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Rapid Response Survey #3: Determining the Training Needs of Child Nutrition Professionals

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Rapid Response Survey #3: Determining the Training Needs of Child Nutrition Professionals

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INTRODUCTION

The United States Department of Agriculture (USDA) finalized updated nutrition standards for school meals in 2012. These standards increased the availability of fruits, vegetables, and whole grains; limited milk to fat-free and low-fat varieties; reduced sodium and saturated fat levels; eliminated synthetic forms of trans fat; and, for the first time, specified both minimum and maximum energy levels for the meals. Additionally, the updated standards require that reimbursable meals include at least one-half cup of fruits or vegetables (Gearan & Fox, 2020). In 2015, the USDA established minimum professional standards for school nutrition personnel who manage and operate meal programs to support the updated nutrition standards. These standards require all school nutrition program staff to complete annual continuing education and training courses (USDA, 2023).

In 2016, the USDA updated the meal pattern standards for the Child and Adult Care Food Program (CACFP). These standards include requirements and best practices for the foods and beverages offered to children at a CACFP-participating program. The meal pattern requirements include limiting juice to one serving per day; requiring breakfast cereals to contain no more than six grams of sugar per dry ounce; limiting sugar in yogurt to no more than 23 grams per six ounces of yogurt; allowing meat and meat alternates to be served in place of the entire grain component at breakfast (up to three times per week); prohibiting flavored milk for children ages two to five years; requiring at least one serving of whole grain-rich grains; and requiring potable drinking water to be offered and available throughout the day. However, the USDA did not establish minimum professional standards for CACFP personnel to support the updated nutrition standards (Chriqui et al., 2020).

Although the USDA did not establish minimum professional standards for CACFP personnel to support the updated nutrition standards, both require child nutrition professionals in schools and in CACFPs to receive training to comply with the updated meal pattern standards accurately and effectively. However, what are the specific training needs, and how do they vary based on the type of child nutrition program (school vs. CACFP) and position type (management vs. staff)?

Between 2012 and 2015, several research studies were conducted to examine the training needs of school nutrition staff. The results of a few studies, presented below, demonstrate mixed findings. In 2012, the Pew Charitable Trusts and the Robert Wood Johnson Foundation commissioned a national survey of school foodservice directors to investigate the staff development and training needed for schools to meet the USDA's updated meal standards adequately. Most survey respondents reported inadequate resources to meet their training needs or their staff's. Researchers observed that the top training needs for all school nutrition personnel were "understanding compliance with the new nutrient requirements and meal standards," the top training needs for kitchen/cafeteria managers and cooks/front-line servers were essential nutrition, cooking skills, and food safety (Pew Research Center, 2015).

Researchers with the Illinois State Board of Education (ISBE) and the University of Illinois Extension and Outreach collaborated in 2012 to examine the training needs of school nutrition professionals. Specifically, they examined the topics of highest priority for school nutrition programs, preferred learning methods, where and when training should be conducted, and whether responses differ according to important factors, including position type, school locale (urban vs. rural), or job experience. Four hundred and ninety-two participants completed surveys that included quantitative and qualitative questions. The researchers concluded that professional development for school nutrition programs should primarily be conducted in person, be easily accessible, include hands-on activities, be tailored by job role, and address situational barriers unique to the geographic area (Flure et al., 2020).

A collaboration between researchers at the University of California and the California Department of Education was started to determine nutrition program personnel's training, resource, and professional development needs in schools, afterschool programs, and Residential Child Care Institutions (RCCIs). Respondents of a statewide survey indicated a need for training on the following topic areas: program management; the Healthy, Hunger-Free Kids Act of 2010; nutrition, health, and wellness; planning, preparing, and serving meals; and communication and marketing. Respondents employed in RCCIs indicated a strong need for training specific to RCCIs. (Jones et. al, 2013)

Multiple research studies have also examined the training needs of CACFP professionals. In 2019, Delger, Bauer, and Morgan (2019) conducted a training needs assessment to support the development of online training for CACFP professionals. The researchers found that menu planning and healthy food purchasing were the most significant topics of interest.

In 2017, Chriqui et al. conducted a nationwide assessment of CACFP child daycare centers. The findings highlight opportunities for targeted training and technical assistance related to menu and meal/snack preparation for child daycare centers. In 2019, Smith et al. assessed the nutrition knowledge of CACFP providers after one year of implementing the new meal standards. They found a need for intensive nutrition education training regarding the updated CACFP standards among child care providers.

These studies demonstrate that child nutrition professionals (school nutrition and CACFP) must receive training to support updated nutrition standards. While some topic areas have been identified based on position and operation type, more research would help to solidify the specific training needs of school nutrition and CACFP based on position type (staff versus management). Further, this research would support USDA, the Institute of Child Nutrition (ICN), and other child nutrition stakeholders/advocates in developing training to support child nutrition professionals and meet the nutritional needs of children in their care.

Therefore, the objectives of this study are:
1. To identify the training topics that are most needed by child nutrition professionals based on operation type (school nutrition and CACFP) and position title (staff and management) over the next two years.
2. Determine the ideal training modes (e.g., self-paced, live virtual, and in-person live) for child nutrition professionals to receive specific training topics.

METHODOLOGY

The study's population of interest includes a nationally representative sample of school nutrition professionals (district-level school nutrition director or supervisor, site-level school nutrition manager, and school nutrition staff/worker) and CACFP professionals (CACFP director of supervisor and CACFP provider). The sampling framework included all individuals listed in ICN's contact database, with a population of plus 218,744.

This study consisted of two phases: Phase I focused on survey development and included a literature review, the development of a draft survey (based on the literature review), and an expert review panel to evaluate the draft survey. Phase II included piloting the draft survey and data collection and analysis utilizing the finalized survey.

Researchers conducted a literature review in The University of Southern Mississippi's online library in Phase I. Within that system, the researcher accessed the EBSCOhost platform, selected all databases, and utilized the following filters: 2017 to present, peer-reviewed academic journals, and English language. Some of the keywords used in the search included school nutrition staff, training needs, and professional development. Other resources utilized in the development of the draft survey included: *Managing child nutrition programs: Leadership for excellence* (Martin & Oakley, 2008), *Keys to excellence: standards of practice for nutrition integrity,* (SNA, 2019), and the Institute of Child Nutrition's Competency Knowledge and Skills series for school nutrition professionals (Lewis & Lartey, 2018; Rushing & Rainville, 2022; and Nettles, Asperin, and Carr, 2010). The initial survey draft was developed with the assistance of two culinary professionals at the ICN's Culinary Institute of Child Nutrition, Chef Partick Garmong, Associate Director, and Chef Garrett Berdan, Education and Training Specialist.

The initial survey (Appendix A), which was created as a Word document, included a consent form, three multiple choice demographic questions (school district student enrollment size [for school personnel only], state where child nutrition program is located, and respondent job title) and two matrix-style questions tailored based on respondents' selection to the job title question. The five job title choices were as follows:

- District-Level School Nutrition Supervisor or Director
- Site-Level School Nutrition Manager
- School Nutrition Assistant/Technician (the foodservice employees who work at the local school cafeteria under the direction of a School Nutrition Manager)
- School Nutrition Other
- Child Care Provider in a CACFP

If a respondent selected "other" as a job title, they were directed to the end of the survey. Each set of matrix questions incorporated the functional areas as topic areas from the ICN competency, knowledge, and skills series, each of which corresponds to a job title choice (Lewis & Lartey, 2018; Rushing & Rainville, 2022; Nettles et al., 2010). In each matrix question set, respondents were asked to "rate your current level of need to receive training on each topic area" with the following answer choices: no need, low level of need, moderate level of need, high level of need. With the second matrix

question in each set, respondents were asked to "indicate the ideal mode to receive training on each topic area," the answer choices were in-person, virtual, live self-paced, online, and not applicable.

Next, an expert review panel of subject matter experts was solicited via email to evaluate the survey. The email included a consent form, a copy of the survey, and a guided review form (Appendix B and C). Participants were asked to complete and return the guided review form via email. Below (Table 1) is an overview of the individuals who were invited and those who participated in the expert review panel. A total of 145 individuals were emailed invitations: 38 of the emails were returned as undeliverable and 28 participated for a participation rate of 26.2% (N=145-38=107, n=28÷107=.2616).

Table 1

Expert Review Panel Invited and Participants

	Number Invited	Number That Participated
State agency child nutrition/school nutrition staff and directors from each State agency in the United States *(Those invited were in ICN's current State agency contact database. If they were a member of ICN's advisory board, they were counted with that group below.)*	98	13
ICN Training and Education Specialist and Multi-Media Specialists *(The directors provided this list for each department based on individual experience/expertise.)*	25	6
ICN's advisory board (*These are child nutrition professionals that work in multiple areas/settings such as USDA regional offices, State agencies, district-level school nutrition programs, CACFPs, non-profit agencies that support child nutrition programs, etc.*).	21	8
A representative from the USDA, Food and Nutrition Service (FNS), Nutrition, Education, Training and Technical Assistance Division (NETTA) *(This division is responsible for managing the ICN Applied Research Division [ARD] grant.)*	1	1
Totals	145	28

A compilation of review panel results is in Appendix D. Based on input from the expert review panel, significant revisions were made to the draft survey. The survey was entered into Qualtrics and emailed to invitees with a link. The matrix questions were converted to a "pick-group" format in Qualtrics that allows respondents to identify topic areas that they felt there was a high need to receive training within the next two years and select one of three training modes (self-paced, online, live virtual

[meaning online in real time], and in-person live) that they felt would be ideal for them to receive training on that topic area. This change was made for multiple reasons. First, review panel participants felt the matrix questions were too cumbersome and would not generate sincere responses. The pick-group provided an alternative that would gather similar data but in a more concise, up-to-date manner with a more innovative activity for respondents. The topic areas in the pick-group questions were changed from ICN's function areas identified as the Knowledge Competency and Skills series (Lewis & Lartey, 2018; Rushing & Rainville, 2022; and Nettles, Carr and Asperin, 2009) to USDA's list of suggested job-specific training topics found in the Professional Standards: Guide to Professional Standards for school nutrition resource (USDA, 2020). Each pick-group question listed job-specific topic areas based on one of the following three job title categories: 1) school nutrition management, 2) school nutrition assistants/technicians, and 3) CACFP professionals.

Skip-logic steered respondents to the appropriate category of pick-group questions based on how they answered a job title question. Respondents who selected the following choices on the job title question (district-level school nutrition director or supervisor, site-level school nutrition manager, and school nutrition other) were directed to the "school nutrition management" topic area question, while respondents who selected school nutrition staff/worker on the job title question were directed to the "school nutrition assistants/technicians" topic area question. Respondents who selected CACFP (director/supervisor, provider, or other) on the job title question were directed to the "CACFP professionals" topic question.

The final version of the survey with a consent form was distributed as a survey link in an email invitation (Appendix H, F, and G) by the manager of marketing and communications at ICN to all individuals listed in ICN's database of plus 218,744 contacts. The total of successfully delivered emails was 192,744. The survey was distributed on November 7, 2023, and closed on December 5, 2023.

RESULTS

The number of individuals that responded to the survey, minus surveys with missing data, was 777 (4.03% response rate.) Figure 1 provides an overview of the distribution of all respondents by state. Alaska, Puerto Rico, the Northern Mariana Islands, and Hawaii are not shown because of the size of the map.

Figure 1

Map Distribution of All Respondents
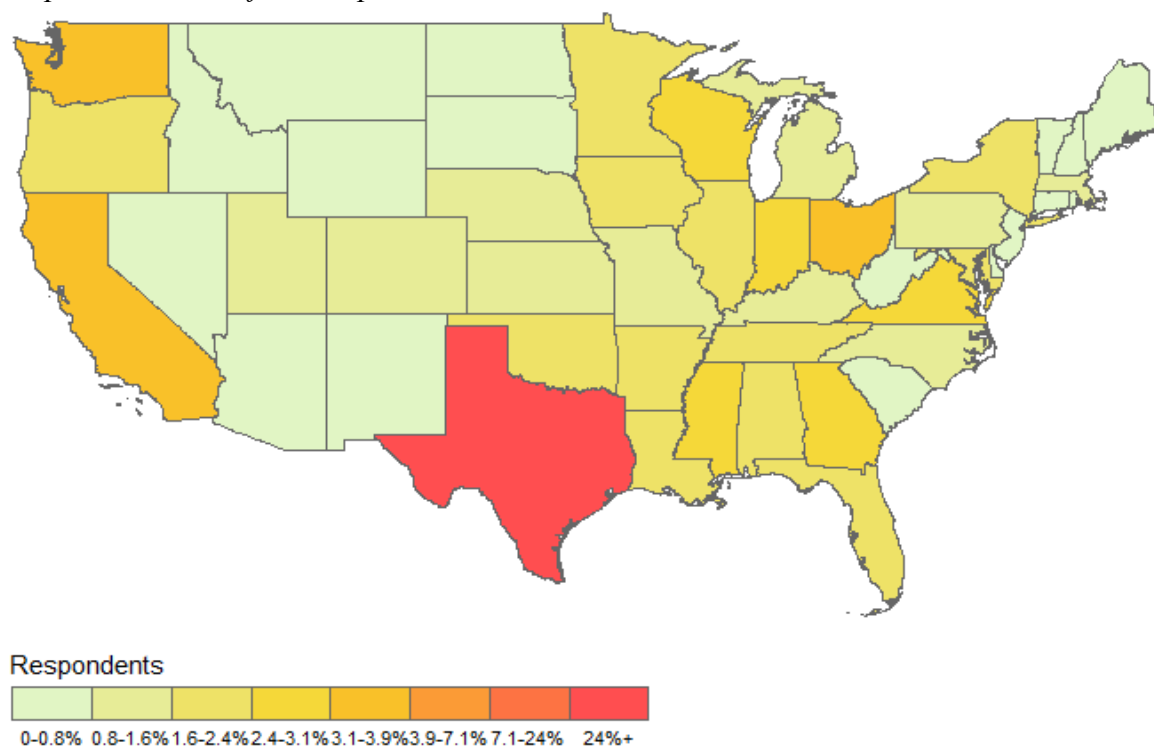
Texas, by far, had the most significant number of respondents (28%, n=221), while California (3.8%, n=30, Ohio (3.5%, n=28), and Washington 3.3%, n=26) had the following highest participation rates. Rhode Island (0.1%, n=1), Delaware (0.3%, n=2), Montana (0.3%, n=2), Nevada (0.3%, n=2), and Puerto Rico (0.3%, n=2) all tied with low participation rates and there were no participants from South Dakota. Two participants (0.40%) reported that they do not Reside in the US.

Table 1A in Appendix H provides a complete listing of state and U.S. Territory participation rates.

Figure 2 provides an overview of the distribution of school nutrition management/school nutrition other respondents by state. Alaska, Puerto Rico, the Northern Mariana Islands, and Hawaii are not shown. Texas was again the state with the most significant number of respondents (23.7%, n=116), while Ohio (4.3%, n=21), Mississippi (3.9%, n=19), and California (3.9%, n=19) were the states with

the lowest participation rates. Two participants reported not residing in the US (2, 0.4%). Moreover, there were no participants from South Dakota. Table 1B in Appendix H provides a complete listing of state and U.S. Territory participation rates for school nutrition management/school nutrition other respondents.

Figure 2

Distribution of School Nutrition Management/School Nutrition Other Respondents by State
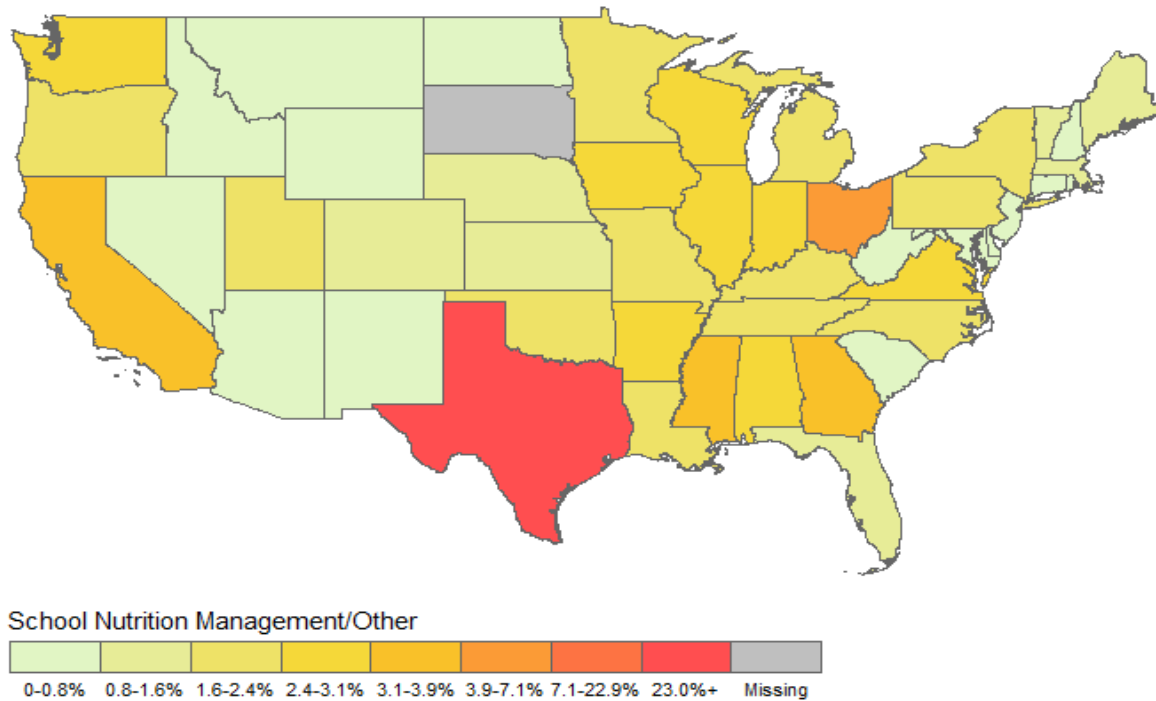
Figure 3 provides an overview of the school nutrition staff/workers distribution by state. Alaska, Puerto Rico, the Northern Mariana Islands, and Hawaii are not shown. As with the previous school nutrition respondent groups, Texas had the vast majority of respondents (34.9%, n=38), while Washington and California each had the highest response rates at 5.5% (n=6). No participants were from Pennsylvania, Rhode Island, South Carolina, Alaska, South Dakota, Utah, Vermont, Nevada, New Hampshire, Arizona, Delaware, Iowa, Kansas, Maine, and Michigan. Table 1C in Appendix H provides a complete listing of school nutrition staff/workers' state and U.S. Territory participation rates.

Figure 3

Distribution of School Nutrition Staff/Worker Respondents by State

School Nutrition Staff

0-0.9% 1%-2% 2%-3% 3%-6% 6%-34% 34%+ Missing
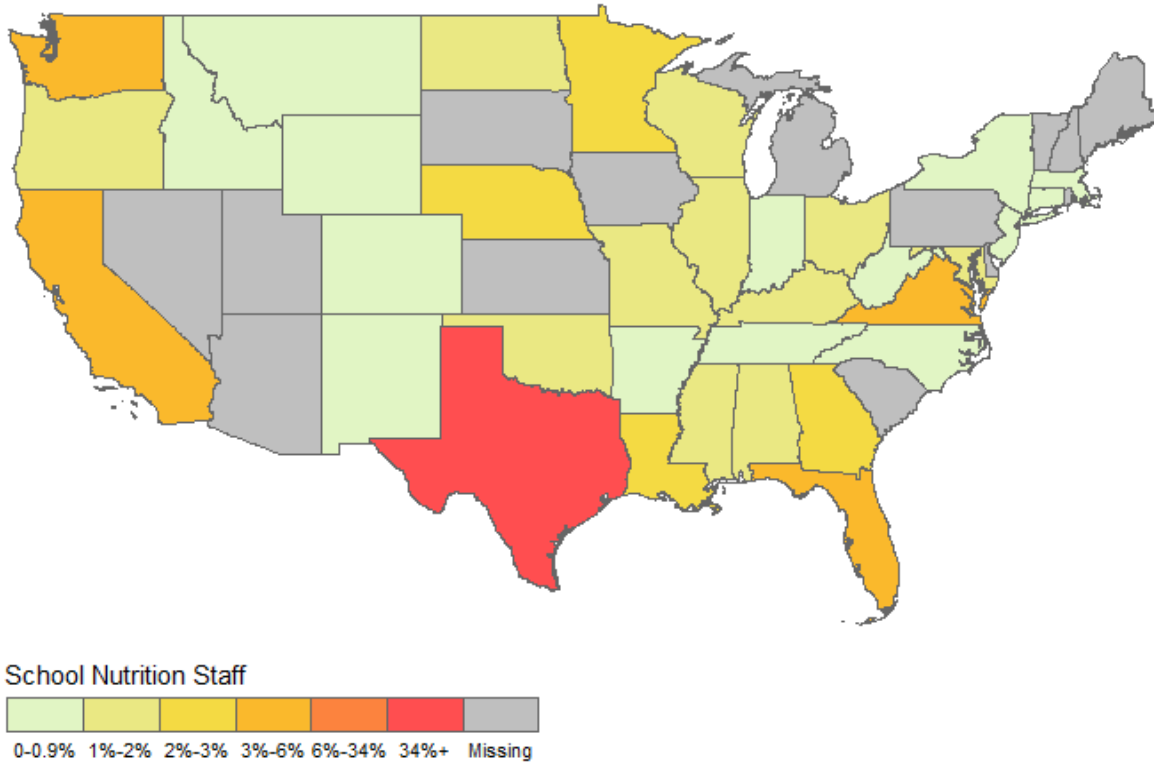
      An overview of the distribution of CACFP respondents by state is depicted in Figure 4. Alaska, Puerto Rico, the Northern Mariana Islands, and Hawaii are not shown. As with the school nutrition respondent groups, Texas had the most respondents (28.3%, n=36), while Maryland had the next highest response rate at 7.1% (n=9). Thirteen states tied for the low participation rate of 0.8% (n=1). There were no participants from Kentucky, Maine, Missouri, Montana, Nevada, New Hampshire, New Jersey, Arizona, Pennsylvania, Rhode Island, South Dakota, Utah, and Vermont states. Table 1D in Appendix H provides a complete listing of participation rates for CACFP respondents by state and U.S. Territory.

Figure 4

Distribution of CACFP Respondents by State
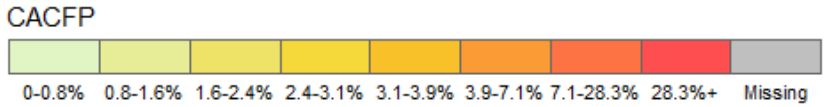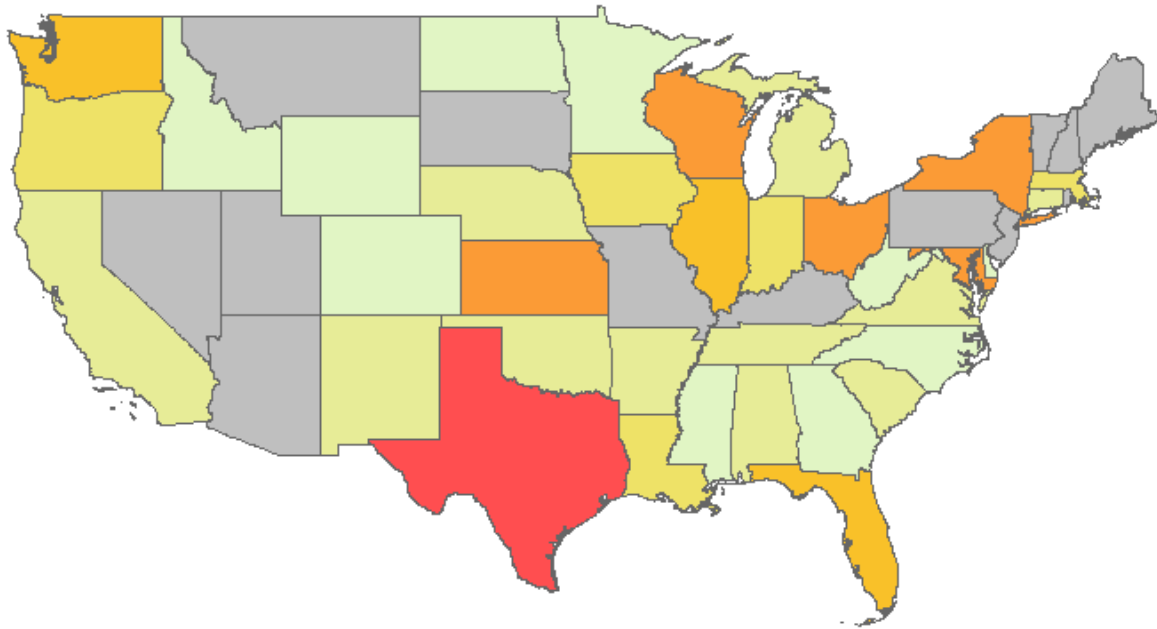
Most respondents were district-level school nutrition directors (28.9%, n=230) and site-level school nutrition managers (18.7%, n=149). Figure 5 provides an overview of respondents by job title. Table 2A in Appendix H provides a complete listing of participation rates by participant job title. Table 2B (located in Appendix H) lists the respondents who selected school nutrition other and gave specific job titles. Table 2C in Appendix H lists the respondents who selected CACFP other and gave specific job titles.

Figure 5

The Distribution of Survey Respondents Per Job Title
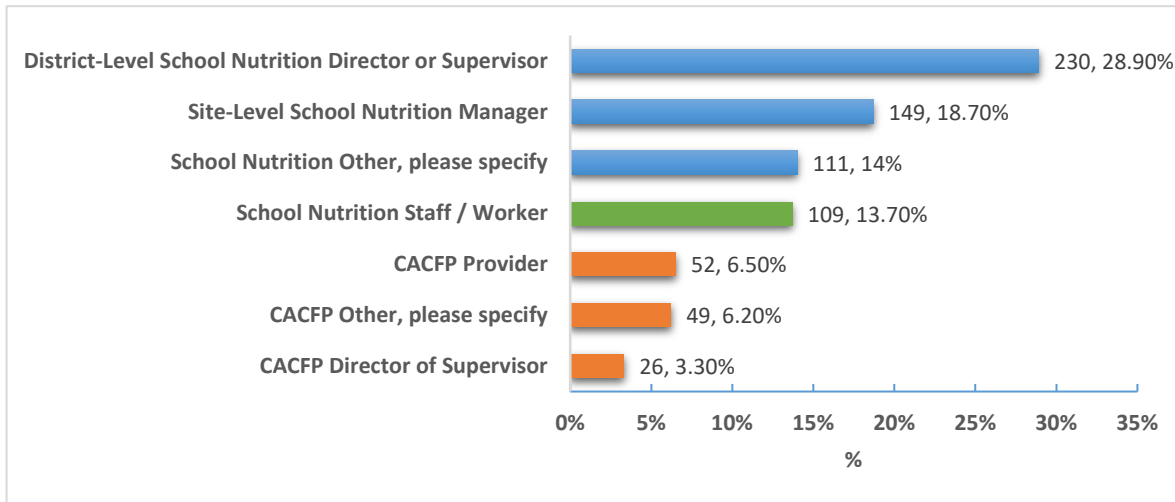
Position Title: School Nutrition Management/School Nutrition Other

The results in the following section pertain to survey respondents with school nutrition management job titles (i.e., district-level school nutrition director or supervisor or site-level school nutrition manager) and those who selected school nutrition other as a job title.

Approximately one-third of school nutrition management/school nutrition other respondents were from districts with less than 1,000 students (35.4%, n=169). Large school districts (greater than 20,000 students) accounted for the smallest percentage of respondents working in schools (15.9%, n=76) (Figure 6). Table 3 in Appendix H lists participation rates by district size in tabular form.

Figure 6

School District Size Based on Student Enrollment (School Nutrition Management/School Nutrition Other Respondents)
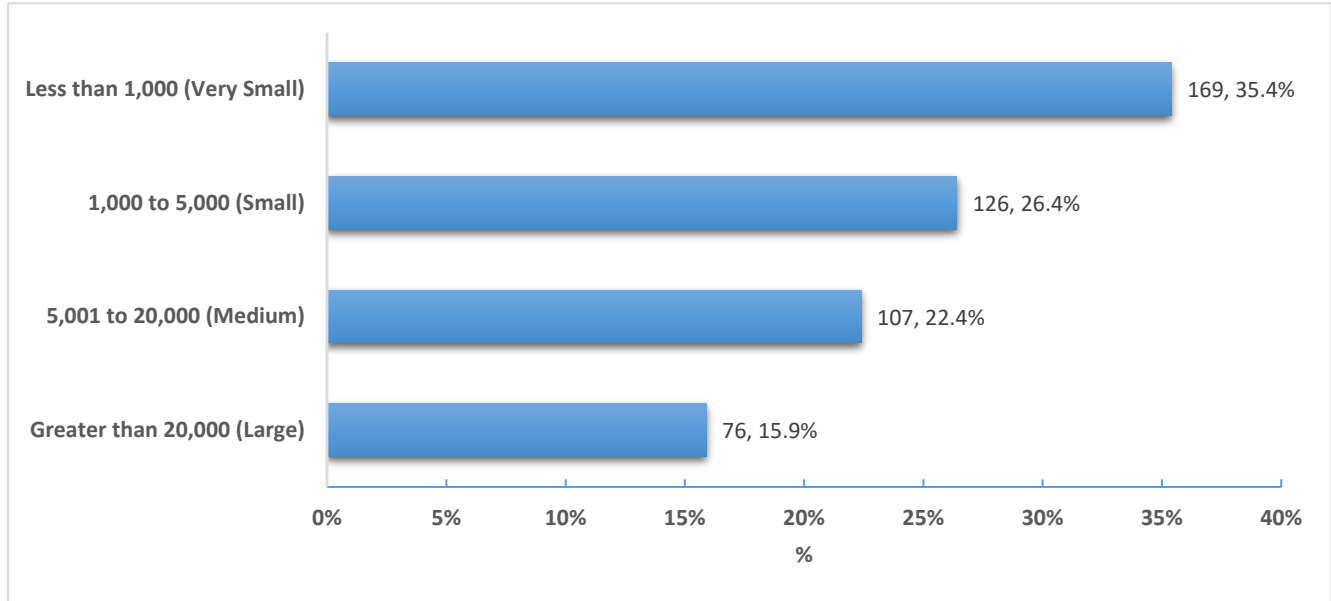
When school nutrition management/school nutrition other respondents were asked to select the training topics, respondents felt a high level of need to receive training within the next two years in an in-person live setting for the following topics: food production (17.8%, n=87), program management (17.6%, n=86), menu planning (15.9%, n=78), and financial management (15.7%, n=77). Figure 7 provides an overview of the training topics individuals working in schools feel there is a high need to receive in-person training and live within the next two years. Table 4A in Appendix H lists participants who indicated a high level of need to receive specific training topics in person live.

Figure 7

In-Person Live: High-Level Need Topics School Nutrition Professionals Want to Receive Education Within the Next Two Years (School Nutrition Management/School Nutrition Other Respondents)
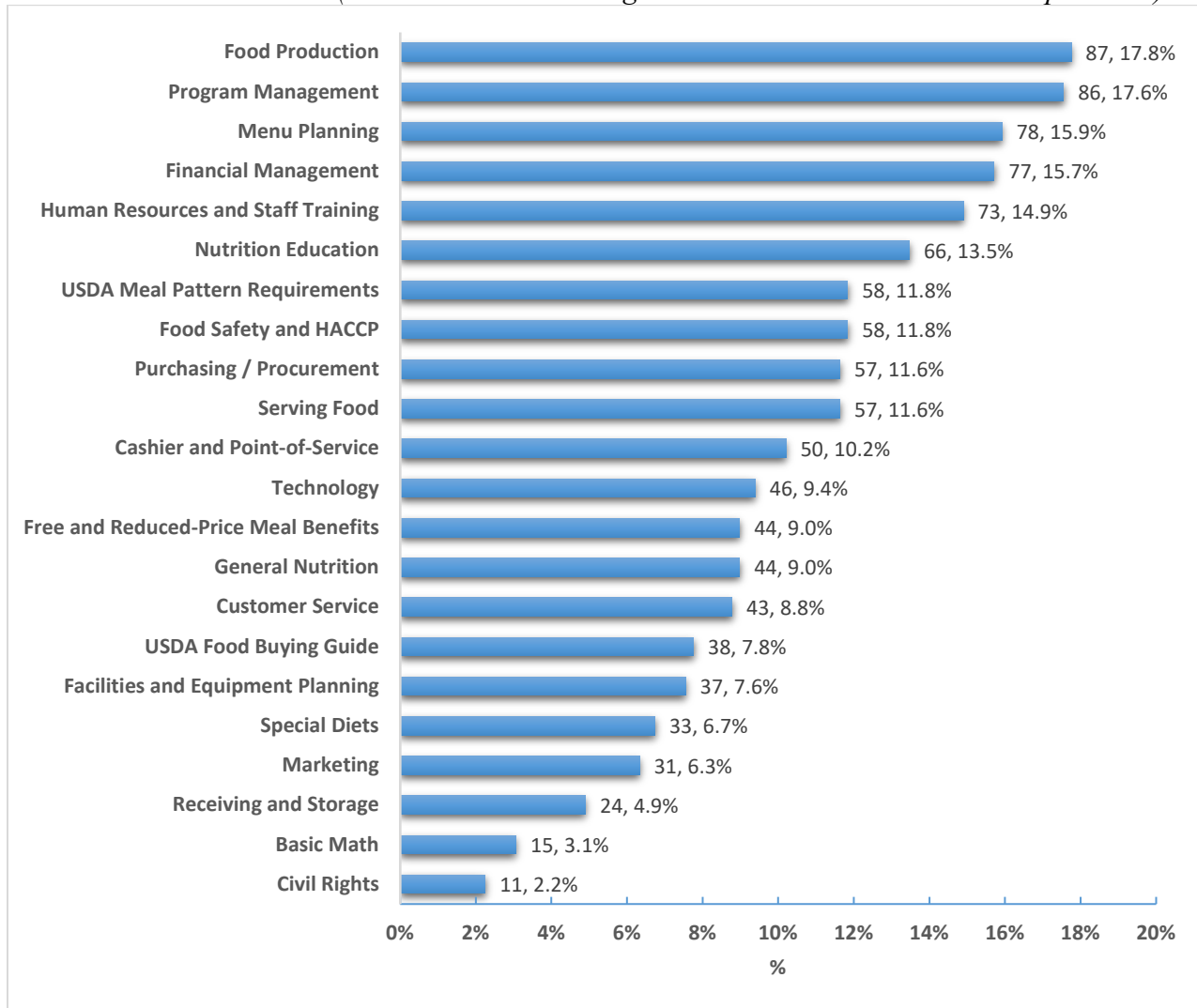
School nutrition management/school nutrition other respondents selected the following training topic areas the most often as having a "high-level of need" and best received via "live, virtual," mode: special diets (19.0%, n=93) menu planning (18.0%, n=88), and food production (16.9%, n=83) (Figure 8). Table 5 in Appendix H lists participants who indicated a high level of need to receive specific training topics in a "live, virtual" mode.

Figure 8

Live Virtual: High-Level Need Topics School Nutrition Professionals Want to Receive Education Within the Next Two Years (School Nutrition Management/School Nutrition Other Respondents)
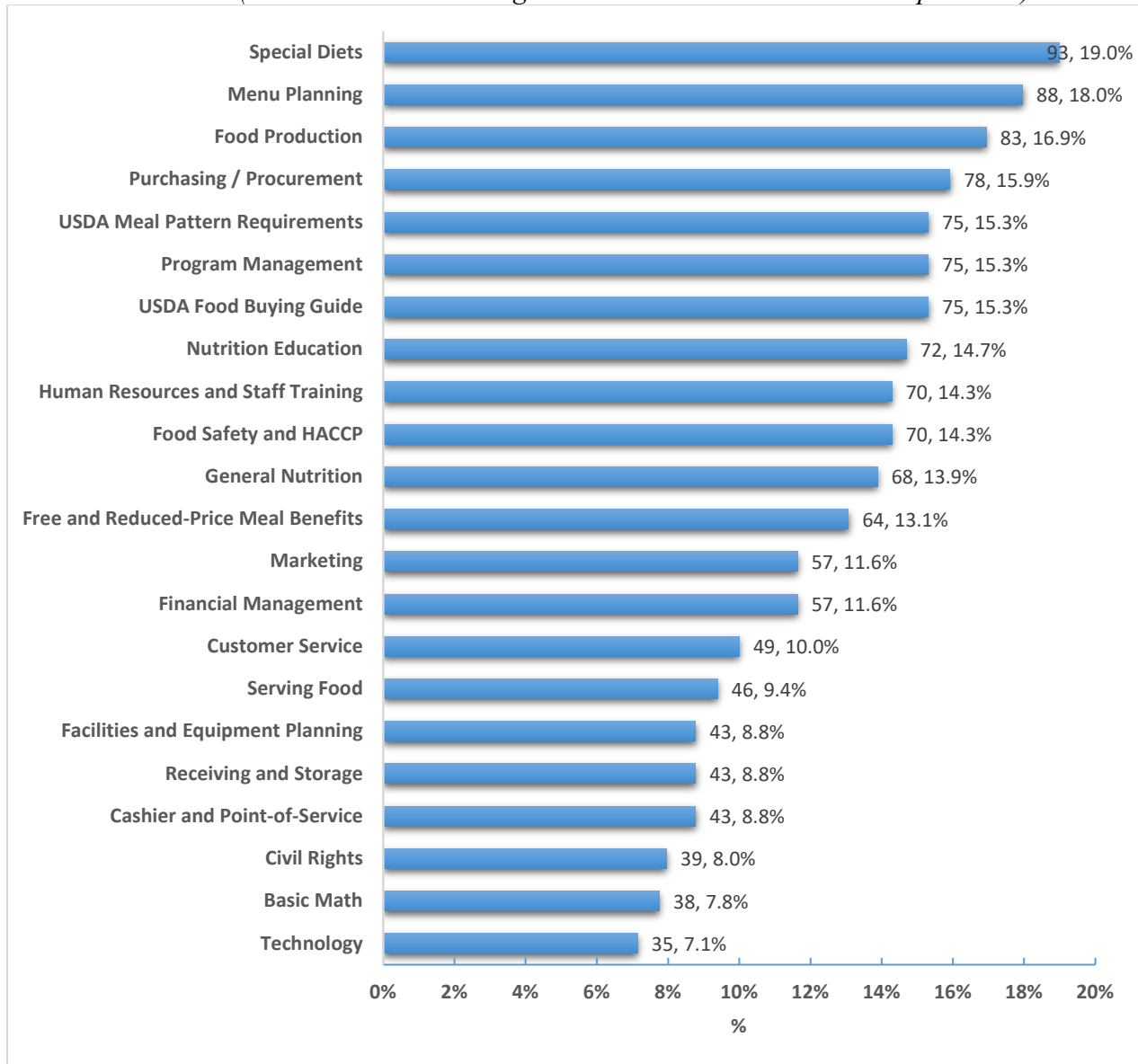
"Self-paced, online" was identified as the ideal training mode by most school nutrition management/school nutrition other respondents for having a high level of need for receiving the following training topics: civil rights (23.1%, n=113), food safety and Hazard Analysis Critical Control Point (HACCP) (22.2%, n=109) and basic math (18.4%, n=90) (Figure 9). Table 6 in Appendix H lists participants who indicated a high level of need to receive specific training topics in a "self-paced, online" mode.

Figure 9

Self-Paced, Online: High-Level of Need Topics School Nutrition Professionals Want to Receive Education Within the Next Two Years (School Nutrition Management/School Nutrition Other Respondents)

Topic	Value
Civil Rights	113, 23.1%
Food Safety and HACCP	109, 22.2%
Basic Math	90, 18.4%
Nutrition Education	89, 18.2%
Receiving and Storage	84, 17.1%
General Nutrition	82, 16.7%
Customer Service	81, 16.5%
USDA Meal Pattern Requirements	80, 16.3%
Menu Planning	80, 16.3%
USDA Food Buying Guide	78, 15.9%
Serving Food	76, 15.5%
Human Resources and Staff Training	67, 13.7%
Purchasing / Procurement	67, 13.7%
Marketing	63, 12.9%
Special Diets	63, 12.9%
Facilities and Equipment Planning	62, 12.7%
Cashier and Point-of-Service	61, 12.4%
Technology	60, 12.2%
Program Management	59, 12.0%
Food Production	58, 11.8%
Financial Management	49, 10.0%
Free and Reduced-Price Meal Benefits	47, 9.6%

When school nutrition management/school nutrition other respondents were asked to provide comments, they expressed a high level of need to receive in the next two years in either of the three different modes provided (live-virtual, self-paced online, in-person live), the following six themes: 1) in-person, live training mode, 2) live virtual training mode, 3) self-paced, online training mode, 4) combined training modes, 5) other training needed, no specified mode, and 6) miscellaneous comments, no specified mode. Table 2 provides a listing of general themes and specific themes observed. Some of the challenges offered regarding self-paced, online training classes included a level of self-discipline and skill level needs by participants. Several respondents indicated they preferred the flexibility of self-paced online. The primary challenge associated with in-person, live training was limited flexibility with time and the ability to travel to training activities. Several training topics were requested with no specified mode.

Table 2

Respondent Comments: School Nutrition Management/School Nutrition Other (Themes)

General Theme	Specific Theme
Flexibility of Training:	• "Absolutely love the flexibility the online classes give." • "Online when I have time fits me best." • "I know virtual or self-paced is cheapest and easiest." • "If I took all online, it will be much easier for me to finish my courses on my own pace without any stress."
Specific Training Needs:	• "An in-depth training on crediting foods would be beneficial." • "I would like to see more training geared toward the SAU office staff" • "I need more of the Administrative side of Child Nutrition." • "Would love to see a class for Managers on how to fill in Production Sheets."
Continuous Improvement:	• "Everybody needs a refresher course each year." • "There were a few items that I felt would be beneficial to do in two different categories."
Preference for Virtual Training:	• "I don't feel like I need any in-person or live options." • "In-person trainings are sort of old now." • "The webinars are good, but the timing isn't so making them available if we can't make is great for me."
Technological Integration:	• "eLearning modules using Technology are used now by 50% of all classroom teachers." • "I prefer internet or self-paced." • "The online training program needs to be changed."

Note: Comments are provided in the way respondents typed, with no spelling or grammatical corrections.

(Table 2 continues)

(Table 2 continued)

Respondent Comments: School Nutrition Management/School Nutrition Other (Themes)

General Theme	Specific Theme
Policy and Compliance Training:	• "Whenever there is a policy change, then that becomes the most needed training item." • "Please make civil rights training non-register required." • "I need classes to train for the ServSafe Certificate."
Resource and Waste Management:	• "I see a big waste of food because the students don't like what's being served." • "Procurement guidelines too strict." • "Some cooks do not know how to use the Food Buying Guide."
Preference for Hands-On Learning:	• "I feel that hands-on training is the best way for employees to learn." • "Some cooks do not know how to use the Food Buying Guide. Hands-on would be great."
Diverse Workforce and Language Needs:	• "There needs to be more Spanish courses for my staff." • "With a diverse workforce, in-person training is essential."
Program-Specific Training:	• "We are a Residential Child Care Institution. Some of the topics do not affect our facility." • "I would like training on how to oversee an FSMC." • "Resources to teach nutrition in Title 1 schools."
Training Format Preferences:	• "I prefer in-person classes, but unfortunately, they are not always available in my area." • "In-person trainings are sort of old now...I prefer the internet or self-paced." • "The option for both in-person and virtual choice would be nice." • "There are never many options for business managers who are required to take courses in the 3000 Administration series."
Concerns about Training Effectiveness:	• "The online training program needs to be changed so that students are not allowed to just skip to the end and take a test that they can take over and over until they pass and then get a certificate for multiple hours." • "The sign-in and training format is confusing for a lot of our cafeteria staff. Going through the small box on the right-hand side to see pre-quiz, training, and end quiz for each section blends together." • "We have actually stopped using your system because it was so easy to cheat on that we rarely had anyone truly take the class."

Note: Comments are provided in the way respondents typed, with no spelling or grammatical corrections.

Table 7 in Appendix H lists all school nutrition management/school nutrition other respondents' comments regarding training topics they feel there is a high level of need to receive in the next two years.

Position Title: School Nutrition Staff/Worker

The results in the following section pertain to survey respondents who selected school nutrition staff/worker as a job title. The majority of respondents who identified as school nutrition staff/workers were from districts with less than 1,000 students (41.3%, n=45). Large school districts (greater than 20,000 students) accounted for the smallest percentage of respondents working in schools (10.1%, n=1). Figure 10 provides a listing of participation rates by district size for all school nutrition staff/workers respondents.

Figure 10

School District Size Based on Student Enrollment (School Nutrition Staff/Worker Respondents)
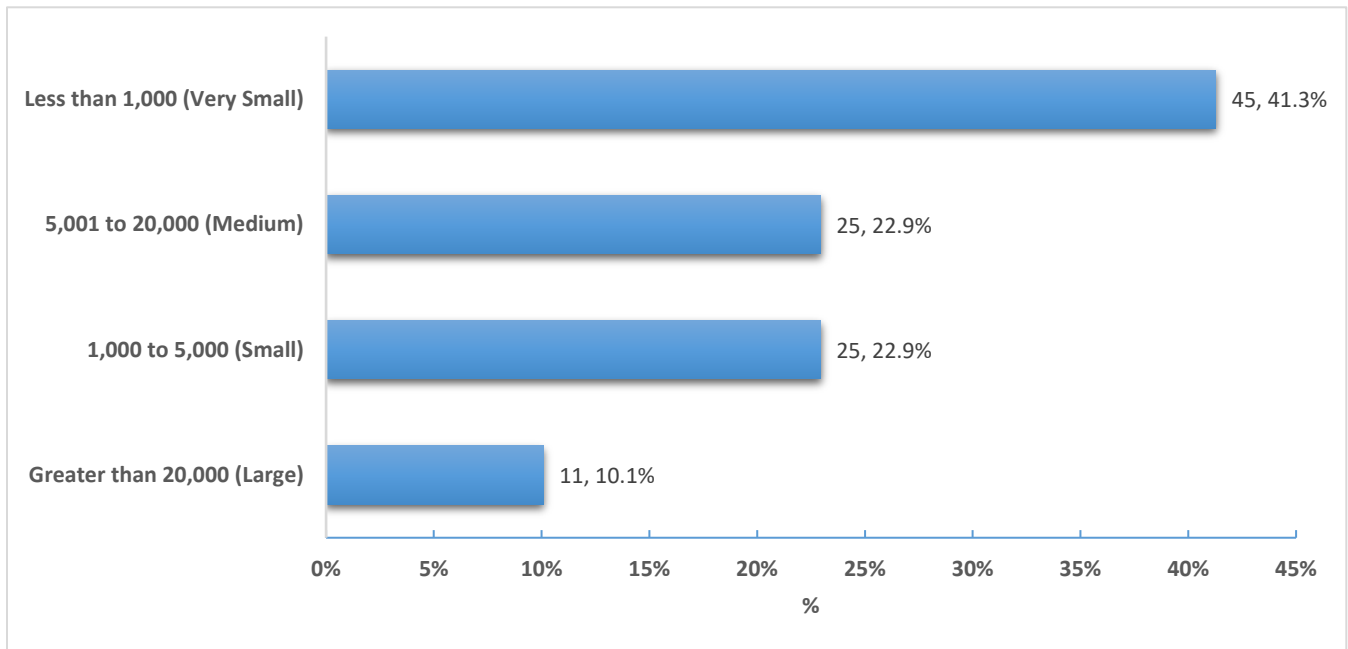
When school nutrition staff/workers were asked to select the training topics that they felt there was a high level of need to receive within the next two years in multiple settings (in-person live, live, virtual, and self-paced online), several trends were observed in each mode. Figure 11 provides an overview of those trainings, and Table 8 in Appendix H provides a complete listing of school nutrition staff/work responses for all three training modes. With regards to in-person live the most common choices were food production (22.2%, n=2), food safety and HACCP (16.5%, n=18)), serving food (16.5%, n=18), and general nutrition (16.5%, n=18), while respondents suggested special diets (17.4%, n=19), USDA Meal Pattern Requirements (16.5%, n=18), and general nutrition (16.5%, n=18) were best received identified in a live, virtual mode. Self-paced online was selected as the ideal training mode for receiving the following training topics: USDA Meal Pattern Requirements (26.6%, n=29), civil rights (22.9%, n=25), and basic math (21.1%, n=23).

Figure 11

Self-Paced, Live Virtual, and In-Person Live: High Level of Need Topics School Nutrition Professionals Want to Receive Education Within the Next Two Years (School Nutrition Staff/Worker Respondents)
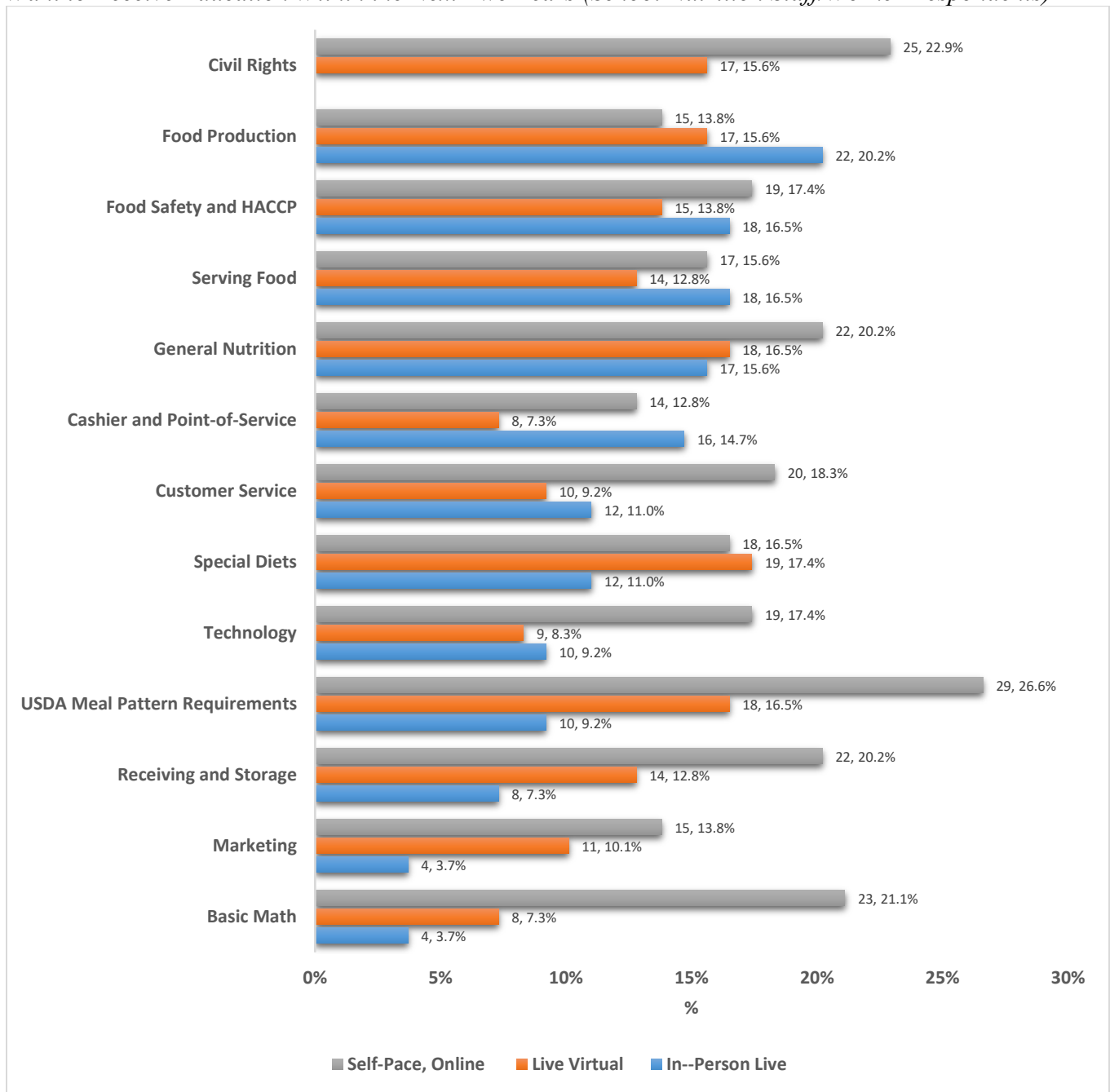
When school nutrition staff/worker respondents were asked to provide comments, they had regarding training topics needed in either of the three different modes provided (live-virtual, self-paced online, in-person live), four themes emerged: 1) in-person, live training mode, 2) combined training modes, 3) other training needed, no specified mode, and 4) miscellaneous comments, no specified mode. Table 3 lists general themes, specific themes, and specific comments given by all school nutrition

staff/worker respondents. Table 9 in Appendix H lists all school nutrition staff/worker respondents who indicated a high level of need to receive specific training topics in either of the three training modes (self-paced online, live virtual, and in-person live).

Table 3

Respondent Comments: School Nutrition Staff/Worker (Themes)

General Theme	Specific Comments
Preference for Training Format:	• "I feel that most of the live and in-person could be either or." • "It is sometimes hard to get away to do live or in-person classes. It would be great if self pace was a choice for all classes, in case live classes are not at a time where people can attend, or drive out to." • "Live is rarely feasible due to time difference and other job schedule." • "Live or in person are too hard to get time for."
Challenges with Live or In-Person Classes:	• "I learned more in person."
Appreciation for Training Content:	• "Offer a diverse and up to date information."
Suggestions for Improvements:	• "There needs to more classes on what is needed to pass the SNS test, especially the administrative and financial parts, please." • "Too many to list."
Miscellaneous Comments:	• "Great on all." • "I'm a stay at home grandma." • "N/A." • "Love."

Note: Comments are provided the way respondents typed with no spelling or grammatical corrections.

Position Title: Child and Adult Care Food Program

The results in the following section pertain to survey respondents who selected CACFP (director/ supervisor, provider, or other) as a job title. A total of 53 respondents (15.8%, N=726) indicated they work with CACFPs (Table 2). As demonstrated in Figure 12, the majority identified their program classification as providers (41.7%, n=53), while the remainder identified their program classification as sponsoring organizations (28.3%, n=36) and independent centers (20.5%, n=26).

Figure 12

Child and Adult Care Food Program (CACFP) Respondent Program Classification
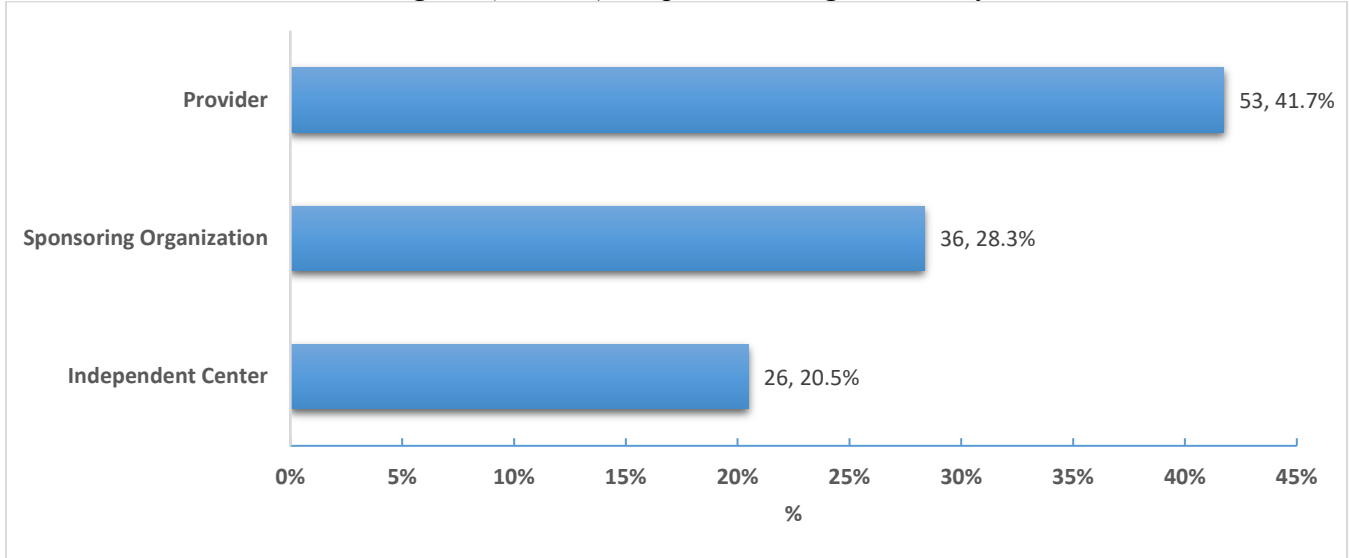
When asked to specify their CACFP program type, most identified family child care home (24.4%, n=31), child care center (21.3%, n=27) head start/early head start (19.7%, n=25), and other (14.2%, n=18). Figure 13 provides an overview of the distribution of CACFP respondent program types. Those CACFP respondents who selected "other" were asked to specify. Examples of some of those responses included crisis nurseries, food pantries, and group daycare homes. A complete listing of the "other" responses is located in Appendix H, Table 10.

Figure 13

Child and Adult Care Food Program (CACFP) Respondent Program Type
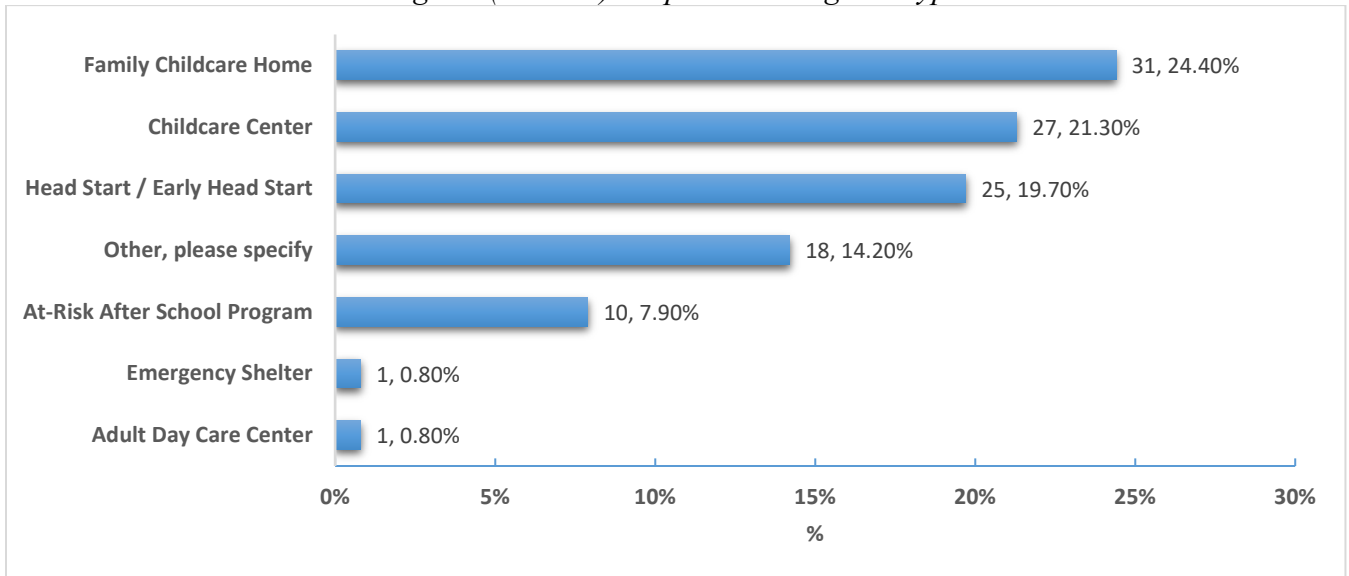
When CACFP professionals were asked to select the training topics that they felt there was a high level of need to receive within the next two years, in each training mode, the following trends were observed. With regards to in-person live, the most common choices were administration/paperwork (16.5%, n=21) and regulatory compliance (16.5%, n=21), while respondents suggested administration/paperwork (24.4%, n=31), special diets (24.4%, n=31) were best received identified in a live, virtual mode. Self-paced online was selected as the ideal training mode for receiving the following training topics: USDA meal pattern requirements (30.7%, n=39), health and safety (29.1%, n=37), and special diets (28.3%, n=36). Figure 14 provides an overview of those trends, and Table 11 in Appendix H provides a complete listing of school nutrition staff/work responses for all three training modes.

Figure 14

Self-Paced, Live Virtual, and In-Person Live: High Level of Need Topics CACFP Professionals (All Position Titles, Classifications, and Respondent Types) Want to Receive Education Within the Next Two Years
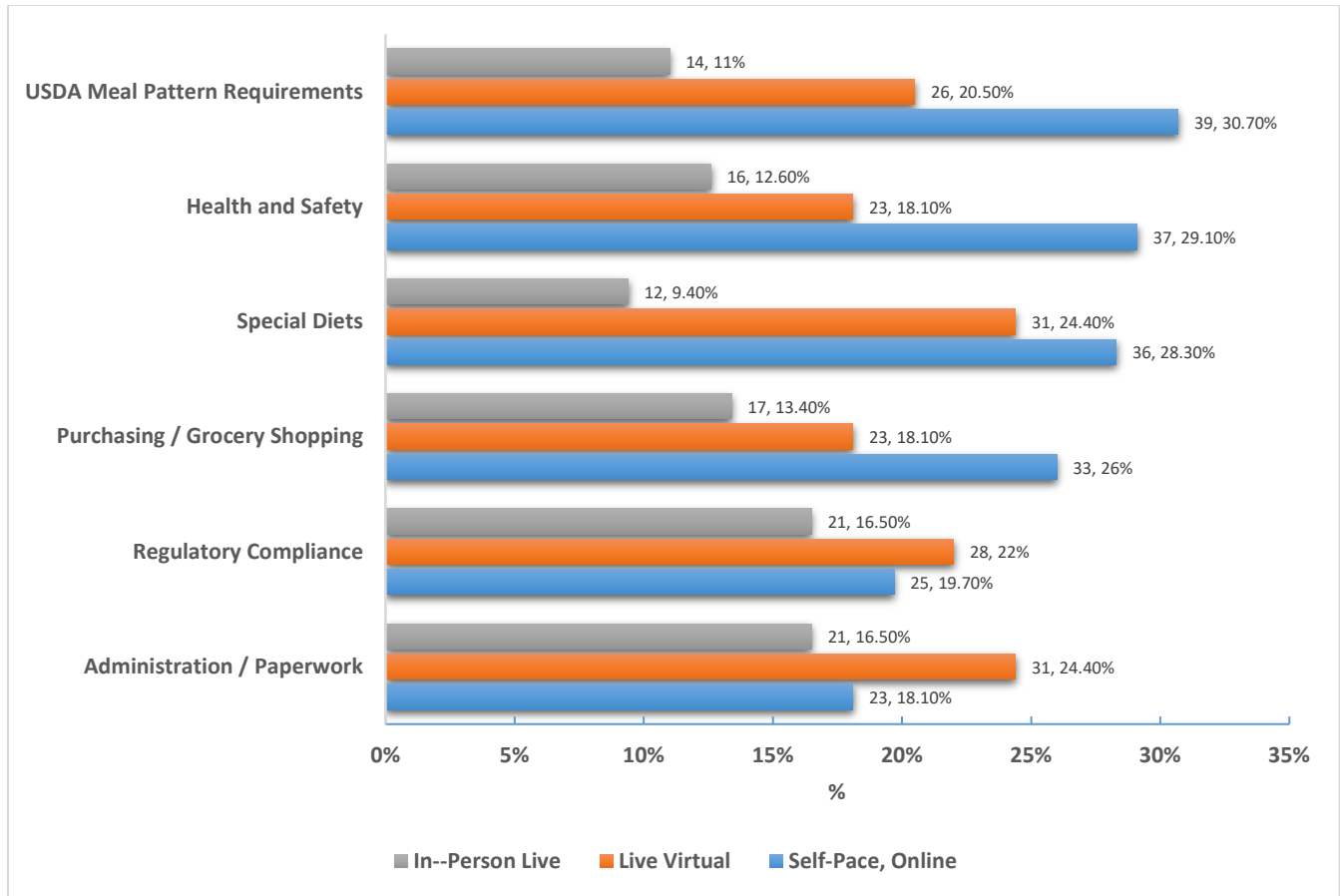
When school nutrition CACFP professionals were asked to provide comments, they had regarding in either of the three different modes provided (live-virtual, self-paced online, in-person live), five themes emerged: 1) preference for training format, 2) documentation and compliance, 3) professional development and continuing education, 4) accessibility and convenience, ad 5) miscellaneous comments. Table 4 lists general themes, specific themes, and specific comments given by all school nutrition staff/worker respondents. Table 12 in Appendix H lists all school nutrition

staff/worker respondents who indicated a high level of need to receive specific training topics in a self-paced, online mode.

Table 4

Respondent Comments: CACFP Professionals (Themes)

General Theme	Specific Comments
Preference for Training Format:	• "I like all training in person, or self-past online." • "I like both in-person and live virtual sessions." • "On line works best for me. We have a big family so it's easier for me to do just online classes." • "Travel is difficult due to our rural location and staffing needs so virtual trainings work best." • "With budgets as tight as they are it is not feasible to travel to in-person/live trainings anymore."
Documentation and Compliance:	• "I have always thought it would be nice if there was a list of documents that the kitchen should have. Many documents are not dated, and I never know if they are the current version in use." • "Regulatory and meal-related compliance guidance is required by each state. So, face-to-face is always best to try to meet and establish relationships with State agency representatives and administrators. They are also the ones that monitor and conduct program audits."
Professional Development and Continuing Education:	• "I work with Head Start/Early HS programs nationwide and provide training and assistance. Would like to see your trainings offer continuing professional education credits from the Academy of Nutritionists and Dietitians for registered dietitians." • "We need Spanish speaking trainings."
Accessibility and Convenience:	• "My cooks all have different schedules and would like to be able to take training when they have time." • "Please allow users to retake a course without going through a difficult process." • "UNABLE TO MOVE TOOL...TECH ISSUES."
Miscellaneous Comments:	• "N/a" • "N/A" • "None, you all are great!" • "Very good information." • "Training on Form H 1606 CAFP Child Care Center Monitoring Review." • "why do we not the high tier I feed my kids homecooked foods every day and get less money not fair."

Note: Comments are provided the way they we typed by respondents with no spelling or grammatical corrections.

CONCLUSIONS AND DISCUSSION

Review Panel Participation

The 28 people who participated in the review panel represent a 19% response rate. While this number may appear low, more people than were needed were invited to get a good distribution of participants (at least six to eight respondents) from each group (i.e., State agency child nutrition/school nutrition staff and directors, ICN Training and Education Specialist and Multi-Media Specialists, ICN's advisory board and FNS, NETTA.) We exceeded the six to eight thresholds with the State agency and two ICN groups. Although we sent the survey to only one USDA, FNS, or NETTA representative, the entire group provided comments and collectively put those comments on one document. Therefore, the research team believes the review panel participation was more than adequate to assess the survey and to provide feedback.

Survey Participation

The survey was sent out to a large population (N=218, 744), which included all individuals listed in ICN's contacts database. However, the response rate was only 0.4% (n=795), with an overwhelming percentage of total respondents from Texas 27.8% (n=221). California had the next highest participation rate, with a rate of only 3.8% (n=30). Table 1A in Appendix H provides a complete listing of state and U.S. Territory participation rates.

The school nutrition management/school nutrition other respondent group had the largest representation and geographic distribution of all the job title groups. More than half of all survey respondents were school nutrition management/school nutrition other (61.6%, n=490), and this group had at least one respondent from every state except South Dakota. As with each job title group and the sample, Texas accounted for an overwhelming percentage of total responses, with 23.7% (n=116) comprising the school nutrition management/school nutrition other job title group. Ohio had the next highest participation from school nutrition management/school nutrition other respondents, with a rate of only 4.3% (n=23). Table 1B in Appendix H provides a complete listing of school nutrition management/other participation rates by state and U.S. Territory.

Individuals who work in CACFPs represented only 16% (n=127) of respondents, and multiple states were not represented by this group including Kentucky, Maine, Missouri, Montana, Nevada, New Hampshire, New Jersey, Arizona, Pennsylvania, Rhode Island, South Dakota, Utah, and Vermont states. An overwhelming percentage of CACFP respondents were from Texas (28.3%, n=36), while the state with the next largest representation of CACFP respondents was Maryland, with only 7.1% (n=9). Table 1D in Appendix H provides a complete listing of CACFP provider participation rates by state and U.S. Territory.

The school nutrition staff/other respondents made up only 13.7% of total respondents (n=109) and several states were not represented by this group including Pennsylvania, Rhode Island, South Carolina, Alaska, South Dakota, Utah, Vermont, Nevada, New Hampshire, Arizona, Delaware, Iowa, Kansas, Maine, and Michigan. As with the other job title groups, Texas comprised an overwhelming percentage of school nutrition staff/other respondents (34.9%, n=38), while Washington and California were the states with the next highest participation, each with a rate of only 5.5% (n=6). Table 1C in

Appendix H provides a complete listing of school nutrition staff/worker participation rates by state and U.S. Territory.

Position Title: School Nutrition Management/School Nutrition Other Training Needs

Comment Insights

Highlights from school nutrition management/school nutrition other respondents' comments provide insight into why they made some of the topic and mode choices identified in the results section. Online training was described as cheap and easy to take and administrate. Several respondents indicated that it would be ideal to have the option to take training in multiple modes (i.e., in-person live, live virtual, and self-paced online). Multiple respondents identified the need for greater opportunities for school nutrition management staff to receive Food Buying Guide training. More than one respondent inferred the need for the development and availability of training activities specialized by job title and/or facility type, such as training specifically for RCCI management staff. Finally, some respondents pointed out that it is sometimes easy to cheat on online training quizzes to get certificates of completion. For example, skipping to the end of each course section and taking the quizzes until the individual receives a passing score, or taking a quiz with a friend or co-worker and sharing answers.

School Nutrition Management's Topic Preferences by Mode Compared School Nutrition Staff/Workers

Training topics identified as having a high level of need by 15% or more of school nutrition management/school nutrition other respondents were compared by mode preferences and school nutrition staff/workers preferences in Table 5 below.

Menu planning was selected as a training for which school nutrition management staff needs to receive a high level of need in all three training modes: in-person live, live virtual, and self-paced online. This indicates a high level of need for this course to be offered in multiple modes to provide the greatest opportunity for school nutrition management staff to improve their competence in this area. This is also affirmed by the results of the Illinois Board of Education study (Flure et al., 2020). Note that school nutrition staff/workers were not offered this topic as a choice.

Table 5

Training Topics Identified as Having a High Level by at Least 15% of School Nutrition Management/School Nutrition Other Respondents for All Three Training Modes

In-Person Live		Live Virtual		Self-Paced Online	
Food Production	17.80%	Special Diets	19.0%	Civil Rights	23.10%
Program Management	17.60%	Menu Planning	18.0%	Food Safety and HACCP	22.20%
Menu Planning	15.90%	Food Production	16.9%	Basic Math	18.40%
Financial Management	15.70%	Purchasing/Procurement	15.9%	Nutrition Education	18.2%
		USDA Meal Pattern Requirements	15.3%	Receiving and Storage	17.1%
		Program Management	15.3%	General Nutrition	16.7%
		USDA Food Buying Guide	15.3%	Customer Service	16.5%
				Menu Planning	16.3%
				USDA Meal Pattern Requirements	16.3%
				USDA Food Buying Guide	15.9%
				Serving Food	15.5%

Financial management was identified as a topic area with a high level of need by more than 15% of school nutrition management respondents, but only in the in-person live mode. This suggests respondents feel this is an important, but complex topic that should be offered in-person live mode to allow for maximum interaction between instructors and other students. School nutrition staff/workers were not offered this topic as a choice.

Serving food, customer service, general nutrition, receiving and storage, nutrition and education, basic math, food safety, HACCP, and civil rights were all topics identified as having a high level of need, but only in the self-paced online mode. This was consistent with school nutrition staff/worker respondents, who were also given these topic areas as choices. This suggests respondents consider these topic areas important, but they do not feel the need for in-depth or immediate interaction with the instructor and their peers, and they prefer the flexibility of completing these courses at their own pace.

School nutrition management respondents identified purchasing procurement and special diets as topic areas with a high level of need to be received only in the live virtual. This indicates that school nutrition management staff prefer the convenience and potential cost savings of receiving these topic areas online, but they desire real-time interaction with the instructor and peers due to the complexity of the topic areas. school nutrition staff/workers were not offered purchasing/procurement as a topic choice.

Food production and program management were topic areas school nutrition management respondents selected as having a high level of need to be received either in-person live or live virtual modes. This indicates school nutrition management staff want to receive these courses face-to-face in real-time, but they want the option of in-person live or live virtual. The preferences for the topic area food production were consistent between school nutrition management respondents and school nutrition staff /workers. This research is consistent with Jones et al. (2013) finding that those respondents working in schools see a high level of need to receive training on program management. School nutrition staff/workers were not offered program management as a topic choice.

School nutrition management respondents selected the topic areas USDA food buying guide and USDA meal pattern requirements as high-level need courses to be received either in the live virtual or self-paced online modes. This signifies the importance of these courses but suggests that school nutrition management staff do not see the need for these courses to be offered live in person. The USDA meal pattern requirements selection was consistent with school nutrition management and school nutrition staff/worker preferences; however, school nutrition staff/workers were not offered the USDA buying guide as a topic choice. These findings are also consistent with Jones et al. (2013) finding that individuals working in school nutrition programs have a high level of need to receive training on the Healthy, Hunger-Free Kids Act of 2010.

Position Title: School Nutrition Staff/Worker Training Needs

Comment Insights

School nutrition staff/worker respondents did not provide nearly as many comments (n=13) as the school nutrition management respondents (n=72). The comments indicate that while school nutrition staff/workers feel they learn more when in-person training is in-person, time constraints and convenience create a greater demand for online courses.

Table 6 provides an overview of topic areas 15% or more of school nutrition staff/workers respondents identified as having a high level of need for each of the three training modes (in-person live, live virtual, and self-paced online).

Table 6

Training Topics Identified as Having a High Level by at Least 15% of School Nutrition Staff/Worker Respondents for All Three Training Modes

In-Person Live		Live Virtual		Self-Paced, Online	
Food Production	20.20%	Special Diets	17.40%	USDA Meal Pattern Requirements	26.60%
Food Safety and HACCP	16.50%	USDA Meal Pattern Requirements	16.50%	Civil Rights	22.90%
Serving Food	16.50%	General Nutrition	16.50%	Basic Math	21.10%
General Nutrition	15.60%	Food Production	15.60%	Receiving and Storage	20.20%
		Civil Rights	15.60%	General Nutrition	20.20%
				Customer Service	18.30%
				Food Safety and HACCP	17.40%
				Technology	17.40%
				Special Diets	16.50%
				Serving Food	15.60%

School Nutrition Staff/Worker Training Topic Preferences of Training Topics Compared to Their Mode Preferences

When observing training topics identified by 15% or more of school nutrition staff/worker respondents as having a high level of need, multiple themes emerged when compared by preferred training mode. General nutrition was selected as a high-level need topic that should be available in all three training modes (in-person live, live virtual, and self-paced online). Researchers at the University of California and the California Department of Education (Jones et al., 2013) also reported the need for general nutrition training among school nutrition personnel.

Food production was selected as a high-level need topic by school nutrition staff/worker respondents, with in-person life and live virtual as the preferred modes. This indicates school nutrition staff/workers want face-to-face, real-time interaction with instructors and peers for this topic area, consistent with school nutrition management respondents' findings. Researchers at Pew Charitable Trusts and the Robert Wood Johnson Foundation (2015) also identified basic cooking skills as a top training need for school nutrition workers.

School nutrition staff/worker respondents indicated a high level of need for Food Safety and HACCP in both the in-person live and self-paced online modes. This corresponds with these respondents' comments that in-person live training promotes better learning, but online is needed for convenience.

Special diets, civil rights, and USDA meal pattern requirements were identified as high-level need topic areas in the live virtual and self-paced online modes. This supports the need for flexibility and convenience discussed above. Research findings by the Illinois State Board of Education (ISBE) and the University of Illinois Extension and Outreach supported the need for training on USDA meal patterns to comply with meal standards (Flure et. al., 2020).

Position Title: Child and Adult Care Food Program (Director or Supervisor/Provider/Other)

Comment Insights

Child and Adult Care Food Program respondents offered similar comments as the school nutrition management/school nutrition other respondents. They indicated a need for flexibility in training mode offerings to allow for cost and time savings associated with the online option but also desired the choice of in-person mode. Some CACFP respondents preferred training to support compliance with CACFP-specific regulations, while others expressed experiencing technical difficulties when completing online training. A couple of CACFP respondents stated the desire for some specialized training, including training available in Spanish and training approved for dietitians to receive continuing education credit through the Commission on Dietetic Registration.

Conclusions When Looking at All the Preferences of Training Topics Based on Respondents' Mode Preference

The training topics selected by 15% or more of CACFP respondents as having a high level of need for each of the three training modes (in-person live, live virtual, and self-paced online) demonstrate several trends (Table 7).

Table 7

Training Topics Identified as Having a High Level by at Least 15% of CACFP Respondents for All Three Training Modes

In-Person Live		Live Virtual		Self-Paced, Online	
Administration/Paperwork	16.50%	Administration/Paperwork	24.%4	Administration/Paperwork	18.10%
Regulatory Compliance	16.50%	Special Diets	24.40%	Regulatory Compliance	19.70%
		Regulatory Compliance	22.0%	Purchasing/Grocery Shopping	26%
		USDA Meal Pattern Requirements	20.50%	Special Diets	28.30%
		Purchasing/Grocery Shopping	18.10%	Health and Safety	29.10%
		Health and Safety	18.10%	USDA Meal Pattern Requirements	30.70%

Administration/paperwork and regulatory compliance were each identified as high level of need topics that respondents desired to receive in all three modes. This suggests the importance of the selected topics and the need for respondents to have options and flexibility on when and how to receive those trainings. Special diets, USDA meal pattern requirements, purchasing and grocery shopping, and health and safety were each chosen as high-level need topics that respondents preferred to receive in the live virtual and self-paced online modes. This also demonstrates the importance of these topics while suggesting respondents prefer the convenience and cost savings associated with receiving the courses online.

Limitations

The population for this study was limited to individuals listed in the ICN contact database. South Dakota was not represented by any school nutrition management/school nutrition other respondents and several states were not represented by school nutrition staff/work and CACFP respondents. The large number and percentage of respondents from Texas (n=221, 28%) skews the data to that region of the country.

Application

It is recommended that agencies tasked with developing and providing training for child nutrition professionals consider developing and offering training on the following topics in the specific modes and for the different child nutrition positions listed below:

School Nutrition Management/School Nutrition Other

- Food production: in-person live and live virtual.
- Financial management: in-person live.
- Menu planning: all three modes.
- Program management: in-person live and live virtual modes (in-person live, live virtual and self-paced).
- Purchasing/procurement: live virtual.
- USDA meal pattern requirements and USDA Food Buying Guide: live virtual and self-paced online.
- Food safety and HACCP, basic math, nutrition education, receiving and storage, general nutrition, and serving food: self-paced online.

School Nutrition Staff/Worker

- General nutrition: all three modes.
- Food production: in-person line and live virtual.
- Food safety and HACCP and serving food: in-person live and self-paced online.
- Special diets: live virtual.
- USDA meal pattern requirements and civil rights: live virtual and self-paced online.
- Basic math, receiving and storage, and customer service: self-paced online.

Child and Adult Care Food Program (Director or Supervisor/Provider/Other)

- Administration/paperwork and regulatory compliance: all three modes
- Special diets, USDA meal pattern requirements, purchasing and grocery shopping, and health and safety: live virtual and self-paced online.

It is recommended that agencies developing and providing training to any child nutrition professionals recommend the following:

- Consider job titles and areas of school nutrition, such as RCCIs, when developing training.
- Promote food buying guide training.
- Create online training that reduces technical difficulties for users.
- Develop online training that reduces or eliminates students' ability to take shortcuts or cheat when taking the courses.

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APPENDIX A

DRAFT SURVEY

Please click on the link below to take a short, five-question survey to help ICN determine the training needs of child nutrition professionals.

Link: XXXXXXXXXX

CONSENT TO PARTICIPATE IN RESEARCH
By clicking the box below, consent is hereby given to participate in this research project. Information has been provided to me regarding the risks and benefits of participation.
☐ Check this box **if you consent to participate in this study**.
☐ Check this box **if you do not wish to consent to participate in this study**.

This project (USM IRB Protocol # 22-1568) has been reviewed by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research subject should be directed to the chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5116, Hattiesburg, MS 39406, (601) 266-5997.

Note: Participants who consent to participate in the study will be taken to survey question 1. Those who declined to participate will be taken to the note at the end of the survey, "Thank you for your time."

Demographics

1. What is the student enrollment in your school district?
   A. <1,000
   B. 1,000-5,000
   C. 5,001-20,000
   D. >20,000

2. What state or territory is your child nutrition program located in?

State		State		State		State
Alabama	○	Kansas	○	New Mexico	○	Virginia
Alaska	○	Kentucky	○	New York	○	Washington
Arizona	○	Louisiana	○	North Carolina	○	West Virginia
Arkansas	○	Maine	○	North Dakota	○	Wisconsin
California	○	Maryland	○	Ohio	○	Wyoming
Colorado	○	Massachusetts	○	Oklahoma	○	Puerto Rico
Connecticut	○	Michigan	○	Oregon	○	U.S. Virgin Islands
Delaware	○	Minnesota	○	Pennsylvania	○	American Samoa
Florida	○	Mississippi	○	South Carolina	○	Northern Mariana Islands
Georgia	○	Missouri	○	South Dakota	○	Guam
Hawaii	○	Nebraska	○	Tennessee	○	
Idaho	○	Nevada	○	Texas	○	
Indiana	○	New Hampshire	○	Utah	○	
Iowa	○	New Jersey	○	Vermont	○	

3. Please select the answer that most closely matches your current job title. (Select only one response.)
    A. District-level School Nutrition Supervisor or Director
    B. Site-Level School Nutrition Manager
    C. School Nutrition Assistant/Technician (the foodservice employees who work at the local school cafeteria under the direction of a school nutrition manager).
    D. Child Care Provider in a Child and Adult Care Feeding Program (CACFP)
    E. Other

SECTION A

4A. Please rate your current level of need to receive training on each topic area listed in the table below. The topic areas are based on the functional areas from the Institute's most recent Competencies, Knowledge, and Skills research and resource for district level school nutrition professionals. This resource can be found at the following link: https://theicn.org/research/

Topic Areas	No Need	Low Level of Need	Moderate Level of Need	High Level of Need
Facilities and Equipment Management	○	○	○	○
Financial Management	○	○	○	○
Food Production and Operation Management	○	○	○	○
Food Security, Sanitation, and Safety	○	○	○	○
Human Resource Management	○	○	○	○
Marketing and Communication	○	○	○	○
Menu and Nutrition Management	○	○	○	○
Procurement and Inventory Management	○	○	○	○
Program Management and Accountability (including nutritional, financial, and regulatory accountability of a school nutrition program)	○	○	○	○
Technology and Information Systems	○	○	○	○

5A. Please indicate the ideal mode to receive training on each topic area listed in the table below.

The topic areas are based on the functional areas from the Institute's most recent Competencies, Knowledge, and Skills research and resource for district level school nutrition professionals. This resource can be found at the following link: https://theicn.org/research/

Topic Areas	In-Person, Live	Virtual, Live	Self-Paced, Online	Not Applicable
Facilities and Equipment Management	○	○	○	○
Financial Management	○	○	○	○
Food Production and Operation Management	○	○	○	○
Food Security, Sanitation, and Safety	○	○	○	○
Human Resource Management	○	○	○	○
Marketing and Communication	○	○	○	○
Menu and Nutrition Management	○	○	○	○
Procurement and Inventory Management	○	○	○	○
Program Management and Accountability (including nutritional, financial, and regulatory accountability of a school nutrition program)	○	○	○	○
Technology and Information Systems	○	○	○	○

SECTION B

Note: *If B is selected for question 3, the survey will skip to 4B below.*

4**B**. Please rate your current level of need to receive training on each topic area listed in the table below. The topic areas are based on the functional areas from the Institute's most recent Competencies, Knowledge, and Skills research and resource for school nutrition managers. This resource can be found at the following link: https://theicn.org/research/

Topic Areas	No Need	Low Level of Need	Moderate Level of Need	High Level of Need
Personnel Management	○	○	○	○
Sanitation, Safety, and Security	○	○	○	○
Facility and Property Management	○	○	○	○
Marketing, Communication, and Customer	○	○	○	○
Procurement and Inventory Management	○	○	○	○
Nutrition and Meal Management	○	○	○	○
Financial Management and Accountability	○	○	○	○
Meal Preparation and Service	○	○	○	○

5**B**. Please indicate the ideal mode to receive training on each topic area listed in the table below. The topic areas are based on the functional areas from the Institute's most recent Competencies, Knowledge, and Skills research and resource for school nutrition managers. This resource can be found at the following link: https://theicn.org/research/

Topic Areas	In-Person, Live	Virtual, Live	Self-Paced, Online	Not Applicable
Personnel Management	○	○	○	○
Sanitation, Safety, and Security	○	○	○	○
Facility and Property Management	○	○	○	○
Marketing, Communication, and Customer	○	○	○	○
Procurement and Inventory Management	○	○	○	○
Nutrition and Meal Management	○	○	○	○
Financial Management and Accountability	○	○	○	○
Meal Preparation and Service	○	○	○	○

SECTION C

4C. Please rate your current level of need to receive training on each topic area listed in the table below. The topic areas are based on the functional areas from the Institute's most recent Competencies, Knowledge, and Skills research and resource for school nutrition assistants/technicians. This resource can be found at the following link: https://theicn.org/research/

Topic Areas	No Need	Low Level of Need	Moderate Level of Need	High Level of Need
Equipment Use and Care	○	○	○	○
Food Production	○	○	○	○
Food Safety and Sanitation	○	○	○	○
Personal Characteristics (such as conflict management, customer service, basic math, and technology skills)	○	○	○	○
USDA Meal Program Requirements	○	○	○	○
Workplace and Employee Safety	○	○	○	○

5C. Please indicate the ideal mode to receive training on each topic area listed in the table below. The topic areas are based on the functional areas from the Institute's most recent Competencies, Knowledge, and Skills research and resource for school nutrition assistants/technicians. This resource can be found at the following link: https://theicn.org/research/

Topic Areas	In-Person, Live	Virtual, Live	Self-Paced, Online	Not Applicable
Equipment Use and Care	○	○	○	○
Food Production	○	○	○	○
Food Safety and Sanitation	○	○	○	○
Personal Characteristics (such as conflict management, customer service, basic math, and technology skills)	○	○	○	○
USDA Meal Program Requirements	○	○	○	○
Workplace and Employee Safety	○	○	○	○

SECTION D

4D. Please rate your current level of need to receive training on each topic area listed in the table below. The topic areas are based on the functional areas from the Institute's most recent Competencies, Knowledge, and Skills research and resource for Child Care Providers in a Child and Adult Care Feeding Program (CACFP). This resource can be found at the following link:
https://theicn.org/research/

Topic Areas	No Need	Low Level of Need	Moderate Level of Need	High Level of Need
Administration	O	O	O	O
Procurement	O	O	O	O
Compliance	O	O	O	O
Health and Safety	O	O	O	O
Nutrition and Meal Management	O	O	O	O
Education and Training (providing all CACFP staff with information and/or professional development to effectively implement standard operating procedures)	O	O	O	O

5D. Please indicate the ideal mode to receive training on each topic area listed in the table below. The topic areas are based on the functional areas from the Institute's most recent Competencies, Knowledge, and Skills research and resource for Child Care Providers in a Child and Adult Care Feeding Program (CACFP). This resource can be found at the following link: https://theicn.org/research/

Topic Areas	In-Person, Live	Virtual, Live	Self-Paced, Online	Not Applicable
Administration	◯	◯	◯	◯
Procurement	◯	◯	◯	◯
Compliance	◯	◯	◯	◯
Health and Safety	◯	◯	◯	◯
Nutrition and Meal Management	◯	◯	◯	◯
Education and Training (providing all CACFP staff with information and/or professional development to effectively implement standard operating procedures)	◯	◯	◯	◯

Note: If E is selected for question 3, the survey will skip to the end below.

Thank you for your time!

APPENDIX B

REVIEW PANEL RECRUITMENT LETTER AND CONSENT FORM

Dear Child Nutrition Professional,

The Institute of Child Nutrition Applied Research Division (ICN ARD) is conducting a research study to determine the level of interest in in-person training and virtual training and to identify the training topics that are most needed by child nutrition professionals over the next two years.

This research will be conducted in two phases. Each phase will require the participation of child nutrition professionals. Therefore, the ICN ARD would like to invite you to participate in the first phase of the project, which involves the development of a national rapid response survey.

As a part of your participation in this research phase, you are invited to review and assess the draft survey (see the attached document). A review form with instructions is attached. If you choose to participate, please complete the review form, save it as a Word document, and return it to me as an email attachment at keith.rushing@usm.edu.

There is no risk for participating in this process. However, the benefits include contributing to the improvement of child nutrition program operations by informing the decision-making processes regarding future research, education, and training needs of child nutrition programs.

Participation in this research study is voluntary. Your name will not be associated with any information collected in this process, and your personal information and school information will remain confidential. If you are interested in participating in this study, please click the box below and forward your response to this email to keith.rushing@usm.edu by [insert date].

☐　　I consent to participate in the ICN ARD research on identifying trends, fill data gaps, and assess changes related to child nutrition program operations and staffing needs.

Your participation in this study is valuable to ICN ARD. After we have received your consent agreement, we will contact you to schedule a time to complete your interview. If you have any questions about this survey or the research study, don't hesitate to contact Dr. Keith Rushing at 1-601-543-9866 or keith.rushing@usm.edu.

Sincerely,

Keith Rushing, PhD, RD

This project (USM IRB Protocol # 22-1568) has been reviewed by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research subject should be directed to the chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5116, Hattiesburg, MS 39406, (601) 266-5997.

APPENDIX C

SURVEY EVALUATION FORM WITH BACKGROUND INFORMATION AND INSTRUCTIONS

Thank you for agreeing to participate in this process! Please open and review the Draft Survey attached to the email invitation.

The following paragraphs provide background information about the survey and how it will be conducted once this evaluation is complete. This information is provided to assist in your evaluation:

- **Final Survey Location**
  A link to the final survey will be available on ICN's website once this evaluation is complete. The specific location on the website has not yet been established. Once the location is identified, a box like the one on the top of the Draft Survey (shaded in green) will be utilized. The final survey will be uploaded onto a platform such as Qualtrics or Survey Monkey.

- **Survey Navigation**
  Once participants click on the survey link, they will be sent to the consent form. Individuals who consent to participate will be sent to question 1. Those who do not wish to consent will be sent to the end of the survey. Navigation will be set so that participants view only one question at a time. Further, a question must be answered before a participant can progress to the next question. Participants will be allowed to navigate backward to previous questions.

  Based on the job title participants select in question three dictates where they will be sent next. Participants who select choice A will be navigated to questions 4A and 5A, those who select choice B will be navigated to questions 4B and 5B, those who select choice C will be navigated to questions 4C and 5C, and those who select choice D will be navigated to questions 4D and 5D. Those who select choice E will be sent to the end of the survey.

- **Question Origins**
  Questions 4 and 5 (A, B, C, and D) are based on the functional areas from the Institute's most recent Competencies, Knowledge, and Skills research and resources for district-level school nutrition professionals, school nutrition managers, school nutrition assistants/technicians, and child care providers in a CACFP. Each of these resources can be found at the following link: https://theicn.org/research/

- **The Draft Survey Document**
  Any of the information on the draft survey that is highlighted in yellow will not be on the final survey. This highlighted information is provided to help your evaluation. It is also intended to guide the individuals who will upload the survey onto a survey platform.

Instructions:

1. To complete this evaluation, please answer the evaluation questions located in column three of the table below. To answer this question, type an X in the box below the answer you select. Based on your answers to the questions in column three, please type comments and recommendations in column four, as appropriate.

2. Once you have completed this form, please save it as a Word or PDF file, and return it to me via email at Keith.Rushing@usm.edu by Monday October 2, 2023.

If you have any questions, please do not hesitate to contact me at the phone number or email address provided below.

Thank you for participating!

Sincerely,

Keith Rushing
Research Scientist
Institute of Child Nutrition, Applied Research Division
Keith.rushing@usm.edu
Cell – 601-543-9866

This project (USM IRB Protocol # 22-1568) has been reviewed by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research subject should be directed to the chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5116, Hattiesburg, MS 39406, (601) 266-5997.

Survey Evaluation Form

Survey Sections	Survey Question Numbers	Evaluation Questions	Comments/Recommendations
Consent		Is the information/instruction in this survey section clear to understand? | Yes	No		If you answered no, please explain why, and provide recommendations.

Survey Sections	Survey Question Numbers	Evaluation Questions	Comments/Recommendations
Demographics	1	Do you agree with the parameters of this question? | Yes	No		If you answered no, please explain why, and provide recommendations.
	2	Do you agree with the parameters of this question? | Yes	No		If you answered no, please explain why, and provide recommendations.
	3	Do recommend any modifications to the question? | Yes	No		If you answered yes, please explain why, and provide recommendations.

Survey Sections	Survey Question Numbers	Evaluation Questions	Comments/Recommendations
A	4A	Do you recommend any modifications to the question?	If you answered yes, please explain why, and provide recommendations.
		Yes | No	
	5A	Do you recommend any modifications to the question?	If you answered yes, please explain why, and provide recommendations.
		Yes | No	

Survey Sections	Survey Question Numbers	Evaluation Questions	Comments/Recommendations
B	4B	Do you recommend any modifications to the question?	If you answered yes, please explain why, and provide recommendations.
		Yes | No	
	5B	Do you recommend any modifications to the question?	If you answered yes, please explain why, and provide recommendations.
		Yes | No	

Survey Sections	Survey Question Numbers	Evaluation Questions		Comments/Recommendations
C	4C	Do you recommend any modifications to the question?		If you answered yes, please explain why, and provide recommendations.
		Yes	No	
	5C	Do you recommend any modifications to the question?		If you answered yes, please explain why, and provide recommendations.
		Yes	No	

Survey Sections	Survey Question Numbers	Evaluation Questions		Comments/Recommendations
D	4D	Do you recommend any modifications to the question?		If you answered yes, please explain why, and provide recommendations.
		Yes	No	
	5D	Do you recommend any modifications to the question?		If you answered yes, please explain why, and provide recommendations.
		Yes	No	

APPENDIX D

Compilation of Review Panel Results

<table>
<tr><td>

Survey Evaluation Form

TABULATION

Number of participants solicited = 145
Number of undeliverable emails = 38 (15 – 9/6-9/7/9 & 13 9/18-9/19))
Number that participated = 28
Participation rate: 145-13 = 132, 28 ÷ 132 = 21.21%
Number of consent forms: 28

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CONSENT

Is the information/instruction in this survey section clear to understand?

Yes 25
No 2
Missing:1

Will participants receive an official pop-up consent form once they click on the survey link? I did not see an example of the consent form where they can read through possible risks and benefits as mentioned in the following sentence, "Information has been provided to me regarding the risks and benefits of participation."

You said that information has been provided to me regarding the risks and benefits of participation, but I did not see any information on that.

Before or in the Consent to Participate in Research section, please provide information to participants about the risks and benefits of survey participation, so they can make an informed decision about whether to participate.

Remove "wish to" in the second option under Consent to Participate

It is clear, however, has "information been provided regarding the risks and benefits of participation?"

</td></tr>
<tr><td>

Demographics
1

Do you agree with the parameters of this question?

Yes 20
No 7

</td></tr>
</table>

Missing:1

Would it be possible to ask a follow up question regarding the number of students they serve/participate in the school nutrition program? To have an idea of the program participation percentage based on the district enrollment?

Is enrollment size the standard measure
you are looking for, or the number of
meals served per day (breakfast, lunch,
suppers)?

You may want to type out "less than" and "more than."

The question makes sense for school districts- my only concern is how child care providers would answer it. Recommend- moving this question to after question 3 and set up the survey logic so only school nutrition professionals answer it. If information on child care center size would be helpful to gather, please add a separate question on this for child care providers.

Is greater than 20,000 enough delineation? School districts with 100,000 students or more might have different training preferences and needs.

Maybe use the professional standards enrollment categories. Would help connect the required number of training hours.

Is this the student enrollment question? Maybe include an N/A for child care providers? This question isn't relevant to them at all and may turn them off from taking the survey fully.

Why are we asking about "district" for CACFP?

If the survey is to identify need from all child nutrition program professionals, suggest asking what programs the district/organization participates in first. Then, if the sponsor is SFSP or CACFP only, the question could ask how many meal sites they operate (or number of meals served in the prior year). If a school/district is selected, keep question as-is.

This question asks about schools but question number 2 asks about your child nutrition program, which is the program in general. If you are asking about schools it needs to read school nutrition. Is this survey for schools or child nutrition in general?

If a CACFP provider is not associated with a school district, the question is not clear as to what they should select.

Question #3 should be Question #1, and #1 and #2 should become #2 and #3.

If the intent of the question is to ascertain the size of the school district where the CACFP Provider is located, then it should present an alternative version of this question state as (or similar):

"What is the student enrollment in the school district in which your CACFP home, center, or facility is located?"

If the intent of the question is to be specific to school district employees, managers, and directors, then the skip logic should skip this question

Are you using enrollment categories/divisions based on definition of major cities?

Demographics
2

Do you agree with the parameters of this question?

Yes 22
No 4
Missing:2

Answer choice style regarding Q2 what state/territory…? Answer choices may be presented better if you have them type in the state name and choose the state that populates to avoid choosing wrong state with the multiple answer choices.

Three states are missing from the list: Illinois, Montana, and Rhode Island.
The District of Columbia also is missing.

Circles in the first column do not align in the allotted space

Circles in the first column do not align in the allotted space

There are four rows of states and territories, but only three rows of circles. I would put the circles before the choice also.

It seems that 3 states are missing including Montana.

This question mentions child nutrition programs. Are we surveying the program in general or one specific program.

Illinois and the District of Columbia are missing from this list

If you answered yes, please explain why, and provide recommendations.

Demographics
3

Do recommend any modifications to the question?

Yes 12

No 15
Missing:1

I would let participants know that the position the select the questions will be directed to their role.

I would make the CACFP question for all participants and add a N/A if they do not participate in CACFP.

A: Change level to an Uppercase L

A: Change level to an Uppercase L

B: Delete "in" at the end of the question number 2. 10/1/2023

These are the major categories of school nutrition professionals; but will you have a fill in the blank section for Other? This will inform future categories, if significant (i.e., RDN, Chef, etc.).

I would add CACFP Director or Supervisor.

May want to give examples of other?

General feedback- Please write out school nutrition throughout the survey and do not use the acronym School nutrition per current USDA guidance.

I realize the terminology "assistant/technician" came from past ARD research studies and reports. To be more inclusive recommend changing this to "school nutrition staff." I think more people will identify with this title.

Recommend that ARD consider adding additional job title options for this question because it may be common for a participant to select "other" and then be sent to the end of the survey. If users are sent to the end of the survey, they wouldn't end up providing any valuable feedback. Roles that may select other- district chef, menu planner, etc.

Maybe use a word other than 'in' the child and adult care food program. Maybe using or participating in the food program?

Also, many child care providers call it "The Food Program"

Also it might be helpful to distinguish the type of child care provider. Child care center employee (or director or teacher) or family child care provider

Update title for A to: District level Child Nutrition Supervisor or Director

Update title for B to: Site-level child nutrition manager

To capture all possible audiences, suggest updating to include an additional option:
-Summer Food Service Program (SFSP) Sponsor only (if selected, go to 4/5 D)

To accurately reflect the type of work for selection C, suggest updating title to "child nutrition cafeteria worker"

Could include another option to select "child nutrition program administrative staff." Trainings applicable could be around processing household income forms, meal claiming, etc.

This question needs to be clearly explained. I am unsure why schools and CACFP are combined.

Medium and larger districts have central office roles that are not clearly defined in this categorization. For example, a dietitian may be employed with no supervisory role, so is neither a Site Manager nor a District Supervisor/Director.

If the intent is to include them with the option A group, then re-label as:
"District-level School Nutrition Supervisor, Administration, or Director"

4B

Do you recommend any modifications to the question?

Yes 5
No 22
Missing:1

A training on the Food Buying Guide app may be helpful in the Procurement section perhaps.

Would like the Nutrition and Meal Management section to include information
on the meal pattern, importance of following the menu, what a reimbursable meal is,
Breakfast in the classroom best practices, the special diet section to share best practices/
policies, etc.

For Financial Management and Accountability, perhaps MPLH could be
discussed/ how to calculate, appropriate ranges, how to read a profit and loss
statement, etc.

Add service to marketing, communication and customer service.

Can they list more than one? It does not state whether they can choose more than one.

Under Topic Areas row 4, please add "Service." The row should read "Marketing, Communication, and Customer Service." Also recommend adding free response area for participants to add any additional topic areas that may have been overlooked.

Suggest including civil rights as a topic for this audience

Typo for "marketing, communication and customer" (add "customer service")

Suggest removing financial management from this selection as site-level managers typically aren't involved in that level

The first would be rank-order selection. I believe this is easier to implement but harder to evaluate the results (This would likely have to be evaluated similarly to rank-choice voting to see the first, second, third, etc. choices)

Another way would be to use the number of required training hours per year based on the employee's job title (from the USDA's professional standards requirement) and allow the respondent to assign their training hours in 0.5 hour increments to each topic.

5B

Do you recommend any modifications to the question?

Yes 4
No 23
Missing:1

Add service to marketing, communication and customer service.

Can they list more than one? It does not state whether they can choose more than one.

Under Topic Areas row 4, please add "Service." The row should read "Marketing, Communication, and Customer Service." If participants have the option to add additional topic areas, recommend that they be able to select the ideal model to receive training each topic area.

Typo for "marketing, communication and customer" (add "customer service")

4C

Do you recommend any modifications to the question?

Yes 5
No 22
Missing 1

10/1/2023 – Question for ICN? Is Basic Math and Technology Skills personal characteristics? I believe they can stand alone as a separate line item and not be placed under Topic Area Personal Characteristics

Special diet training would be helpful (under

Meal Program requirements)?

The importance of following the menu/
proper portioning should be highlighted
under Meal Program requirements

Add **in** the table below

The topic area Personal Characteristics encompasses quite a few different competencies including communication, customer service, basic math, and technology. To provide actionable data on specific training needs from this survey, recommend providing a way for participants to indicate which of the personal characteristics they would like training on. Also recommend adding free response area for participants to add any additional topic areas that may have been overlooked.

I would use USDA Meal *Pattern* Requirements instead of the word program

Suggest including additional topics for this audience:
-civil rights
-meal service/meal counting (recognizing reimbursable meals at POS/meal count form)
-outreach and marketing

The first would be rank-order selection. I believe this is easier to implement but harder to evaluate the results (This would likely have to be evaluated similarly to rank-choice voting to see the first, second, third, etc. choices)

Another way would be to use the number of required training hours per year based on the employee's job title (from the USDA's professional standards requirement) and allow the respondent to assign their training hours in 0.5 hour increments to each topic.

5C

Do you recommend any modifications to the question?

Yes 5
No 22
Missing 1

10/1/2023 – Question for ICN? Is Basic Math and Technology Skills personal characteristics? I believe they can stand alone as a separate line item and not be placed under Topic Area Personal Characteristics

Would this level of staff benefit from
downloadable materials in print version if
computer access is limited? Which category
could that fall under?

Add service to marketing, communication and customer service
Change link.

Can they list more than one? It does not state whether they can choose more than one.

If participants have the option to add additional topic areas, recommend that they be able to select the ideal model to receive training each topic area.

I would use USDA Meal *Pattern* Requirements instead of the word program

---

4D

Do you recommend any modifications to the question?

Yes 5
No 22
Missing 1

Add this question for all job categories and provide an N/A if the school does not participate in CACFP

No experience with this group.

Change link.

Procurement covered previously, need to know difference in meal pattern but procuring same within district

Recommend adding free response area for participants to add any additional topic areas that may have been overlooked. From my understanding the last update of CKS for Child Care Providers in CACFP operations was in 2016.

It's the Child and Adult Care *Food* Program – not feeding program

Since this is for providers in centers and homes – it might help to change some of the words. For example: Administration – maybe use the word paperwork

Procurement/Grocery Shopping

Procurement isn't a word most child care providers are going to use.

Add USDA Meal Pattern Requirements

Suggest including higher level administrative topics for this audience (applicable to SFSP sponsors as well):

-Civil rights
-community partnerships and outreach
-contracting with a FSMC or meal vendor
-financial management
-meal prep and meal service

Does "health and safety" include food safety? If not, suggest including that topic.

Suggest including meal patterns and menu planning within the nutrition and meal management topic

The first would be rank-order selection. I believe this is easier to implement but harder to evaluate the results (This would likely have to be evaluated similarly to rank-choice voting to see the first, second, third, etc. choices)

Another way would be to use the number of required training hours per year based on the employee's job title (from the USDA's professional standards requirement) and allow the respondent to assign their training hours in 0.5 hour increments to each topic.

5D

Do you recommend any modifications to the question?

Yes 5
No 22
Missing 1

Add this question for all job categories and provide an N/A if the school does not participate in CACFP

No experience with this group.

Change link.

Can they list more than one? It does not state whether they can choose more than one.

If participants have the option to add additional topic areas, recommend that they be able to select the ideal model to receive training each topic area.

It's the Child and Adult Care *Food* Program – not feeding program

Since this is for providers in centers and homes – it might help to change some of the words. For example: Administration – maybe use the word paperwork

Procurement/Grocery Shopping

Procurement isn't a word most child care providers are going to use.

Add USDA Meal Pattern Requirements

Comments are provided the way they we typed by respondents with no spelling or grammatical corrections.

APPENDIX E

SURVEY INVITATION

Dear Child Nutrition Professional Your Feedback is Wanted!

The Institute of Child Nutrition would like to give you an opportunity to provide valuable feedback about your training needs for the next two school years.

If you are interested in participating in a short online survey, please follow the link or QR Code. Thank you for your time and thoughts!

https://usmep.co1.qualtrics.com/jfe/form/SV_0dkp5dvdVESvP5I

This project (USM IRB Protocol # 22-1568) has been reviewed by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research subject should be directed to the chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5116, Hattiesburg, MS 39406, (601) 266-5997.

APPENDIX F

SURVEY CONSENT FORM

Dear Child Nutrition Professional/Stakeholder,

The Institute of Child Nutrition Applied Research Division (ICN ARD) is conducting a research study to determine the level of interest in in-person training and virtual training and to identify the training topics that are most needed by child nutrition professionals over the next two years.

There is no risk for participating in this process. However, the benefits include contributing to the improvement of child nutrition program operations by informing the decision-making processes regarding future research, education, and training needs of child nutrition professionals. The survey should take less than 10 minutes to complete.

Participation in this research study is voluntary. Your name will not be associated with any information collected in this process, and your personal information and school information will remain confidential.

Please select one of the two boxes below:

○ I consent to participate in this study.

○ I DO NOT consent to participate in this study

This project (USM IRB Protocol # 23-0855) has been reviewed by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research subject should be directed to the chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5116, Hattiesburg, MS 39406, (601) 266-5997

APPENDIX G

FINAL SURVEY

SECTION A

Question 1: In which state or U.S. territory do you currently reside?

SURVEY PAGE BREAK

Question 2: Please select the answer that most closely matches your current job title. (Select only one response.) Your selection will impact the next question you see.

○ District-Level School Nutrition Director or Supervisor

○ Site-Level School Nutrition Manager

○ School Nutrition Staff/Worker

○ School Nutrition Other, please specify

○ CACFP Director or Supervisor

○ CACFP Provider

○ CACFP Other, please specify _____

SECTION B

The following survey consists of four questions. Once you answer each question, click on the arrow at the bottom right to progress to the next question.

Question 4B: What is the student enrollment in your school district?

○ Less than 1,000 (Very Small)

○ 1,000 to 5,000 (Small)

○ 5,001 to 20,000 (Medium)

○ Greater than 20,000 (Large)

◯

SURVEY PAGE BREAK

Question 3B: Please select the Training Topic(s) from the list of items below that you feel there is a high level of need for you to receive education within the next two years. Click and drag your choices to the box you feel is the ideal mode for you to receive the training.

1. Menu Planning
2. Nutrition Education
3. General Nutrition
4. Food Production
5. Serving Food
6. Cashier and Point-of-Service
7. Purchasing/Procurement
8. USDA Food Buying Guide
9. Receiving and Storage
10. Food Safety and HACCP
11. Free and Reduced-Price Meal Benefits
12. Program Management
13. Financial Management
14. Human Resources and Staff Training
15. Facilities and Equipment Planning
16. USDA Meal Pattern Requirements
17. Special Diets
18. Civil Rights
19. Basic Math
20. Technology
21. Marketing
22. Customer Service

In--Person Live

Live Virtual

Self-Paced, Online

Question 5B: Please provide any comments you have regarding your answer to the previous question.

PAGE BREAK

SECTION C

The following survey consists of four questions. Once you answer each question, click on the arrow at the bottom right to progress to the next question.

Question 3C: What is the student enrollment in your school district?

○ Less than 1,000 (Very Small)

○ 1,000 to 5,000 (Small)

○ 5,001 to 20,000 (Medium)

○ Greater than 20,000 (Large)

SURVEY PAGE BREAK

Question 4C: Please select the Training Topic(s) from the list of items below that you feel there is a high level of need for you to receive education within the next two years. Click and drag your choices to the box you feel is the ideal mode for you to receive the training.

1. General Nutrition
2. Food Production
3. Serving Food
4. Cashier and Point-of-Service
5. Receiving and Storage
6. Food Safety and HACCP
7. USDA Meal Pattern Requirements
8. Special Diets
9. Civil Rights
10. Basic Math
11. Technology
12. Marketing

In--Person Live
Live Virtual
Self-Paced, Online

13. Customer Service

Question 5C: Please provide any comments you have regarding your answer to the previous question.

SURVEY PAGE BREAK

SECTION D

Question 3D: What is your child care program's classification?

◯ Independent Center

◯ Sponsoring Organization

◯ Provider

SURVEY PAGE BREAK

Question 4D: What is your child care program's type?

◯ Child Care Center

◯ Family Child Care Home

◯ Adult Day Care Center

◯ At-Risk After School Program

◯ Emergency Shelter

◯ Head Start/Early Head Start

◯ Other, please specify _____

SURVEY PAGE BREAK

Question 5D: Please select the Training Topic(s) from the list of items below that you feel there is a high level of need for you to receive education within the next two years. Click and drag your choices to the box you feel is the ideal mode for you to receive the training.

1. Administration/Paperwork
2. Purchasing/Grocery Shopping
3. Regulatory Compliance
4. Health and Safety
5. USDA Meal Pattern Requirements
6. Special Diets

In--Person Live
Live Virtual
Self-Paced, Online

Question 6D: Please provide any comments you have regarding your answer to the previous question.

SURVEY PAGE BREAK

Thank you for taking this survey!

APPENDIX H

SURVEY RESULTS

Table 1A

The Distribution of Survey Respondents Per State

State	No.	%
Rhode Island	1	0.1%
Delaware	2	0.3%
Montana	2	0.3%
Nevada	2	0.3%
Puerto Rico	2	0.3%
Northern Mariana Islands	2	0.3%
Alaska	3	0.4%
Arizona	3	0.4%
New Hampshire	3	0.4%
New Jersey	3	0.4%
Wyoming	3	0.4%
Idaho	4	0.5%
Vermont	4	0.5%
West Virginia	4	0.5%
Connecticut	5	0.6%
Hawaii	5	0.6%
New Mexico	5	0.6%
South Carolina	5	0.6%
Maine	6	0.8%
North Dakota	6	0.8%
Colorado	8	1.0%
Utah	8	1.0%
Kentucky	10	1.3%
Missouri	10	1.3%
Michigan	11	1.4%
Nebraska	11	1.4%
Pennsylvania	11	1.4%
Kansas	12	1.5%
North Carolina	12	1.5%
Massachusetts	13	1.6%

Oregon	13	1.6%
Tennessee	13	1.6%
Florida	14	1.8%
Maryland	14	1.8%
Minnesota	15	1.9%
Oklahoma	15	1.9%
Arkansas	16	2.0%
Louisiana	16	2.0%
Alabama	17	2.1%
Iowa	17	2.1%
New York	17	2.1%
Indiana	19	2.4%
Illinois	20	2.5%
Georgia	21	2.6%
Wisconsin	21	2.6%
Virginia	22	2.8%
Mississippi	23	2.9%
Washington	26	3.3%
Ohio	28	3.5%
California	30	3.8%
Texas	221	27.8%
I do not reside in the United States	2	0.3%
Missing	18	2.3%
Total	777	97.7%
Grand Total	795	100.0%

Table 1B

Participation Rates for School Nutrition Management/School Nutrition Other Respondents by State and U.S. Territory

State	No.	%
Delaware	1	0.2%
Idaho	1	0.2%
Montana	1	0.2%
Puerto Rico	1	0.2%
Rhode Island	1	0.2%
Wyoming	1	0.2%
Alaska	2	0.4%
Connecticut	2	0.4%
Nevada	2	0.4%
New Jersey	2	0.4%
New Mexico	2	0.4%
North Dakota	2	0.4%
West Virginia	2	0.4%
Arizona	3	0.6%
Maryland	3	0.6%
New Hampshire	3	0.6%
South Carolina	3	0.6%
Hawaii	4	0.8%
Vermont	4	0.8%
Colorado	5	1.0%
Florida	6	1.2%
Maine	6	1.2%
Massachusetts	6	1.2%
Nebraska	6	1.2%
Kansas	7	1.4%
Kentucky	8	1.6%
Missouri	8	1.6%
Oregon	8	1.6%
Utah	8	1.6%
Louisiana	9	1.8%
Michigan	9	1.8%
North Carolina	9	1.8%
New York	10	2.0%
Tennessee	10	2.0%
Minnesota	11	2.2%
Oklahoma	11	2.2%

Pennsylvania	11	2.2%
Illinois	12	2.4%
Alabama	13	2.7%
Arkansas	13	2.7%
Iowa	14	2.9%
Virginia	14	2.9%
Washington	14	2.9%
Wisconsin	14	2.9%
Indiana	15	3.1%
Georgia	16	3.3%
California	19	3.9%
Mississippi	19	3.9%
Ohio	21	4.3%
Texas	116	23.7%
I do not Reside in the US	2	0.40%
Total	490	100%

Table 1C

Participation Rates for School Nutrition Staff/Workers Other Respondents by State and U.S. Territory

State	No.	%
Arkansas	1	0.9%
Colorado	1	0.9%
Connecticut	1	0.9%
Hawaii	1	0.9%
Idaho	1	0.9%
Indiana	1	0.9%
Massachusetts	1	0.9%
Montana	1	0.9%
New Jersey	1	0.9%
New Mexico	1	0.9%
New York	1	0.9%
North Carolina	1	0.9%
Northern Mariana Islands	1	0.9%
Tennessee	1	0.9%
West Virginia	1	0.9%
Wyoming	1	0.9%
Alabama	2	1.8%
Illinois	2	1.8%
Kentucky	2	1.8%
Maryland	2	1.8%
Mississippi	2	1.8%
Missouri	2	1.8%
North Dakota	2	1.8%
Ohio	2	1.8%
Oklahoma	2	1.8%
Oregon	2	1.8%
Wisconsin	2	1.8%
Georgia	3	2.8%
Louisiana	3	2.8%
Minnesota	3	2.8%
Nebraska	3	2.8%
Florida	4	3.7%
Virginia	5	4.6%
California	6	5.5%
Washington	6	5.5%
Texas	38	34.9%
Total	109	100.0%

Table 1D

Participation rates for CACFP respondents by state and U.S. Territory

State	No.	%
Alaska	1	0.8%
Colorado	1	0.8%
Delaware	1	0.8%
Georgia	1	0.8%
Idaho	1	0.8%
Minnesota	1	0.8%
Mississippi	1	0.8%
North Carolina	1	0.8%
North Dakota	1	0.8%
Northern Mariana Islands	1	0.8%
Puerto Rico	1	0.8%
West Virginia	1	0.8%
Wyoming	1	0.8%
Alabama	2	1.6%
Arkansas	2	1.6%
California	2	1.6%
Connecticut	2	1.6%
Michigan	2	1.6%
Nebraska	2	1.6%
New Mexico	2	1.6%
Oklahoma	2	1.6%
South Carolina	2	1.6%
Tennessee	2	1.6%
Virginia	2	1.6%
Indiana	3	2.4%
Iowa	3	2.4%
Louisiana	3	2.4%
Massachusetts	3	2.4%
Oregon	3	2.4%
Florida	4	3.1%
Illinois	4	3.1%
Washington	4	3.1%
Kansas	5	3.9%
New York	5	3.9%
Ohio	5	3.9%
Wisconsin	5	3.9%

Maryland	9	7.1%
Texas	36	28.3%
Total	127	100%

Table 2A

The Distribution of Survey Respondents Per Job Title

Participant's job title	No.	%
District-Level School Nutrition Director or Supervisor	230	28.9%
Site-Level School Nutrition Manager	149	18.7%
School Nutrition Staff/Worker	109	13.7%
School Nutrition Other, please specify	111	14.0%
CACFP Director of Supervisor	26	3.3%
CACFP Provider	52	6.5%
CACFP Other, please specify	49	6.2%
Total	726	91.3%
Missing	69	8.7%
Grand Total	795	100.0%

Table 2B

The Distribution of Survey Respondents Who Selected "School Nutrition, Other" for Per Job Title

School Nutrition Other, please specify	Frequency
Tech-claim preparer	1
Admin Assist	2
Aide	1
Area Coordinator/Supervisor	2
Bookkeeper	1
Business Admin/Manager	3
Central Office	1
Charter School Food Service Director	1
Chef demonstrator in schools	1
Child care nutrition staff/aide/assistant/worker	4
Club Sponsor	1
Consultant	5
Consumer	1

Cook	2
Cook/foodservice manager child care center	1
Coop Admin	1
Coordinator	1
Director of Operations overseeing several districts	1
District Level - Office Assistant	1
District-Level Nutrition Secretary	1
DOE SCHOOL LUNCH PROGRAM	1
Educator	1
Educator and Researcher	1
Field Supervisor	1
FNS State agency Nutritionist	1
Food Bank/Pantry	3
Food Production Coordinator	1
Food Program Coordinator	4
Food Safety Support Specialist	1
Foodservice Director	2
Foodservice manager	1
Foodservice Secretary	1
Head Start Programs	1
Home child care provider	1
ICN Consultant	1
Lead	1
Lead manager	1
Manager Assistant Supervisor warehouse Driver C.N.P.	1
Marketing Manager	1
Nurse	1

Nutrition Director - Charter School	1
Nutrition Services Supervisor	1
Nutrition Services Trainer	1
Nutritionist	1
Other	1
Paraprofessional	1
Principal	1
Procurement Specialist	1
Quality Control Manager	1
Researcher	3
Retired District Level Director	1
School manager/Director	1
Secretary	2
Site Leader for the Learning Tree After School Program	1
State agency	6
Student at Jones College	1
Teacher	4
Teacher/assistant	1
Trainer	1
USDA FNS Program Specialist	1
Volunteer	1

Table 2C

The Distribution of Survey Respondents Who Selected "CACFP, Other" for Per Job Title

Assistant	**1**
Assistant Director	1
CACFP Nutrition Manager	1
CACFP Specialist	1
CACFP State agency Nutrition Consultant	1
Child care center CACFP admin	1
Child Care Consultant	1
Clinical Supervisor (LMSW/LPC/Health Coach)	1
Computer Aide	1
Daycare	1
Dietitian	1
Distribution of food	1
Family home provider	1
Food pantry	1
Food Program Director	1
Food Service cook	1
Head Start Food Service Manager	1
Head Start Nutrition Trainer and Menu Developer	1
Head Start/Early Head Start	1
HeadStart	1
Health, Safety &Nutrition manager Early Childhood	1
Industry	1
Meals in classroom, Educator	1
Monitor	1

Nutrition Supervisor	1
Paraprofessional	1
program support	1
Social worker	1
Sponsor Agency	1
State agency	1
State agency taff	1
Support Specialist	1
Teacher	1
Teacher	1
Volunteer	1

Table 3

The Student Enrollment in Your School District (School Nutrition Management/School Nutrition Other Respondents)

The student enrollment in your school district	No.	%
Less than 1,000 (Very Small)	169	35.4%
1,000 to 5,000 (Small)	126	26.4%
5,001 to 20,000 (Medium)	107	22.4%
Greater than 20,000 (Large)	76	15.9%
Total	478	100.0%

Table 4A

In-Person Live Nutrition Education High Level of Need Topics Participants Want to Receive Education Within the Next Two Years (School Nutrition Management/School Nutrition Other Respondents)

Training	No.	%
Civil Rights	11	2.2%
Basic Math	15	3.1%
Receiving and Storage	24	4.9%
Marketing	31	6.3%
Special Diets	33	6.7%
Facilities and Equipment Planning	37	7.6%
USDA Food Buying Guide	38	7.8%
Customer Service	43	8.8%
General Nutrition	44	9.0%
Free and Reduced-Price Meal Benefits	44	9.0%
Technology	46	9.4%
Cashier and Point-of-Service	50	10.2%
Serving Food	57	11.6%
Purchasing/Procurement	57	11.6%
Food Safety and HACCP	58	11.8%
USDA Meal Pattern Requirements	58	11.8%
Nutrition Education	66	13.5%
Human Resources and Staff Training	73	14.9%
Financial Management	77	15.7%

Menu Planning	78	15.9%
Program Management	86	17.6%
Food Production	87	17.8%

Table 5

Live Virtual Nutrition Education High Level of Need Topics Participants Want to Receive Education Within the Next Two Years (School Nutrition Management/School Nutrition Other Respondents)

Training	No.	%
Technology	35	7.1%
Basic Math	38	7.8%
Civil Rights	39	8.0%
Cashier and Point-of-Service	43	8.8%
Receiving and Storage	43	8.8%
Facilities and Equipment Planning	43	8.8%
Serving Food	46	9.4%
Customer Service	49	10.0%
Financial Management	57	11.6%
Marketing	57	11.6%
Free and Reduced-Price Meal Benefits	64	13.1%
General Nutrition	68	13.9%
Food Safety and HACCP	70	14.3%
Human Resources and Staff Training	70	14.3%
Nutrition Education	72	14.7%
USDA Food Buying Guide	75	15.3%
Program Management	75	15.3%
USDA Meal Pattern Requirements	75	15.3%
Purchasing/Procurement	78	15.9%
Food Production	83	16.9%
Menu Planning	88	18.0%
Special Diets	93	19.0%

Table 6

Self-Paced, Online Nutrition Education High Level of Need Topics Participants Want to Receive Education Within the Next Two Years (School Nutrition Management/School Nutrition Other Respondents)

Training	No.	%
Free and Reduced-Price Meal Benefits	47	9.6%
Financial Management	49	10.0%
Food Production	58	11.8%
Program Management	59	12.0%
Technology	60	12.2%
Cashier and Point-of-Service	61	12.4%
Facilities and Equipment Planning	62	12.7%
Special Diets	63	12.9%
Marketing	63	12.9%
Purchasing/Procurement	67	13.7%
Human Resources and Staff Training	67	13.7%
Serving Food	76	15.5%
USDA Food Buying Guide	78	15.9%
Menu Planning	80	16.3%
USDA Meal Pattern Requirements	80	16.3%
Customer Service	81	16.5%
General Nutrition	82	16.7%
Receiving and Storage	84	17.1%
Nutrition Education	89	18.2%
Basic Math	90	18.4%
Food Safety and HACCP	109	22.2%
Civil Rights	113	23.1%

Table 7

Comments from School Nutrition Management/School Nutrition Other Respondents

Absolutely love the flexibility the on line classes give. I have also enjoyed in person trading and your facility is beautiful.
Acknowledging differences in skill level and adult learner and skills in person vs. self-paced
Although I appreciate the "active participation" in some of the sessions, a lot of times I am watching the zoom sessions while still working and I can not participate. Often, that's the only way I can attend, so having the option to not participate in the breakout sessions, etc. is valuable to me. I always love getting to listen, though. My staff jokes that I am always trying to "feed my brain" while still getting my daily work done. :)
Although meals are provided to the children, I see a big waste of food because the students don't like what's being served the majority of the time
Always whenever there is policy change, then that becomes the most needed training item
An in-depth training on crediting foods would be beneficial to our sponsors.
any and all training is helpful. Online when I have time fits me best.
Anything involving finances or purchasing is better for when I take the course online.
As a new Business Administrator I would like to see more training geared toward the SAU office staff who oversee the Food Service Program. Nonprogram Revenue, How to complete the NSLP Application at the start of the school year etc. There has been much turnover and this knowledge is lost.
Based on the school and its needs
eLearning modules using Technology are used now by 50% of all classroom teachers. With teacher shortages, high food prices, the CDC reporting children only get 10 hours of nutrition education a year and need 50 for behavioral change we need to collaborate with social Benefit companies doing this work.
everybody needs refresher course each year.
Everything listed to have in person or live, would love to have an online version for those out or additional hired employees throughout the year.
Food Handler's Card be done in person for beginners to the Child Nutrition Program
food safety should be top priority
How to calculate the ingredients for nutritional analysis

I did not get the drag method to work so I wish to state my choices here. USDA Meal Pattern, USDA food Buying Benefits, Facilities and Equipment, Menu Planning, Nutrition Education, General Nutrition, Special Diets, Program Management. Human Resources, Technology Resources
I do love how in depth the CNI webcast are. They beat the NLSP webcast hands down.
I don't feel like I need any in person or live options....been doing this for a long time
I feel that hands on training is the best way for employees to learn
I have more time to work at home than most.
I have not been trained at this time.
I know virtual or self-paced is cheapest and easiest. I would love for all of my staff to have a basic understanding of nutritional need of children.
I need classes to train for the ServSafe Certificate and giving the test.
I need help with recipes. ex. I have several that say it makes 250 svg, but I only get 180
I need more of the Administrative side of Child Nutrition.
I prefer in-person classes, but unfortunately they are not always available in my area.
I would like to attend an in-person training for new directors, or refreshment training for directors.
I would love to have a GOOD Civil Rights Video that I could use for my staff orientation. Also a decent Food Allergen video for my cooks & supervisors to watch (ServSafe has a decent one, but its focus is in restaurants)
I've never attended an in-person class before. I don't understand how they work due to travel.
if I took all online, it will be much easier for me to finish my courses on my own pace without any stress plus if it is in person or virtual, it will be hard since no closed caption or long distance for me to travel.
IN Person, training. Where we bring our laptops and training step by step is provided
In-person trainings are sort of old now...I prefer internet or self-paced
It would also be nice to have leadership/management trainings available in addition to LEAD to Succeed
It would be great to have short 5 - 15 minute videos on serving food, food prep and food safety. Directors and managers could use these trainings for training and retraining their team. Also HACCP should be divided into segments.

It would be helpful if training was above and beyond our normal and participating would work like teacher certificates granting us a small pay
It's very hard to be available to attend in-person training as we do not have a lot of substitute to cover for us.
keep everyone up to the standers
Many of these content areas could be done as self paced yet students do like a back and forth with instructors.
n
N/C
na
Na
NA
OVS also, part time staff need the availability to take webinar coursed for professional standards.
OVS training
Please make civil rights training non register required, so we can attach to our safe schools
procurement guidelines too strict
Procurement training should be offered in all three formats.
Program Management: specifically, separate modules for Monitors, Kitchen Managers, and staff.
Resources to teach nutrition in title 1 schools
Self-paced courses could pose a greater challenge for some individuals who do not have the necessary discipline for such courses.
Some cooks do not know to use the Food Buying Guide. Hands-on would be great.
The on-line training program needs to be changed so that students are not allowed to just skip to the end and take a test that they can take over and over until they pass and then get a certificate for multiple hours. We have actually stopped using your system because it was so easy to cheat on that we rarely had anyone truly take the class.
The option for both in-person and virtual choice would be nice
The sign in and training format is confusing for a lot of our cafeteria staff. Going through the small box on the right hand side to see pre-quiz, training and end quiz for each section blends together.

The webinars are good but the timing isn't so making them available if we can't make is great for me.
there are never many options for business managers who are required to take courses in the 3000 Administration series
There needs to be more Spanish courses for my staff.
There were a few items that I felt would be beneficial to do in two different categories. All items should have a self paced online option for flexibility.
We are a Residential Child Care Institution. Some of the topics do not affect our facility.
We need more trainings in Spanish.
We use a Food Service Management Company - I would like training on how to oversee a FSMC - how to hold them acNable, what we should be looking for and what we have a right to access.
With a diverse workforce, in-person training is essential for the front line workers in the operation of meal programs.
Would love to have a smallwares tour/demo of a star school where you review best tips/ tricks for how to set up a line efficiently and beautifully.
Would love to see a class for Managers on how to fill in a Production Sheets

Note: Comments are provided the way respondents typed with no spelling or grammatical corrections.

Table 8

Nutrition Education High Level of Need Topics Participants (School Nutrition Staff/Worker Respondents) Want to Receive Education Within the Next Two Years, According to the Three Modalities (Self Paced, Online, Live Virtual, In-Person Live)

Topics	In-Person Live		Live Virtual		Self-Paced, Online	
	N	**%**	**N**	**%**	**N**	**%**
Basic Math	4	3.70%	8	7.30%	23	21.10%
Marketing	4	3.70%	11	10.10%	15	13.80%
Receiving and Storage	8	7.30%	14	12.80%	22	20.20%
USDA Meal Pattern Requirements	10	9.20%	18	16.50%	29	26.60%
Technology	10	9.20%	9	8.30%	19	17.40%
Special Diets	12	11.00%	19	17.40%	18	16.50%
Customer Service	12	11.00%	10	9.20%	20	18.30%
Cashier and Point-of-Service	16	14.70%	8	7.30%	14	12.80%
General Nutrition	17	15.60%	18	16.50%	22	20.20%
Serving Food	18	16.50%	14	12.80%	17	15.60%
Food Safety and HACCP	18	16.50%	15	13.80%	19	17.40%
Food Production	22	20.20%	17	15.60%	15	13.80%
Civil Rights	NA	NA	17	15.60%	25	22.90%

Table 9

Comments from School Nutrition Staff/Workers

Great on all
I feel that most of the live and in person could be either or
I learned more in person.
I'm a stay at home grandma
It is sometimes hard to get away to do live or in-person classes. It would be great if self pace was a choice for all classes, in case live classes are not at a time where people can attend, or drive out to.
Live is rarely feasible due to time difference and other job schedule.
Live or in person are to hard to get time for.
Love
N/A
Offer a diverse and up to date information
On the second line of instructions there needs to be a period after "two years." There are two - in column one between In--Person. The third column reads "Self-Pace" instead of "Self-Paced." Instructions for THIS question has errors, and should read, "Please explain why you identified the training topics in the previous question as priorities, and why you selected the specific training modes. (adding the word question, removing the extra "the training")
There needs to more classes on what is needed to pass the SNS test, especially the administrative and financial parts, please.
to many to list

Note: Comments are provided the way respondents typed with no spelling or grammatical corrections.

Table 10

CACFP Respondent Program Type "Other"

Child Care Program Type	N	%
Both Child Care Center and Head Start/Early Head Start	1	0.8%
Center and Homes	1	0.8%
Child Care Resource and Referral	1	0.8%
Crisis Nursery	1	0.8%
Day resource center	1	0.8%
Early ECEAP & ECEAP	1	0.8%
food pantry	2	1.6%
Group daycare home	1	0.8%
High school	1	0.8%
Homes, centers & head Start	1	0.8%
Multiple	1	0.8%
school	2	1.6%
School feeding program	1	0.8%

Table 11

Nutrition Education High Level of Need Topics Participants Want to Receive Education Within the Next Two Years, According to the Three Modalities (Self-Paced, Online, Live Virtual, In-Person Live)

	Self-Paced, Online		Live Virtual		In--Person Live	
Topics	**N**	**%**	**N**	**%**	**N**	**%**
Administration/Paperwork	23	18.10%	31	24.%4	21	16.50%
Regulatory Compliance	25	19.70%	28	22%	21	16.50%
Purchasing/Grocery Shopping	33	26%	23	18.10%	17	13.40%
Special Diets	36	28.30%	31	24.40%	12	9.40%
Health and Safety	37	29.10%	23	18.10%	16	12.60%
USDA Meal Pattern Requirements	39	30.70%	26	20.50%	14	11%

Table 12

Comments from Child and Adult Care Food Program Professionals

I have always thought it would be nice if there was a list of documents that the kitchen should have. Many documents are not dated and I never know if they are the current version in use.
I like all training in person, or self-past online
I like both in-person and live virtual sessions.
I work with Head Start/Early HS programs nationwide and provide training and assistance. Would like to see your trainings offer continuing professional education credits from the Academy of Nutritionists and Dietitians for registered dietitians. A lot of the training provided is for elementary school district food service personnel. Miss having the RDN focus the Institute had in the past.
Importance is in order of importance to children.
My cooks all have different schedules and would like to be able to take training when they have time.
N/a
N/A
Na
None, you all are great!

On line works best for me. We have a big family so it's easier for me to do just online classes
Please allow users to retake a course without going through a difficult process
purchasing/grocery shopping
Regulatory and meal-related compliance guidance is required by each state. So, face-to-face is always best to try to meet and establish relationships with State agency representatives and administrators. They are also the ones that monitor and conduct program audits. I wish there were options to select multiple topics for training modes. Based on the individual centers'/schools' needs, purchasing and specialized diets, and health and Safety can be Live Virtual and self-paced, online. All states were offering face-to-face prior and adding recorded trainings, PowerPoint slides or other resources to their websites as references for providers/Sponsors.
Salud y segurida
Training on Form H 1606 CAFP Child Care Center Monitoring Review
Travel is difficult due to our rural location and staffing needs so virtual trainings work best.
UNABLE TO MOVE TOOL...TECH ISSUES.
Very good information
We need Spanish speaking trainings
We would like training on the requirement for sponsors, (procurement requirement for sponsor sites, reviewing non-profit status for sites) and it's unaffiliated sites.
why do we not the high tier I feed my kids homecooked foods everyday and get less money not fair
With budgets as tight as they are it is not feasible to travel to in-person/live trainings anymore.

Comments are provided the way they we typed by respondents with no spelling or grammatical corrections.

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