge instead of skill. Representative comments are summarized below.

- “Managers should make sure serving sizes meet the new meal pattern requirements.”
- “Understanding basic nutrition is helpful.”
- “Know policies and procedures for making substitutions; know what foods can be substituted to meet meal component requirements.”

- “It is important for managers to understand vegetable subgroups and how they contribute to meal standards.”
- “Managers must know about whole grains.”
- “Knows weekly meal requirements for grade/age groups.”
- “Know how to read child nutrition labels and how to use them in documentation.”
- “Manager should know and implement USDA signage requirements.”
- “...regulations of special needs diets and food allergies.”
- “Managers should keep doctor statement on file and updated for special needs students.”
- “Know policies and procedures for special need students and proper documentation requirements.”

What specific skills and knowledge are necessary in the functional area, “Meal Preparation and Service?”

Focus group participants identified several areas important to becoming an effective manager as it relates to the functional area of meal preparation and service. Participants indicated that managers must have knowledge and be skilled in several areas related to meal preparation to be successful in today’s work environment. The topics listed below represent the areas mentioned in focus group discussions

- “Accurate forecasting.”
- “Ordering.”
- “Using the *Food Buying Guide*.”
- “Understand quantity food production.”
- “Maintain accurate production records.”
- “Production scheduling.”
- “Portion control; serving size and tools.”
- “Standardized recipes.”
- “Recipe adjustment.”
- “Utilization of leftovers.”
- “Planning and organizational skills.”
- “Knowledge of weights and measures and how to convert.”
- “Know and use quality standard guidelines for evaluating food.”
- “Have ability to train new employees on use of equipment for food preparation.”
- “Develop policies for employee appearance on the serving line.”
- “Understand the flow in the kitchen during food production.”
- “Utilize labor effectively.”
- “Check food production against meals served daily.”
- “Adjusting for absent employees.”

What specific skills and knowledge are necessary in the functional area,

“Procurement and Inventory?”

Many of the areas mentioned in the discussion of meal preparation and service were also discussed in the procurement and inventory functional area. The list below summarizes the areas of knowledge and skills mentioned most often.

- “Forecasting and ordering.”
- “Follow district guidelines for preparing food order.”
- “Using inventory for ordering.”
- “Relationship between inventory management and food costs.”
- “Receiving procedures for quality, temperature, and quantities.”
- “Follow district rules for refusing product and reporting invoice errors.”
- “Practice first in, first out (FIFO).”
- “Accuracy in inventorying.”
- “Knows meaning of physical and perpetual inventory.”
- “Follow HACCP guidelines for storing food and other items.”
- “Know how to use technology for procurement and inventory process.”
- “Utilizes staff in tracking inventory used and how used.”
- “Rodent/pest control in the storeroom.”

What specific skills and knowledge are necessary in the functional area,

“Marketing, Communication, and Customer Service?”

The discussion to identify a draft of knowledge and skills needed in the functional area that includes marketing, communication, and customer service generated the following list of comments appropriate to the responsibilities of managers.

- “Managers should make sure the cafeteria looks good and is an appealing place to eat.”
- “Train employees to prepare food that looks and tastes good.”
- “Work with cooks to make sure food is the same every time it is prepared; consistency”
- “Implement food presentation and quality standardization.”
- “Develop merchandising techniques and train employees to use them.”
- “Know and utilize food principles and procedures of marketing.”
- “Plan special events to promote the SN program.”
- “Listen to what customers say.”

- “Be friendly to children; say things like ‘have a good day.’”
- “Establish good relationship with teachers.”
- “When there is a customer complaint, solve the problem immediately.”
- “Managers should walk around the cafeteria when students are eating and ask what they like or don’t like.”
- “Use social media to promote school lunch and breakfast.”
- “Managers need to know diversity of customers and work with it to improve customer satisfaction.”
- “Managers need to know their customers.”
- “Involve stakeholders, chefs, PTO, and others in promoting school meals.”

What specific skills and knowledge are necessary in the functional area,

“Personnel Management?”

Focus group discussions were fairly intense when talking about personnel management.

Some comments regarding the management of staff involved issues mentioned under other functional areas. For example, one participant perceived standards of food presentation as a personnel issue, because staff sometimes ignore the standards for serving food attractively and neatly. Topics mentioned most often are listed below.

- “Know district policies and procedures regarding employees.”
- “Orientation of new employees.”
- “Dealing with difficult employees.”
- “Grievance procedures.”
- “Diversity.”
- “Training.”
- “Employee counseling.”
- “Line of authority.”
- “Communication with employees.”
- “Evaluating employees.”
- “Know district professional standards policies.”
- “Know and possess good management skills; communication, motivation, fairness, and professionalism.”

What specific skills and knowledge are necessary in the functional area, “Financial Management and Accountability?”

Most of the discussion about financial management and accountability centered around operational issues more than accountability issues. For example, participants in all groups emphasized the need for managers to understand meal cost and how it is calculated. Other financial management and accountability topics mentioned are listed below.

- “Understanding importance of meal counts.”
- “Handling cash collections.”
- “Controlling food cost.”
- “Understanding meal and non-program food pricing.”
- “Identification of reimbursable meals.”
- “Responsibilities for accuracy in point of service.”
- “Managing leftover to reduce waste in food production.”
- “Monitoring student plate waste.”
- “Implements district policy for charged meals.”
- “Utilize financial reports, such as profit and loss for site level kitchen on regular basis.”
- “Knows importance of labor cost controls to overall financial picture.”
- “Implements procedures to reduce theft.”

What specific skills and knowledge are necessary in the functional area, “Facility and Property Management?”

Summarized comments from participants regarding facility and property management are listed below.

- “Managers should be skilled in the use of equipment, and know how to train employees in the operation of equipment.”
- “Follow rules for shutting down equipment during emergency preparedness.”
- “Maintain a back-up plan in the event a major piece of equipment stops working.”
- “Develops a weekly schedule for cleaning equipment.”
- “Complete work order for equipment in a timely fashion.”
- “Monitor use of equipment by outside groups, if applicable.”
- “Knows importance of equipment cleanliness to prevent foodborne illness.”
- “Document repairs and maintenance cost for each major piece of equipment.”

8. Is this an adequate summary?

The assistant moderator recapped main ideas and topics mentioned during the focus group discussions. Focus groups members were in agreement with summary.

9. Is there anything else that we should have talked about today regarding knowledge and skills of effective SN managers, but did not?

No new topics were suggested.

Development of Draft Knowledge and Skills Statements According to Functional Areas

Researchers used several avenues of information to develop the draft knowledge and skill statements for effective SN managers. The focus groups discussions, site visit notes, and knowledge and skill statements in the current document were analyzed and used to draft a new set of knowledge and skill statements appropriate to each functional area identified by the expert panel. Other resources used by researchers included several publications that provide insight into current manager responsibilities. The Mississippi curriculum for manager training, *Decide to Succeed: An Orientation for New Managers*, published in 2017 by the Office of Nutrition, State of Mississippi Department of Education, furnished descriptions of manager roles and responsibilities as they apply to implementing menu standards, procurement, inventory control, food production, marketing, and human resource management. Industry books, printed materials, and Internet sources rounded out the research resources that assisted the researchers in developing a draft of knowledge and skills statements. A total of 191 knowledge statements were drafted, and are presented in Table 8. A total of 384 skill statements were drafted, and are presented in Table 9.

Table 8

Draft Knowledge Statements for Effective School Nutrition Managers

Functional Area
Knowledge Statements

Nutrition and Menu Management

1. Knows responsibilities of the SN manager in implementing nutrition standards.
2. Knows current USDA standards and regulations that apply to all meals served in the SN program.
3. Knows laws and regulations for compliance with nutrition objectives in school meals.
4. Knows implementing the *Dietary Guidelines for Americans* is an important part of achieving good nutrition in the SN program.
5. Knows the breakfast and lunch meal pattern requirements for various age/grade groups.
6. Knows USDA guidelines for making substitutions in the planned menu, if necessary.
7. Knows NSLP regulation regarding signage.
8. Knows locations of resources such as *Vegetable Subgroups*, to assist school staff in identifying and serving reimbursable lunches.
9. Knows the minimum quantities of food components/items to offer daily.
10. Knows USDA meal pattern requirements for components and food items for a meal to be reimbursable.
11. Knows how to use child nutrition labels or product formulations statements for crediting food items.
12. Know regulations for implementing offer versus served in the SN program.
13. Knows current government nutrition standards that apply to SN program meals/snacks.
14. Knows procedures for documenting and evaluating amounts of food planned, prepared, and served.
15. Knows importance of proper nutrition and nutrition environment as an integral part of educating children.
16. Knows importance of the SN program contributions to the long-range health of schoolchildren.
17. Knows local wellness policy requirements.
18. Knows federal, state, and local rules governing competitive food sales.
19. Knows the importance of a team approach when addressing the special food and nutrition need of children.
20. Knows sources of guidance for schools to use in meeting nutritional needs of children with special needs.
21. Knows how to follow a medical authorization to modify meals for a special-needs child.
22. Knows signs and symptoms of an adverse food reaction and/or an allergic reaction.
23. Knows the importance of nutrition education training for professional standards.

(Table 8 continues)

Table 8 continued

Draft Knowledge Statements for Effective School Nutrition Managers

**Functional Area
Knowledge Statements**

Nutrition and Menu Management

24. Knows resources available to SN managers that provide information on healthy meal patterns.
25. Knows importance of receiving the HealthierUS School Challenge certification.
26. Knows procedures for counting and claiming school meals at point-of-service.
27. Knows collection procedures when identifying a student as paid, reduced, or free meal eligibility.
28. Knows district internal controls to assure that meals counts are accurate.

Financial Management and Accountability

1. Knows all federal, state, and local regulations governing the financial operations of the SN program.
2. Knows district financial goals and objectives.
3. Understands the value of technology in SN financial management and accountability.
4. Understands the importance of accurate, current, and complete records to document SN financial accountability.
5. Knows basic mathematical operations and how use to calculate financial data.
6. Knows importance of operating a financially sound program.
7. Knows cost-effective techniques relevant to SN operations.
8. Knows the purpose of the budget and its use as both a planning and control tool.
9. Knows elements of the budget and the purpose of each.
10. Understands importance of accurate counting and claiming of reimbursable meals using approved method.
11. Knows district policies and procedures for secure cash management.
12. Knows financial impact of cost saving production techniques.
13. Understands the importance of meal costs on the financial status of the SN program.
14. Knows district policies and procedures for meal charging.
15. Knows how to calculate meals per labor hour and the significance of the results.
16. Identifies reimbursable meals and understands their impact on the financial status of the SN program.
17. Knows policies and procedures for the use of USDA foods.
18. Knows approved policy and procedures for providing free and reduced price meal benefits.
19. Knows system of internal controls to secure SN resources.
20. Understands the requirements and approved methods for completing financial reports.

(Table 8 continues)

Table 8 continued

Draft Knowledge Statements for Effective School Nutrition Managers

Functional Area
Knowledge Statements

Sanitation, Safety, and Security

1. Knows federal, state, and local health code requirements for foodservice establishments.
2. Knows principles of food safety and sanitation for equipment, personnel, food, and facility.
3. Knows methods of adult education to train employees on safe food handling techniques.
4. Understands causes and prevention of foodborne illness outbreaks
5. Knows principles of personal hygiene.
6. Knows correct method for hand washing.
7. Knows the HACCP-based food safety plan for the SN program.
8. Knows procedures to prevent cross contamination.
9. Knows safe temperatures for receiving, storing, cooling, freezing, thawing, cooking, and serving foods in the SN program.
10. Knows procedures for appropriate handling storing, and disposing of garbage and refuse that meet requirements for food safety.
11. Knows pest control regulations.
12. Knows procedures for preventing contamination of equipment and utensils.
13. Knows procedures for ensuring the safety of foods served to students with food allergies.
14. Knows procedures for preventing cross contamination of allergenic foods during storage, preparation, and service.
15. Knows district policies and procedures for serving children with special needs.
16. Knows procedures to protect food from deliberate tampering.
17. Knows system of measures to protect the security of people and foods in the SN program.
18. Knows district/school emergency/crisis management plan and manager's role in the plan.
19. Knows contact people/resources in an emergency/crisis.
20. Knows procedures to minimize or prevent workplace injuries.
21. Knows procedures to eliminate hazards and maintain a safe work environment.
22. Knows CPR and Heimlich maneuver.
23. Knows first aid procedures and supplies to keep in the facility.
24. Knows procedures for using fire extinguishers appropriate to the type of fire.
25. Knows district policies and procedures for reporting accidents and injuries and how to complete incident reports.

(Table 8 continues)

Table 8 continued

Draft Knowledge Statements for Effective School Nutrition Managers

Functional Area
Knowledge Statements

Facility and Property Management

1. Knows all federal, state, and local regulations relating to facility and property management of the SN program.
2. Knows safe equipment operation.
3. Knows cleaning procedures for all equipment
4. Knows procedures to calibrate thermometers in use in the SN program.
5. Knows who to contact in the event of emergency repairs to the facility and equipment.
6. Knows importance of using energy saving measures in SN program operations.
7. Knows district's policy on the use of equipment by outside entities.
8. Knows pest control plan and procedures.
9. Understands the value of a preventive maintenance plan.
10. Knows equipment replacement plan.
11. Understands the value of a clean, pleasant dining environment.

Procurement and Inventory Management

1. Knows the manager's responsibilities for ordering, receiving, and inventorying products for the SN program.
2. Knows the federal, state, and local school purchasing guidelines.
3. Knows forecasting methods to order accurate amounts of food and supplies.
4. Knows importance of using historical data and standardized recipes to determine the amount of food to order.
5. Knows how to use the *Food Buying Guide* or other official resources to determine the quantity of food to order.
6. Knows importance of checking inventory before ordering.
7. Knows the role of forecasting in controlling under- and overproduction.
8. Knows importance of using production records as a source of past and current usage when ordering products for the SN program.
9. Knows district procedures for preparing a purchase order/requisition.
10. Knows the importance of adjusting forecast of meals to prepare in special situations such as weather conditions or field trips.
11. Knows the policies and procedures for verification and acceptance of products delivered to the SN program.

(Table 8 continues)

Table 8 continued

Draft Knowledge Statements for Effective School Nutrition Managers

Functional Area
Knowledge Statements

Procurement and Inventory Management

12. Knows importance of checking prices and price extensions to verify accuracy of invoice.
13. Knows importance of verifying that the temperatures of all products are within the safe temperature zone.
14. Knows importance of secure, efficient, and safe storage areas.
15. Knows importance of following HACCP rules for safety and sanitation when storing food.
16. Knows importance of maintaining and monitoring storage area temperatures on a daily basis.
17. Knows requirements for storing cleaning products and chemicals in a separate storage area away from food.
18. Knows how to locate the Department of Health Food Code for safety guidance.
19. Knows procedures for securing the storeroom from theft and food tampering.
20. Knows importance of rotating stock when issuing food from the storeroom.
21. Knows district policy for dating products to reflect First-In; First-Out.
22. Knows importance of maintaining an accurate record of products removed from storeroom.
23. Knows how to use effective inventory procedures for managing the flow of products from the storeroom to the serving line.
24. Knows physical and perpetual methods of recording food products and supplies in inventory and when to use each method.
25. Knows how to delegate responsibility for inventorying to staff members.
26. Knows responsibilities and procedures to use when a food recall of a product shipped to the school occurs.

Meal Preparation and Service

1. Knows standards for preparing, holding, distributing and serving food in volume that maintain nutrition and food quality.
2. Knows the types of information and acceptable methods for preparing food production records as required for compliance with federal and state regulations.
3. Knows regulations regarding filing, storing, and time for keeping food production records.
4. Knows importance of monitoring food production daily to ensure quality of food and service.

(Table 8 continues)

Table 8 continued

Draft Knowledge Statements for Effective School Nutrition Managers

Functional Area
Knowledge Statements

Meal Preparation and Service

5. Knows the importance of using standardized recipe to ensure nutritional requirements are met.
 6. Knows how standardized recipes help ensure the production of quality food.
 7. Knows how to standardize new recipes for site level operation.
 8. Knows importance of using accepted methods when making recipe adjustments for number served.
 9. Knows common measures used in the production of food products.
 10. Knows how ingredients and preparation techniques influence the quality of food products.
 11. Knows how to calibrate scales to ensure accuracy of weights.
 12. Knows correct procedures, techniques, and tools to use in weighing and measuring ingredients for food preparation.
 13. Knows how quantity food production methods affect the nutritive value of food.
 14. Knows how to calibrate a thermometer.
 15. Knows time and temperature relationships associated with appearance and palatability of food.
 16. Knows the importance of portion control to the nutritional requirements of school meals.
 17. Knows USDA requirement for recording food item contributions to each required food component and quantities required to meet meal standards.
 18. Knows meal service principles that preserve food quality, promote efficiency, and enhance serving line appearance.
 19. Knows established benchmarks, such as meals per labor hour, for efficient production of meals
 20. Knows food quality standards to use in evaluating finished meal items.
 21. Knows fundamentals for developing a continuous quality improvement system for food production.
 22. Knows food preparation techniques that allow for efficient use of product, labor, and equipment.
 23. Knows principles of preplanning, planning, and scheduling food production to maximum efficient use of time and equipment.
 24. Knows the importance of production scheduling for optimum holding of food items.
 25. Knows impact of operational influences and resources on food production (e. g., physical facilities, equipment constraints, personnel skills, and schedules).
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(Table 8 continues)

Table 8 continued

Draft Knowledge Statements for Effective School Nutrition Managers

Functional Area
Knowledge Statements

Meal Preparation and Service

26. Knows federal, state, and local regulations for providing services and using USDA commodities in an emergency situation.
27. Knows federal, state, and local procedures for responding to a Food Recall.

Marketing, Communication, and Customer Service

1. Knows importance of promoting total SN program using established marketing techniques.
2. Knows how to use principles of marketing to encourage healthy food choices.
3. Knows how to develop a school site marketing plan to increase participation in the school meals programs.
4. Knows how to use 4Ps (product, price, place, and promotion) to create a more positive image of excellence in the SN program.
5. Knows importance of marketing National School Lunch Week and National School Breakfast Week to increase awareness of program benefits to children.
6. Knows how to use social media to promote nutritious school meals, when applicable.
7. Knows how to market SN programs as part of the educational environment.
8. Knows marketing techniques to influence dietary behaviors of students.
9. Knows key elements of food presentation to increase eye appeal and student acceptance of food served.
10. Knows methods for communicating food and nutrition standards to staff.
11. Knows fundamentals of creating a pleasant, appealing, and safe environment for serving customers nutritious meals.
12. Knows the importance of appealing food presentation to encourage students to participate in the SN program.
13. Knows how to use garnishes to make the food or serving line more attractive.
14. Knows basic rules for setting up a service line to make it attractive and to help students make good nutritional choices.
15. Knows importance of servings of food neatly without spill on the tray.
16. Know importance of ensuring all serving and eating utensils are clean and sanitized.
17. Knows how to use school menus as a marketing tool.
18. Knows customer expectations for the SN program at the school level site.

(Table 8 continues)

Table 8 continued

Draft Knowledge Statements for Effective School Nutrition Managers

Functional Area
Knowledge Statements

Marketing, Communication, and Customer Service

19. Knows key factors that contribute to customer satisfaction of students who participate or could participate in the SN program.
20. Knows importance of collecting data on customer acceptability of school menus.
21. Knows importance of customer feedback on food items served.
22. Knows how to identify food trends that influence customer eating habits.
23. Knows how to establish a customer-friendly and responsive environment in the SN program.
24. Knows importance of SN staff's role in providing excellent customer service to SN program stakeholders.
25. Knows importance of working with school principal and faculty to improve the dining environment.
26. Knows importance of creating a student friendly environment with clean serving lines and helpful employees to improve participation in the SN program.
27. Knows location of marketing resources to help in achieving goals and objectives of the school district marketing plan.

Personnel Management

1. Knows local, state, and federal legislation pertaining to personnel management of a SN program and who to contact for assistance.
2. Knows civil rights legislation.
3. Understands organizational structure of district SN program and lines of authority.
4. Knows techniques for effective communication.
5. Knows district policies and procedures for selecting, supervising, disciplining, promoting, and terminating employees.
6. Understands the importance of complete and accurate records and documentation.
7. Knows district/school emergency and crisis management plans.
8. Knows manager's role in the district/school emergency and crisis management plans.
9. Knows principles and techniques of adult education.
10. Knows professional development requirements and sources for meeting the requirements.
11. Knows sources for appropriate education and training materials.
12. Understands the impact of cross-training employees to increase productivity.
13. Knows how to organize work areas and job requirements for efficient work flow.

(Table 8 continues)

Table 8 continued

Draft Knowledge Statements for Effective School Nutrition Managers

Functional Area
Knowledge Statements

Personnel Management

14. Knows principles of work simplification.
 15. Knows techniques of time management.
 16. Knows techniques for dealing with difficult employees.
 17. Knows policies and procedures for handling employee grievances.
 18. Knows labor union contract requirements related to the SN program.
 19. Knows district policies and procedures for disciplining employees.
 20. Knows techniques for conflict resolution.
 21. Knows principles of teamwork and techniques for applying.
 22. Knows policies and procedures for evaluating employees.
 23. Knows principles of effective delegation.
 24. Understands importance of employee recognition.
 25. Understands importance of good leadership skills in managing the SN program.
 26. Understands the impact of workplace diversity and the importance of working effectively in a diverse workplace.
 27. Understands importance of representing school nutrition to others in a professional manner.
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Table 9

Draft Skill Statements for Effective School Nutrition Managers

Functional Area
Skill Statements

Nutrition and Menu Management

1. Maintains program integrity and accountability regarding meal requirements and documentation.
2. Implements district menu offerings to ensure compliance with USDA regulations.
3. Ensures all meals served meet current meal standards, and meal pattern requirements, including working with health professionals in providing meals to special needs students.
4. Ensures all menu items are prepared to preserve nutrition in integrity and encourage meal consumption.
5. Provides an SN environment that projects a positive message about the meals served and their nutrition value.
6. Encourages students to make wise food choices that result in healthy, well-balanced meals.
7. Encourages students to select nutrient-dense foods within all food groups.
8. Follows guidelines for implementation of *Dietary Guidelines for Americans*.
9. Ensures additional sugars, saturated fats, and sodium are not added to school meals.
10. Incorporates use of herbs and spices to enhance flavor when using less salt/sodium.
11. Ensures use of nutritionally equivalent foods when menu substitutions are necessary.
12. Ensures students are offered all five required food components in at least the minimum required amounts at lunch.
13. Ensures that students are offered all three required food components in at least the minimum required amounts at breakfast.
14. Ensures crediting documentation is complete for all meal components/food items.
15. Ensures Offer Versus Serve is being implemented properly, if applicable.
16. Ensures students are in compliance with selection of appropriate food components and/or items under OVS.
17. Ensures all meals served meet nutritional requirements for reimbursement.
18. Ensures breakfast program and school lunch program are in compliance with dietary specifications.
19. Maintains child nutrition labels or Product Formulation Statements for items that cannot be credited using the Food Buying Guide.
20. Follows local, state, and federal guidelines for reducing salt in recipes served in school meals.
21. Monitors all foods sold during the school day to ensure they meet nutrient requirements; to include à la carte, school store, and vending machine.

(Table 9 continues)

Table 9 continued

Draft Skill Statements for Effective School Nutrition Managers

Functional Area
Skill Statements

Nutrition and Menu Management

22. Displays signage to identify what foods constitute a unit priced reimbursable meals near or beginning of serving line when OVS is implemented at school site.
23. Works with district and school officials to provide daily/monthly menus to students.
24. Shares nutritional information with students, parents, and faculty about nutrient content of food served in the school meals.
25. Monitors food waste in order to provide feedback to menu maker about student likes and dislikes toward food items served.
26. Monitors portion sizes of meal components/food items served to students to ensure meals are nutritionally compliant with USDA regulations.
27. Provides menu maker with student comments regarding menu item likes and dislikes, new food items served, and menu changes.
28. Ensures menu items/components that meet USDA meal requirements are available to students throughout meal service.
29. Uses the USDA Food Production Record for documenting the amount of each menu item served to age/grade groups daily.
30. Monitors food preparation techniques to ensure the yield of high-quality food that meets nutrition objectives.
31. Trains cashiers and other staff to recognize reimbursable meals at point-of-service.
32. Maintains documentation such as production records to show nutritional requirements and meal pattern are met daily.
33. Records planned number of portions for each menu item served and food items planned according to contribution size for age/grade groups.
34. Records planned number of portions for each menu items served and food items planned according to contribution size for age/grade groups.
35. Monitors in-kind meals when documenting number of menu items planned and served.
36. Monitors access to drinking water in school cafeteria.
37. Maintains documentation that identified all food and beverages (excluding reimbursable meals) sold on school campus to students during the day.
38. Maintains documentation to support the Smart Snacks requirements for all items sold on campus during the school day are met.
39. Communicates the school district policy on days allowed for fundraising.
40. Maintains documentation that identifies all fundraisers that occur during the school day.
41. Ensures meal benefit documentation is up-to-date in POS system.

(Table 9 continues)

Table 9 continued

Draft Skill Statements for Effective School Nutrition Managers

Functional Area
Skill Statements

Nutrition and Menu Management

42. Ensures implementation of all policies and procedures regarding feeding students receiving free or reduced meal benefits.
43. Follows district guidance regarding charged meals or feeding alternate meals to paying students without funds.
44. Ensures daily participation records supporting monthly claims submitted for school year is accurate.
45. Maintains a copy of current Local School Wellness Policy as appropriate.
46. Displays USDA “And Justice for All” poster in a prominent location and visible to recipients of benefits in the SN program.
47. Maintains appropriate USDA guidance and supporting documentation for accommodating students with special dietary needs, as applicable.
48. Follows district policies regarding student food allergies.
49. Ensures applicable policies are followed when providing school meals for children with special needs.
50. Provides required substitutions or modifications of school meals for children whose special needs restrict their diets.
51. Keeps written medical diets and instructions on file.
52. Maintains documentation of all non-program food sold.
53. Maintains documentation, if applicable, that shows families are informed about the availability of reimbursable meals served under the SBP and NSLP programs.
54. Maintains documentation that supports the number of afterschool program snacks served daily and claimed, if applicable.
55. Ensures no overt identification of student eligibility by other students or staff.
56. Monitors point-of-service meal count to ensure only one meal per eligible student per meal service is claimed for reimbursement.
57. Monitors attendance adjusted edit check on each school’s daily meal count, if applicable.
58. Ensures accurate consolidation of meal counts from various service lines.
59. Ensures meal counts are completed and consolidated daily.
60. Maintains meal claim documentation for time periods as required by local, state, and/or federal governments.
61. Maximizes use of technology to improve menu management.
62. Attends professional standards meeting to review government modifications or changes in menu and meal pattern requirements as appropriate.

(Table 9 continues)

Table 9 continued

Draft Skill Statements for Effective School Nutrition Managers

Functional Area
Skill Statements

Financial Management and Accountability

1. Works with SN administration to implement financial management and accountability practices consistent with local, state, and federal requirements.
2. Maintains records and supporting documentation in accordance with federal, state, and local regulations and policies.
3. Shares district financial goals and objectives with employees to encourage employee efforts.
4. Organizes and manages the business functions of the local program to maintain a fiscally sound operation.
5. Operates a financially sound, cost- effective SN program of high integrity.
6. Applies basic math skills to prepare accurate and complete financial reports.
7. Reviews monthly financial reports to ensure that labor, food, and supply costs are within budgeted ranges.
8. Ensures that all employees responsible for financial operations are property trained and authorized.
9. Uses appropriate technology to monitor, analyze, and report financial information.
10. Trains employees on the technology utilized in the operation of the SN program.
11. Uses team approach to encourage employee application of sound financial practices.
12. Encourages employees to take individual responsibility for using sound financial practices in their work duties.
13. Implements a system of cost control measures throughout the SN program.
14. Uses the profit and loss statement to monitor the financial position of the program on a regular basis.
15. Utilizes the profit and loss statement to assist in better financial decision-making.
16. Trains employees to understand the purpose and elements of the profit and loss statement
17. Implements a system of internal controls to reduce theft by employees and students.
18. Ensures that employees adhere to district policies and procedures for cash operations and point of service activities.
19. Maintains confidentiality of all financial data.
20. Maintains confidentiality of student information and transactions.
21. Follows district policies and procedures for charging for in-kind meals, earned meals, and other unusual meal payments
22. Presents accurate, complete financial reports regularly to the district supervisor and other interested parties.

(Table 9 continues)

Table 9 continued

Draft Skill Statements for Effective School Nutrition Managers

Functional Area
Skill Statements

Financial Management and Accountability

23. Presents accurate, complete financial reports regularly to the district supervisor and other interested parties.
24. Trains employees to utilize the approved system for accurately counting and claiming meals.
25. Trains employees in district policies and procedures for cash management.
26. Regularly monitors physical and financial SN resources.
27. Assists parents/guardians with completion of free and reduced price meal applications.
28. Evaluates free and reduced price applications to determine eligibility for benefits.
29. Follows approved procedures for counting and claiming reimbursable meals.
30. Recognizes reimbursable meals and trains employees to recognize reimbursable meals accurately.
31. Follows district guidelines for students charging meals.
32. Monitors prepaid student accounts and notifies parents of the status of student accounts.
33. Collaborates with district administrator and school site principal to develop a system for payment of unpaid charges.
34. Calculates and utilizes meal per labor hour to monitor employee productivity and assist in efficient staffing.
35. Maximizes the use of USDA foods to maximize cost savings.
36. Monitors food production to reduce waste from over-production.
37. Enforces proper use of standardized recipes to reduce waste and control food quality
38. Trains employees to understand the value of accurate, complete specifications in ensuring that products are delivered and received correctly and as specified.
39. Calculates costs of purchased and USDA foods and uses the information to calculate plate costs.
40. Implements a system of department-wide security measures to prevent loss, theft, and pilferage.
41. Monitors and audits cashier operations and cash reconciliation regularly
42. Follows district policies and procedures for bank deposits.
43. Provides information and recommendations to district administrator for use in budget development
44. Tracks expenses and revenue on a regular basis to better forecast future needs.
45. Conducts random checks of financial activities and records.

(Table 9 continues)

Table 9 continued

Draft Skill Statements for Effective School Nutrition Managers

Functional Area
Skill Statements

Financial Management and Accountability

46. Follows district procedures to accurately process invoices for payment.
47. Trains employee to follow district procedures to accurately process invoices for payment.
48. Utilizes the budget to monitor the financial position of the SN program and uses the budget as both a planning and control tool.

Sanitation, Safety, and Security

1. Works with SN administration to implement sanitation, safety, and security practices consistent with local, state, and federal requirements.
2. Ensures SN operations meet the health department code and any deficiencies are corrected promptly
3. Completes a program that certifies knowledge of causes and prevention of foodborne illnesses and infections.
4. Posts Health Department inspection certificate prominently and promptly corrects any deviations cited.
5. Implements and maintains a system for preventing contamination of equipment and utensils.
6. Enforces rules of health, cleanliness, personal habits, and proper clothing to ensure employees handling food are clean and healthy.
7. Trains employees in the causes and prevention of foodborne illnesses.
8. Practices principles of personal hygiene.
9. Monitors and enforces employees' adherence to personal hygiene policies and procedures.
10. Monitors food receiving, storage, preparation, and service activities and areas to identify food safety hazards.
11. Develops and implements a system to prevent cross-contamination of food during receiving, storage, preparation, and service.
12. Monitors employees' food handling practices and corrects as appropriate.
13. Monitors employees' food handling practices to ensure the safety of food as it is stored, prepared, and served.
14. Ensures that employees know role of sanitation and personal hygiene in food safety
15. Monitors employee activities to ensure hands are washed correctly and at appropriate times to prevent food contamination.

(Table 9 continues)

Table 9 continued

Draft Skill Statements for Effective School Nutrition Managers

Functional Area
Skill Statements

Sanitation, Safety, and Security

16. Ensures employees follow procedures for proper glove use to prevent contamination of food products.
17. Follows district procedures that meet food safety standards for handling, storing, and disposing of garbage and refuse
18. Implements district policies and procedures for ensuring that students with food allergies are managed correctly.
19. Follows district policies and procedures for the preparation of foods for students with food allergies.
20. Calibrates food thermometers correctly and regularly to obtain accurate readings.
21. Train employees on proper procedures to calibrate food thermometers.
22. Implements and monitors a regular cleaning and sanitizing schedule for food preparation areas, food contact surfaces, walls, floors, and equipment.
23. Incorporates HACCP principles into the management of the SN program
24. Implements the SN HACCP -based food safety plan.
25. Ensures that all employees attend training on HACCP principles and understand the importance of time/temperature relationship to food safety.
26. Monitors temperatures for receiving, storing, cooling, freezing, thawing, cooking, and serving foods in the SN program.
27. Maintains daily temperature records for storage areas, refrigeration/freezer equipment and dishwashing equipment.
28. Enforces rules of time and appropriate temperatures for food handling and preparation.
29. Ensures that corrective actions for deviations from required temperatures are implemented and recorded promptly.
30. Follows district policies and procedures to for reporting accidents and completion of incident reports
31. Maintains employee contact information in the event of injury or emergency situation.
32. Posts current emergency telephone numbers.
33. Follows and enforces all safety regulations and guidelines.
34. Provides proper equipment, utensils, and training to prevent cuts and burns.
35. Evaluates site routinely to ensure aisles, floors, and walkways are clear and in good repair to prevent trips and falls.
36. Labels and stores chemicals and other hazardous materials separately from food products.

(Table 9 continues)

Table 9 continued

Draft Skill Statements for Effective School Nutrition Managers

Functional Area
Skill Statements

Sanitation, Safety, and Security

37. Models proper lifting techniques and trains employees on the proper techniques for lifting.
38. Follows procedures for use of step ladders.
39. Operates fire extinguisher and determines the extinguisher to use on different types of fires.
40. Successfully completes training on CPR and Heimlich maneuver.
41. Develops and implements a plan for protecting food items from deliberate tampering.
42. Implements security measures throughout the SN operation and enforces compliance by all.
43. Prohibits entry of unauthorized individuals in the food preparation, receiving, and storage areas.
44. Implements a system for the protection of food from intentional and unintentional tampering and contamination throughout the SN facility.
45. Follows school/district crisis or emergency procedures.
46. Trains employees on their role in the crisis/emergency plan.
47. Attends all training on emergency procedures in the event of an active shooter in the facility.
48. Posts list of emergency contact telephone numbers.
49. Utilizes appropriate technology in safeguarding the safety employees and the food served to students.

Facility and Property Management

1. Works with SN administration to implement facility and property management practices consistent with local, state, and federal requirements.
2. Ensures facility and equipment meet health department inspection standards and any deficiencies corrected promptly
3. Follows manufacturers' directions for equipment use, cleaning, and maintenance.
4. Trains employees on use, care and safe operation of equipment.
5. Maintains records of equipment maintenance and repair for appropriate length of time.
6. Follows district policies on use of equipment by outside entities.
7. Maintains all equipment in good repair.
8. Schedules equipment use for maximum efficiency.

(Table 9 continues)

Table 9 continued

Draft Skill Statements for Effective School Nutrition Managers

Functional Area
Skill Statements

Facility and Property Management

9. Follows district policies and procedures for equipment replacement.
10. Recommends new equipment purchases to district administrator.
11. Develops equipment replacement plan.
12. Develops, implements, and monitors master cleaning schedule for the SN facility and all equipment.
13. Inspects facility and equipment daily to ensure cleanliness and proper working condition.
14. Implements a preventive maintenance program for the SN facility and equipment.
15. Maintains a good working relationship with the school maintenance department.
16. Inspects the SN facility for safety hazards.
17. Maintains a safe working environment.
18. Reports safety hazards immediately and ensures hazards are removed or corrected.
19. Trains employees on safety principles, policies, procedures, and guidelines.
20. Ensures all employees can operate department fire extinguishers and are trained on which type of extinguisher to use on which type of fire.
21. Ensures all fire extinguishers are workable and inspections are up-to-date.
22. Posts a current list of contacts and telephone numbers for emergency repairs to the facility and equipment.
23. Monitors twice daily temperature logs of refrigeration/freezer equipment to ensure proper operation.
24. Follows district policies and procedures for pest control in the SN facility.
25. Trains employees on proper pest control procedures.
26. Implements a pest control program for the SN facility.
27. Maintains a pleasant, safe, and clean physical environment in the school cafeteria to encourage student participation.
28. Recommends improvements to the dining environment to encourage student participation.
29. Trains employees on energy conservation measures in the school environment.
30. Participates in available recycling programs.
31. Applies energy conservation measures in managing the SN facility and equipment.
32. Encourages employees to incorporate energy saving techniques as a routine part of their work habits.

(Table 9 continues)

Table 9 continued

Draft Skill Statements for Effective School Nutrition Managers

Functional Area
Skill Statements

Procurement and Inventory Management

1. Works with SN administration to implement procurement practices consistent with local, state, and federal requirements.
2. Participates in district product screening and brand approval activities as appropriate.
3. Communicates with administration regarding approved product list to ensure correct product is ordered based on contract terms.
4. Uses product descriptions when ordering food to ensure the correct menu items are ordered and received.
5. Follows district guidelines for issuing purchase orders for items used in the SN program.
6. Utilizes effective forecasting methods to determine the amount of food to order.
7. Uses district procedures and regulation guides to calculate the amount of food to order.
8. Consults productions records as a source of information for past and current usage of food items.
9. Utilizes vendor/product specifications for case/serving size when calculating amounts to order for food items/components.
10. Uses standardized recipes to calculate amount of food to order for school site prepared menu items.
11. Utilizes inventory when determining quantities for purchased food and/or USDA Foods.
12. Plans for and utilizes left-overs when forecasting amounts of food to order.
13. Retains a copy of the purchase order at the product check-in point to verify products delivered are products ordered.
14. Follows district procedures for receiving product to verify that quantities, prices, and specified items conform to the order placed.
15. Follows procedures for inspecting merchandise for damage, signs of contamination and/or improper temperature upon delivery.
16. Follows district procedures for returning and crediting unacceptable products.
17. Verifies no unauthorized substitutions are delivered.
18. Follows district policies and procedures for documenting variations between purchase order and invoice/delivery ticket.
19. Develops and implements a system for placing items in the storage areas based on district policy.
20. Monitors use of storeroom space; ensures adequate ventilation and lighting.
21. Ensures all food products are dated when entered into storage and/or inventory.

(Table 9 continues)

Table 9 continued

Draft Skill Statements for Effective School Nutrition Managers

Functional Area
Skill Statements

Procurement and Inventory Management

22. Implements a system for following HACCP rules for safety and sanitation when storing food.
23. Ensures storeroom controls are in place to store and maintain all foods at appropriate temperature.
24. Maintains temperature logs according to regulations for checking and recording temperatures of all storage units upon arrival each morning and when leaving in the afternoon.
25. Maintains procedures to ensure storage areas are clean, dry, and free from infestation at all times.
26. Follows rules for storing cleaning products in a separate area away from food products.
27. Follows Department of Health Food Code when handling cleaning products.
28. Institutes a training process for all kitchen staff on receiving and storing foods properly.
29. Maintains accurate and complete records with respect to the receipt, disposal, and inventory of all USDA Foods and food items purchased.
30. Implements a system to record all products removed from storage.
31. Follows district procedures for issuing stock from the storeroom.
32. Maintains school's written policies for procedures established to transfer food in case of equipment failure or natural disaster.
33. Follows approved federal, state, and local guidelines for inventorying purchased food and USDA Foods.
34. Follows best practices when taking actual inventory, (i.e., one person count and another person records).
35. Ensures consistency in inventory practices such as tracking units or cases.
36. Implements effective use of district technology when conducting/tracking inventory.
37. Implements a stock rotation system such as FIFO in accordance with district procedures and policies.
38. Ensures an adequate inventory is available for all meal services and extra food sales.
39. Ensures proper documentation is maintained for a food recall.
40. Works with administration and other officials to fulfill all federal and state responsibilities for food recalls.
41. Maintains and implements a standard operating procedure to identify and contain products when there is a food recall.

(Table 9 continues)

Table 9 continued

Draft Skill Statements for Effective School Nutrition Managers

Functional Area
Skill Statements

Procurement and Inventory Management

42. Follows district guidelines for maintaining food and supply items in inventory to be available for use in case of an emergency.
43. Follows district policies and procedures for addressing security and theft in kitchen and storeroom areas.
44. Develops a system for controlling keys and access to product storage areas.

Meal Preparation and Service

1. Implements and models high professional standards for preparation of meals and service in the SN program.
2. Maintains high standards of control for quality of food production in all SN programs.
3. Utilizes historical data, trends, and standardized recipe to forecast number of servings needed for each menu item served daily.
4. Follows district guidance in using cycle menus.
5. Develops a system for reviewing over- and under-production of food and implementing corrective action.
6. Ensures effective use of USDA Foods.
7. Ensures ingredients are measured using correct procedures, techniques, and tools.
8. Demonstrates how weights and measures are used in recipes to ensure quality food.
9. Trains employees on how weighing and measuring ingredients contribute to food products meeting menu pattern requirements.
10. Demonstrates how to calibrate scales to ensure accuracy in weighing.
11. Uses only tested and standardized recipes in the production of food for the SN program.
12. Adjusts ingredient quantities in standardized recipes to yield planned number of servings.
13. Uses the USDA Food Production Record as a tool for food preparation and service.
14. Maintains food productions records in an accurate manner to provide an audit trail for administrative review.
15. Maintains accurate food production record of planned menus, menu components, amount of food produced, food served, and food discarded.
16. Records leftover portions stored, leftover portions discarded, and special conditions that contributed to more leftovers than usual such as weather or special events.

(Table 9 continues)

Table 9 continued

Draft Skill Statements for Effective School Nutrition Managers

Functional Area
Skill Statements

Meal Preparation and Service

17. Maintains a written record to show the actual food served if a menu is changed or substitutions are made.
18. Monitors portion control to ensure students get the correct meals component contribution in each serving.
19. Determines how much of each menu items to prepared for the planned number of students forecast to be served.
20. Maintains a supply of the correct equipment and tools for controlling portions of food items served to students.
21. Prepares complete and accurate production plans for daily preparation and service of meals.
22. Ensures the aesthetic qualities of menu items are maintained throughout the meal period.
23. Utilizes accepted procedures for evaluation of food prepared on a routine basis.
24. Establishes procedures of food preparation to conserve the nutritive value, enhance flavor and attractiveness, and promote peak freshness of the final product.
25. Utilizes written surveys to determine student food likes and dislikes.
26. Suggests changes to menu developer in menus, preparation techniques, and foods available for purchase based on food acceptability.
27. Communicates with school officials regarding requests from staff for menus planned around special school occasions.
28. Responds to customer suggestions and comments in a pleasant and positive manner.
29. Monitors employees during food preparation period to ensure the yield of high quality food that meets nutrition guidelines.
30. Utilizes a system to maintain high standards of quality in the appearance of food products on the serving line.
31. Identifies techniques to present food items attractively on plate or tray.
32. Implements procedures for holding food at the correct temperature during serving periods.
33. Implements a system for documentation of food temperature during serving periods.
34. Monitors and staggers food production according to meal service schedule.
35. Plans and monitors service periods to ensure all food items are sufficiently available to all students without any food shortages.
36. Plans work organization of staff so that job tasks are performed in proper sequence.
37. Guides staff to incorporate work simplification techniques into product tasks.

(Table 9 continues)

Table 9 continued

Draft Skill Statements for Effective School Nutrition Managers

Functional Area
Skill Statements

Meal Preparation and Service

38. Plans production schedules to effectively utilize resources and coordinate activities of the food service staff.
39. Provides orientation to new staff members regarding job description, including duties and responsibilities for preparing high quality, nutritious food.
40. Develops production schedules that provide for batch cooking as a method for producing high quality food.
41. Adjusts food production schedules to changing circumstances such as weather, field trips, or a staff member's absence.
42. Develops employee schedules to ensure maximum use of labor hours.
43. Develops and implements a cleaning schedule to assure that the kitchen and dining areas are always clean and attractive.
44. Evaluates menus for equipment/time requirements and personnel availability.
45. Ensures accurate meal eligibility category is confirmed at the point of service.
46. Oversees cashiering activities involving the collection of monies and recording of daily receipts.
47. Implements the meal count/collection system to ensure that no overt identification of free or reduced price meal recipients occurs.
48. Identifies problems/differences in the meal count/collection system for consolidation of line meal counts and cash collections.
49. Reconciles point-of-service records daily.
50. Monitors and enforces procedures to safeguard cash and meal benefits identifiers from loss, theft, or misuse.
51. Uses approved procedures to identify potential problems in the meal count system at the site level.
52. Identifies and appropriately counts adult meals, second meals, or other non-program foods sold.
53. Follows contingency plans in event of point-of-service hardware and/or software failure during meal service.
54. Utilizes technology to improve flow of food production systems.

(Table 9 continues)

Table 9 continued

Draft Skill Statements for Effective School Nutrition Managers

Functional Area
Skill Statements

Marketing, Communication, and Customer Service

1. Works with SN officials to implement a marketing plan to create an atmosphere that attracts customers including students, teachers, administrators, and other support staff.
2. Provides an environment conducive to protecting the health and well-being of customers through high levels of sanitation standards.
3. Creates promotional activities that motivate and support student selection of meals that help maintain a healthy body and ideal weight.
4. Uses merchandising techniques to improve customer nutrition choices and practices.
5. Conducts marketing campaigns designed to increase student participation in the school meals program.
6. Assists school community in hosting special events that feature school cafeteria.
7. Uses nutrition education materials in the cafeteria and on the serving line to promote an awareness of healthy school meals.
8. Uses established marketing techniques to improve customer awareness of the program.
9. Uses marketing to encourage healthy food choices.
10. Promotes SN program to staff, parents, and community in addition to students.
11. Encourages the acceptability of healthful products such as a greater variety of vegetables, fruit, and other more nutrient-dense foods.
12. Implements school district marketing plan at school site when appropriate.
13. Implements district plans to celebrate national school lunch and school breakfast week.
14. Involves school administrators and faculty in promoting special school events such as grandparent's day, contests, and theme days as part of marketing and customer service efforts.
15. Serves as a model for customer-service orientated SN staff.
16. Uses products, price, place, and promotion to help create an image of excellence the SN program.
17. Uses merchandising techniques to improve customer nutrition choices and practices.
18. Assists teachers, school administrators, and parents with nutrition education resources.
19. Recognizes key factors that contribute to customer satisfaction of students who eat school meals.
20. Determines customer expectations for the school site's nutrition program.
21. Communicates with customers to determine what influences their eating habits.
22. Trains staff to remain alert to factors that affect customer satisfaction.

(Table 9 continues)

Table 9 continued

Draft Skill Statements for Effective School Nutrition Managers

Functional Area
Skill Statements

Marketing, Communication, and Customer Service

23. Trains staff to remain alert to factors that affect customer satisfaction.
24. Develops a process to get feedback from customers about their preferences and expectations.
25. Establishes a customer-friendly and responsive environment in the school cafeteria.
26. Encourages SN staff to be helpful and supportive of student customers.
27. Discusses ways to improve customer satisfaction with other staff members.
28. Serves as a role model to other SN staff to help create a customer-friendly environment.
29. Develops a customer service attitude toward students that says “We care about meeting your nutritional needs.”
30. Includes on-the-job training in customer service as part of professional standards.
31. Maintains an attractive dining area, decorated appropriately.
32. Monitors service line to see that it moves smoothly with few backups.
33. Ensures food items are served to maintain quality and appearance standards.
34. Responds immediately to customer complaints and works to resolve issues.
35. Presents pertinent SN information, when appropriate, at school or community meetings.
36. Coordinates facilities and services with outside groups when authorized by school officials.
37. Works with stakeholders to generate support for federal, state, and local policies beneficial to the health and education of children.
38. Demonstrates professionalism in working with SN program customers.

(Table 9 continues)

Table 9 continued

Draft Skill Statements for Effective School Nutrition Managers

Functional Area
Skill Statements

Personnel Management

1. Works with SN administration to implement personnel practices consistent with local, state, and federal requirements.
2. Works within the school site and district organizational lines of authority.
3. Develops a plan for personal professional development and encourages and assists employees in complying with professional development requirements.
4. Represents the SN program professionally and ethically to the public and others within the district.
5. Communicates effectively with employees, supervisors, school administration, parents, students, other school employees, and the public as appropriate.
6. Utilizes basic math skills accurately in all calculations needed in managing the SN program.
7. Keeps employees informed through regular meetings and written and verbal communications.
8. Uses feedback to improve communication among and with employees.
9. Provides clear direction and communication of job expectations to SN staff.
10. Incorporates principles of adult education when training employees.
11. Employs coaching techniques in conjunction with training to improve employee performance.
12. Counsels employees on work-related concerns to encourage good employee morale and improve performance.
13. Complies with district policies and procedures in selecting, supervising, disciplining, training, promoting, and terminating employees.
14. Collaborates with other departments and individuals at the school site and within the district, as appropriate.
15. Reviews, updates, and maintains a current policy and procedures manual for the SN program.
16. Maintains personnel records and documentation as required by the school district.
17. Adheres to union agreement procedures related to the SN program.
18. Follows procedures for responding to union actions and grievances.
19. Promotes respect and appreciation for the diverse workplace and the individuals who make up the work force.
20. Manages effectively a workplace of diverse employees, experience, and skills.
21. Maintains staffing appropriate to the required daily needs of the SN program and plans ahead for future demands.

(Table 9 continues)

Table 9 continued

Draft Skill Statements for Effective School Nutrition Managers

Functional Area
Skill Statements

Personnel Management

22. Organizes work flow for efficient and prompt production and service, freedom from workplace hazards, and employee safety.
23. Assists employees with organizing work areas for efficient work flow and safety.
24. Demonstrates flexibility and the ability to work effectively in a fast-paced, dynamic work environment.
25. Monitors and assesses employee performance on an ongoing informal basis to assist with determining departmental and individual training needs.
26. Sets performance standards for employees.
27. Trains staff on an ongoing, regular, and as-needed basis on skills needed to perform effectively and to ensure that proper procedures are followed in all work areas.
28. Trains employees in work simplification techniques.
29. Implements a program of cross-training for all employees to increase productivity.
30. Utilizes time management techniques to ensure tasks are completed within time constraints.
31. Assists employees with learning and utilizing time management techniques.
32. Provides orientation to the SN program and school cafeteria for new employees.
33. Maintains required program and employee records and documents according to district policies and procedures.
34. Monitors program and employee records for accuracy and completeness.
35. Provides leadership with a focus on employee satisfaction, program improvement, and employee productivity.
36. Promotes a team approach among employees to problem-solve and meet program goals.
37. Provides fair, consistent, and compassionate leadership in the management of the SN program and employees.
38. Follows district policies and procedures to discipline employees fairly and impartially with the goal of improved behavior and/or performance.
39. Uses fair, constructive methods to correct employees and to resolve differences.
40. Applies principles of effective delegation to assign tasks, provide growth opportunities, and achieve stated objectives.
41. Applies conflict resolution techniques to resolve problems between and with employees and other key personnel in the school and district.
42. Develops and posts employee work schedule regularly.

(Table 9 continues)

Table 9 continued

Draft Skill Statements for Effective School Nutrition Managers

Functional Area
Skill Statements

Personnel Management

43. Schedules all duties fairly for maximum efficiency and employee productivity.
 44. Evaluates employees fairly utilizing the job description, according to district procedures.
 45. Trains and drills employees on district/school emergency plans, and ensures each employee knows their role in an emergency.
 46. Utilizes the meals per labor formula to monitor performance and to assist in staffing.
 47. Considers new ideas and concepts, and incorporates new methods for better results.
 48. Models professional behavior and enforces standards for SN staff.
 49. Implements conflict resolution techniques, as needed and appropriate.
 50. Applies techniques for dealing with difficult employees and seeks added assistance and expertise, when needed.
 51. Manages conflict effectively utilizing techniques for conflict resolution.
 52. Supervises employees effectively to ensure SN goals are met.
 53. Relates to employees as a leader and not as a friend.
 54. Monitors staff activities to ensure all tasks are completed, and to assist in improving future performance.
 55. Demonstrates an open, approachable management style.
 56. Actively listens to employees and others to ensure understanding and to express concern.
 57. Treats employees, and others with whom the manager works, with respect.
 58. Acknowledges and recognizes personnel for outstanding work performance and accomplishments.
 59. Utilizes available technology in the management of the SN operations.
 60. Is proficient in use of available technology and trains employees on the use of technology.
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CONCLUSIONS AND RECOMMENDATIONS

The functional areas and knowledge and skill statements identified in this project provide a broad view of the complex role of school nutrition (SN) managers. Job responsibilities for SN managers can differ from state to state, district to district, and site to site. These factors deeply impact the job responsibilities of SN managers. Understanding research- and experience-based functional areas, and the related knowledge and skills, is valuable to SN managers who must function effectively within today's dynamic and challenging environment.

Societal demands in the past ten years have added to the complexity of the SN manager's job. Trends such as the epidemic of childhood obesity, the desire for organic and ethnic foods, a scarcity of qualified technicians who are willing to accept the responsibilities of managing a school food service program, concern for the environment, additional demands by the community, parents, and students, and increased regulation all contribute to a challenging operational climate today.

The Healthy, Hunger-Free Kids Act of 2010 (HHFKA) funds child nutrition and free lunch programs in schools. The bill sets new nutrition standards for schools, and allocates funds for their implementation. The act seeks to improve the critical nutrition and hunger safety net for millions of children in the United States. Additionally, Professional Standards for SN professionals is a key provision of the HHFKA. It requires a minimum of 10 hours training annually for all SN managers. Six hours training annually is required for SN staff who work 20 hours per week and 4 hours training for part-time employees. Managers must incorporate this requirement into their professional development activities, and assist employees with completing their required training.

Although the current setting for SN managers is complicated, the participants chose to reduce the number of functional areas from 11 cited by the 2003 revised edition of the *Competencies, Knowledge, and Skills of Effective Nutrition Managers* to eight at the conclusion of the Modified Delphi Technique. Participants saw the functional areas as a more integrated description of the manager's responsibilities. Technology does not appear to engender the apprehension in managers and employees as previously displayed. It is integrated throughout the system, and given no special emphasis by the participants. Participants appear to be quite comfortable with more sophisticated electronic tools, and assume technology plays an important role in reaching SN goals. A noticeable theme that ran through all phases of the research was the emphasis on personnel management and the importance of public relations in all areas of interactions. As noted previously, the job of the SN manager is demanding, and requires both a committed attitude and a desire to meet challenges.

This project establishes the groundwork for further research to determine the competencies related to each functional area and the knowledge and skill statements that detail the duties of an SN manager.

Future Research

Phase two research to update the *Competencies, Knowledge and Skills of Effective School Nutrition Managers for the 21st Century* will include several activities. An expert panel of SN professionals will be convened to review these proposed knowledge and skill statements, and to reach consensus on the statements for each functional area identified in phase one. In addition, the proposed knowledge and skill statements for each functional area will be sorted into smaller categories, and competency statements for each category will be developed and confirmed by the expert panel. A national review panel of SN professionals will be asked to confirm the results of

the expert work group. This review panel will verify the importance of each knowledge and skill statement to the responsibilities of a SN manager, confirm whether the competency statements are consistent with the supporting knowledge and skill statements, and determine the professional level of performance for each knowledge and skill statement.

When completed, the functional areas and job responsibilities identified in the project provide an understanding of the overall role of SN managers working in schools across the nation. The addition of competencies, knowledge and skills will provide a basis for developing a sample job description template for preparing job descriptions for SN managers. Additionally, the information can serve as a framework to identify the criteria for evaluating an effective SN manager, to advance knowledge and skills through professional development opportunities, and provide the basis for mentoring and other succession planning activities to prepare SN employees for the manager's responsibilities. Training modules could be developed to address each of the functional areas. They could be developed based on the job responsibilities identified for each functional area with content and activities planned in accordance with adult education principles. The Institute of Child Nutrition, state agencies, and training professional could use the modules to develop and customize professional development specifically designed for SN managers and technicians.

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