On-the-Job Training for School Nutrition Assistants/Technicians is Essential

State agencies and local school districts have been faced with the task of training site-level school nutrition personnel since before the passage of the National School Lunch Act. Early leaders in school nutrition (SN) recognized the benefits of establishing standards for personnel as well as developing training programs for the various levels of school nutrition personnel. Since its inception, the National Food Service Management Institute has been in the forefront in the identification of the competencies, knowledge, and skills needed by professionals working in the child nutrition arena. Research studies have been conducted for school nutrition directors and supervisors, school nutrition managers, and sponsor monitors of family day care homes. For this research project, the Applied Research Division of NFSMI focused on the SN assistant/technician who works at the local school cafeteria under the direction of a SN manager.

This research project was conducted in two phases, and SN professionals participated in both phases of the project. Phase I utilized an expert panel consisting of state agency personnel, SN directors, and SN managers to bring about agreement on functional areas for job duties performed by SN assistants/technicians. Expert panel participants also identified knowledge and skill statements for SN assistants/technicians. The findings from Phase I were used to develop a survey on the knowledge and skill statements that was sent to a review panel of state agency personnel, SN directors, and SN managers in Phase II.

Six functional areas were identified that encompass the job duties of the SN assistant/technician. In addition to these functional areas, 12 competencies, 45 knowledge statements, and 105 skill statements were confirmed by the Phase II review panel. From these knowledge and skill statements, the Phase II review panel only identified 37 statements as being necessary when SN assistants are hired. These findings suggest that training of SN assistants occurs after hire as few individuals are fully competent in all aspects of the job when hired.

OBJECTIVES
The objectives of this study were to:

• Identify the functional areas, competencies, knowledge, and skills needed by effective SN assistants in the current SN environment, and

• Determine at what point the SN assistant should be able to know and perform the knowledge/skill statement, at time of hire or after training.

METHODS
Phase I – Expert Panel
Phase I utilized an expert panel of twelve members consisting of state agency personnel, SN directors, and SN managers to bring about agreement on functional areas for job duties performed by SN assistants/technicians. To help guide members of the expert panel, the following list of definitions was provided.
DEFINITIONS USED TO GUIDE THIS RESEARCH

School nutrition assistants/technicians are the foodservice employees who work at the local school cafeteria under the direction of a school nutrition manager.

Functional areas are the broad groupings or categories of similar tasks that reflect job duties performed by technicians/assistants within the local school nutrition operation. These categories serve as an umbrella for all tasks that are listed on a work schedule or are done on a daily, weekly, or seasonal basis within the school year.

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.

Over a series of three rounds, expert panel members reviewed open-ended questions asking them to list the functional areas or broad groupings that summarize all the daily job duties performed by SN assistants/technicians.

The researchers used a variety of approaches to collect job descriptions for school nutrition assistants/technicians. In total, 55 different job descriptions from 25 school districts were reviewed. The content of the job descriptions were analyzed and sorted into similar themes. Based on this analysis, 80 knowledge statements and 179 skill statements were drafted.

Eleven expert panel members attended a work group session facilitated by two NFSMI research scientists. They reviewed the wording of each draft knowledge and skill statement to arrive at agreement on the knowledge and skill statements for each functional area.

The expert panel confirmed the wording of the knowledge and skill statements from the work group session, confirmed the categorization of knowledge and skill statements into the appropriate functional areas, and identified whether the SN assistant should be able to know or perform the knowledge or skill statement at time of hire or after training.

The researchers grouped the knowledge and skill statements for each functional area into smaller categories and drafted competency statements for Phase II.

Phase II - Review Panel

The Phase II review panel, consisting of state agency personnel, SN directors, and SN managers, were mailed a survey that asked them to verify whether the knowledge and skill statements are important to the job responsibilities of a SN assistant, to determine at what point the SN assistant should be able to know or perform the knowledge or skill statement, at time of hire or after training, and to confirm whether the competency statements are consistent with the supporting knowledge and skill statements. Of the 38 SN professionals invited to participate in the review panel, 34 (89%) returned the survey.

- Panel members reviewed the knowledge and skill statements for each of the six functional areas and rated the importance of each statement to the job responsibilities of a SN assistant on a 4-point scale ranging from 1 (strongly disagree) to 4 (strongly agree). They also indicated at what point the SN assistant needed to be able to know or perform the knowledge or skill statement. Knowledge and skill statements with a score of 2.5 or higher indicated review panel respondents considered the statement important in today’s work environment, whereas a score of less than 2.5 indicated a level of disagreement as to the importance of the statement. A simple majority rule was used as the basis for determining at what point the SN assistants needed to be able to know or perform each statement.

- Review panel members also reviewed the competencies in each functional area and indicated their agreement with two statements evaluating the competencies by use of a 4-point agreement scale ranging from 1 (strongly disagree) to 4 (strongly agree). A mean score of 2.5 or higher for each evaluation statement indicated that the panel members agreed that the competency adequately covered the knowledge and skill statements and the competency statement was worded clearly and accurately.

FINDINGS

Six functional areas were identified that encompass the job duties of the SN assistant/technician:

- Food Production
- Sanitation, Safety, and Security
- Customer Service
- Program Regulations and Accountability
- Equipment Use and Care
- Professional Excellence

In addition to these functional areas, 12 competencies, 45 knowledge statements, and 105 skill statements were confirmed by the Phase II review panel. A comprehensive list of these competencies, knowledge and skill statements may be found in the downloadable online resource, “Competencies, Knowledge, and Skills of Effective School Nutrition Assistants and Technicians.”

From this expansive list of knowledge and skill statements, the review panel only identified 37 statements as being necessary when SN assistants are hired, with the other statements being categorized as necessary but can be acquired after training. These findings suggest that a significant amount of training for SN assistants occurs after they are hired. Figure 1 lists all of the 37 knowledge and skills necessary upon hire.
Knowledge and Skill Statements Needed by SN Assistants/Technicians When Hired

Functional Area
Competency Statement
Knowledge/Skill Statement

**FOOD PRODUCTION**
1.2 Follows operational procedures for efficient and effective food production and service.
- Knows units of measurement (pound, cup, etc.) used in food production.
- Knows basic math related to quantity food preparation and service.

**SANITATION, SAFETY AND SECURITY**
2.1 Maintains an environment conducive to protecting the health and well-being of the school’s children through high levels of food safety and sanitation standards.
- Knows importance of practicing safe food handling.
- Knows established rules for personal hygiene and grooming, including dress, appearance, and personal habits.
- Maintains standards of personal appearance and hygiene according to district/department policies and procedures.

**CUSTOMER SERVICE**
3.1 Maintains quality standards for the presentation and service of food in a pleasant environment.
- Knows the importance of teamwork and cooperation with nutrition and school staff.
- Provides positive, professional, and friendly service.
- Uses a caring approach when interacting with students.

**PROFESSIONAL EXCELLENCE**
6.1 Performs all duties and responsibilities in an ethical and professional manner.
- Knows importance of ongoing training to improvement of job skills.
- Demonstrates ability to meet work schedules and time lines.
- Demonstrates ability to add, subtract, multiply, and divide accurately.
- Demonstrates willingness to be flexible.
- Uses school/district resources (time, supplies, services, technology, etc.) in an ethical manner.
- Demonstrates ability to interpret detailed written instructions, such as schedules and recipes.
- Demonstrates willingness to help out when emergencies arise.
- Attends and participates in job-related training.
- Assists other staff as needed to meet established schedules.
- Demonstrates ability to work under the pressure of deadlines and interruptions.
- Performs work-related activities efficiently with limited supervision.
- Demonstrates ability to accurately and rapidly make correct change.
- Exercises independent judgment and initiative to resolve problems.
- Displays willingness to upgrade job knowledge and skills.
- Uses appropriate methods of problem solving and decision-making.
- Avoids problem situations and intervenes to avoid conflicts.

6.2 Communicates effectively with unit manager and other employees.
- Knows the importance of helping inexperienced employees.
- Knows importance of giving and receiving constructive criticism.
- Knows methods of effective communication skills.
- Demonstrates ability to follow oral and written directions.
- Listens effectively to school nutrition manager and other staff.
- Responds appropriately to supervision and constructive criticism.
- Informs manager of potential problems or unusual events, as appropriate.

6.3 Provides leadership as a team member of the school community.
- Knows the importance of having a positive attitude and creating a positive image for school nutrition.
- Knows importance of working with a diverse school community.
- Uses a professional manner when interacting with co-workers, school staff, students, and others.
- Works with a varied population in a meaningful, respectful, and appropriate manner.
- Establishes and maintains cooperative and effective working relationships with others.
- Demonstrates ability to work with a varied population in a meaningful, respectful, and appropriate manner.
Several of the knowledge and skill statements listed as necessary but after training are slightly more advanced and build upon these “When Hired” statements. For example - In Figure 1 under “Food Production” the knowledge and skills listed as necessary “When Hired” relate to basic math and units of measurement. One knowledge statement that was categorized as necessary but obtainable after training was, “Reviews recipes and menus, estimates needed ingredients, and the time required for the production of a variety of food items.” Figure 2 contains examples of “When Hired” and “After Training” statements.

**Figure 2**

Examples of Knowledge and Skill Statements Needed by SN Assistants When Hired and After Training

<table>
<thead>
<tr>
<th>Functional Area</th>
<th>Competency Statement</th>
<th>Knowledge/Skill Statement</th>
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<tbody>
<tr>
<td><strong>Food Production</strong></td>
<td>1.2 Follows operational procedures for efficient and effective food production and service.</td>
<td></td>
</tr>
<tr>
<td><strong>When Hired</strong></td>
<td>• Knows units of measurement (pound, cup, etc.) used in food production.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Knows basic math related to quantity food preparation and service.</td>
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<tr>
<td><strong>After Training</strong></td>
<td>• Reviews recipes and menus, estimates needed ingredients, and the time required for the production of a variety of food items.</td>
<td></td>
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<tr>
<td><strong>Customer Service</strong></td>
<td>3.1 Maintains quality standards for the presentation and service of food in a pleasant environment.</td>
<td></td>
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<tr>
<td><strong>When Hired</strong></td>
<td>• Provides positive, professional, and friendly service.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Uses a caring approach when interacting with students.</td>
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<tr>
<td><strong>After Training</strong></td>
<td>• Knows the importance of student feedback on food items served in cafeteria.</td>
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<tr>
<td></td>
<td>• Encourages students to make healthy menu choices.</td>
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Since this is the first study to enumerate the knowledge and skills that SN assistants need at the time of hire and after training, the need to develop training materials and professional development opportunities has been identified.

The Web based PDF resource titled, “Competencies, Knowledge, and Skills of Effective School Nutrition Assistants and Technicians” was a product of this research project. Included in this resource is a summary of the research, all of the knowledge and skill statements, and the “Sample Job Description Template.” SN administrators can use this resource to help prepare and/or improve job descriptions for school nutrition assistants/technicians, as well as more easily identify qualified candidates during the hiring process. This resource may be found on the NFSMI Web site, www.nfsmi.org, at http://www.nfsmi.org/Information/Comp_resource.pdf.
The school nutrition assistant/technician performs a variety of job functions essential to the successful operation of the local school nutrition cafeteria. The job functions include food production; sanitation, safety, and security; customer service; program regulations and accountability; equipment use and care; and professional excellence. The school nutrition assistant/technician works under the supervision of an assigned manager/supervisor and in partnership with others in the school nutrition program and school district to support a sound nutrition assistance food program while following federal, state, and local guidelines. The local school nutrition program is to provide an environment that supports healthy food habits while maintaining program integrity and customer satisfaction.

ESSENTIAL FUNCTIONAL AREAS OF RESPONSIBILITIES

Food Production
- Maintains high standards of control for quality food production and service.
- Follows operational procedures for efficient and effective food production and service.

Sanitation, Safety, And Security
- Maintains an environment conducive to protecting the health and well-being of the school's children through high levels of food safety and sanitation standards.
- Maintains a safe facility for performance of work.

Customer Service
- Maintains quality standards for the presentation and service of food in a pleasant environment.

Program Regulations and Accountability
- Maintains integrity and accountability of the School Nutrition Program (SNP) through compliance with all federal, state, and local regulations.
- Maintains accountability of recorded documentation for compliance with federal, state, and local regulations.
- Ensures compliance with school/district policies and procedures.

Equipment Use and Care
- Implements administrative policies for proper use and care of all equipment.

Professional Excellence
- Performs all duties and responsibilities in an ethical and professional manner.
- Communicates effectively with unit manager and other employees.
- Provides leadership as a team member of the school community.

PRACTICAL USE OF THIS INFORMATION

- The findings of this research will assist NFSMI, USDA, state agencies, and training professionals in developing appropriate professional development resources for school nutrition assistants/technicians. These results can provide the structure for the development of competency-based training modules that focus on the six functional areas.
- The list of knowledge and skill statements needed at time of hire identified in this study can be used by SN administration professionals to develop interview questions and pre-hiring questionnaires to assist their assessment of applicants.
- SN administrators can use the knowledge and skill statements and the “Sample Job Description Template” in preparing job descriptions for school nutrition assistants/technicians.
- SN professionals can use the knowledge and skill statements identified as needed after training to guide the development of initial training for new SN assistants/technicians and later in-service training.
- SN administrators can develop training modules for orientation and staff development that focus on each of the six functional areas: food production; sanitation, safety, and security; customer service; program regulations and accountability; equipment use and care; and professional excellence.