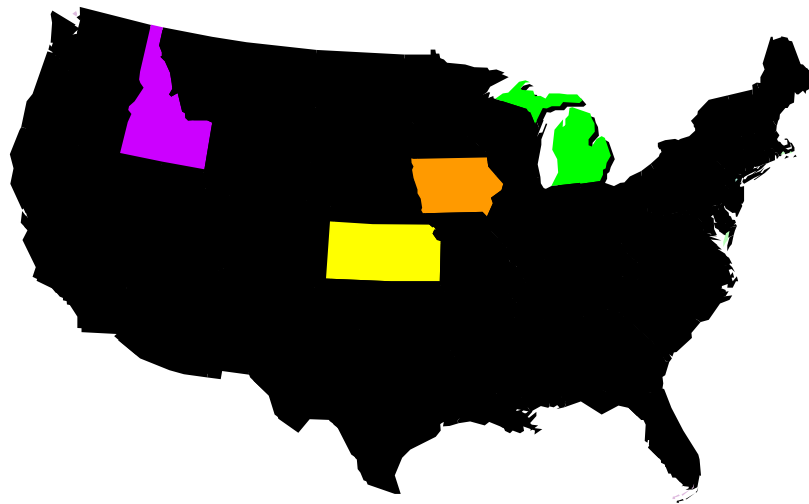


***TEAM NUTRITION
DEMONSTRATION PROJECT
1999-2002***



**Comprehensive Implementation of
Team Nutrition in Four States**



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Team Nutrition Demonstration Project 1999-2003

EXECUTIVE SUMMARY

PURPOSE OF THE PROJECT. The goal of the Food and Nutrition Service (FNS) of the U.S. Department of Agriculture's (USDA) was to document the process (steps, time, and resources) for fully implementing the Team Nutrition (TN) by communicating the four TN messages¹ to students using the classroom and cafeteria as delivery channels, as well as other places in their environment such as the school, home, community and local media. This comprehensive approach to nutrition education resulted from findings of the TN Pilot Implementation Project² in which behavior change of students was more likely when messages were provided by multiple persons in a variety of places (communication channels).

Given the promising results of the Pilot Project, FNS initiated the Team Nutrition Demonstration Project (TNDP). The major objectives of the project were to systematically document the implementation process and to more fully develop models of comprehensive and firmly established Team Nutrition Initiatives that are appealing and helpful to States across the country. Comprehensive Models include commitment to implementing a minimum set of core activities that provide the Team Nutrition messages through six communication channels. These channels include classroom, cafeteria, school-wide, home, community, and media. Sixty-one schools in four States (Idaho, Iowa, Kansas and Michigan) participated in this three-year Demonstration Project by documenting the steps, time, and resources needed to accomplish this comprehensive approach to TN programming.

In addition to this final report, key findings were also included in a TN Technical Assistance/Implementation Guide (*Getting it Started, Keeping it Going: A Guide for Team Nutrition Leaders*). The Implementation Guide is intended to save time and effort for TN School Leaders in their challenge to build, improve and sustain TN activities that make a difference in the eating behavior and school environment of children.

PROJECT ADMINISTRATION. A Request for Application (RFA) for Team Nutrition Demonstration Project Grants (TNDP) was distributed in 1999 to all State agencies that administered the National School Lunch (NSLP) and the School Breakfast Program (SBP). The TNDP, a USDA FNS/State Agency Cooperative Agreement, was awarded to four States: Idaho (lead State), Iowa, Kansas, and Michigan, through a competitive award process. Grant activities began in October 1999. Each State agency designated a Project Director (PD) to coordinate the implementation of required grant activities in participating schools and a Social Scientist (SS) to provide leadership for implementation assessment, data collection and analysis, and dissemination of findings through development of this final report and appendices. Additionally, the PD from the lead State, Idaho, was designated as Principal Investigator.

¹Team Nutrition messages: *Eat a variety of foods; eat more fruits, vegetables, and grains; eat lower fat foods more often; and be physically active.*

²During the spring and fall of 1996, seven school districts participated in the Team Nutrition Implementation Pilot Project. These pilot sites implemented Team Nutrition (TN) activities in an intensive manner over a period of eight to ten weeks, delivering positive nutrition messages through the six communication channels (classroom, cafeteria, school-wide, home, community, and media). www.fns.usda.gov/oane

During the first year (1999-2000) of the three-year grant, State agency staff focused on meeting with project staff from the other grantee States and USDA FNS, recruiting and selecting schools to participate, training school site coordinators and school-based teams, and developing logs/forms to collect data needed to achieve grant project goals. The implementation phase began at the start of the 2000-2001 School Year and ended with the completion of the 2001-2002 School Year. FNS extended the State grants until February 28, 2003, to allow time to synthesize data and develop a draft of the final report.

Schools that participated in the Demonstration Project during the two-year implementation phase had these responsibilities:

- Selection of a site coordinator;
- Formation of a school-based team;
- Development of a project plan and budget for both implementation years;
- Participation in training provided by the Project Director and Social Scientist in respective States;
- Conducting TN activities in all six-communication channels (classroom, cafeteria, school-wide, home, community, and media);
- Use and review of the draft TN Technical Assistance/Implementation Guide and post-project suggestions for the final TN Guidance appropriate for other States;
- Documentation of steps followed, time spent, and resources used to promote TN messages using all six-communication channels;
- Testing and feedback on a TN Routine Reporting System;
- Participation in an end-of-the-project qualitative interview or survey to provide feedback about the challenges, solution, and keys to success related to comprehensive implementation of TN at the school level.

METHODOLOGY. A total of 61 schools were selected by project staff in the four States to participate in comprehensive implementation of TN during a two-year time period (2000-2002). There were 60 schools in Year 1. In Year 2, one school in Michigan left the TNDP and two additional schools from Idaho joined the TNDP for a total of 61 schools. A site coordinator provided leadership for the project at the school/district level. Coordinators were trained by State-level project staff in each State and were provided TN lesson materials (age or grade specific, classroom modules), technical assistance, and funding to cover costs for supplies and services to implement activities in classrooms and the other five communication channels.

Teachers provided TN lessons to 11,374 students in Year 1 and 11,339 students in Year 2 using the four TN lesson modules/kits.³ In addition to the classroom lessons, students were involved in promotions/events in the cafeteria, participated in activities involving their parents (at home and/or school), and attended TN events that were available to the entire student body as well as the community. Schools were required to link with the media to promote or provide coverage for the nutrition and physical activities conducted in school, at home or in the community. Classroom teachers completed logs for each lesson taught to document steps involved, time

³*Food & Me: Pre K and Kindergarten, Food Time: Grades 1-2, Food Works: Grades 3-5, and yourSELF: Grades 6-8.*

spent, and resources used—including cost of purchased and donated items. Coordinators of cafeteria, school-wide, home/parent, community, and media events also completed similar logs for each event.

KEY FINDINGS - CLASSROOM ACTIVITIES

Steps. Classroom teachers took primary responsibility for offering the TN lessons to the 11,000+ students from Pre Kindergarten through eighth grade in the four participating States. They were assisted by school foodservice staff, teaching assistants and parents. Just over half of approximately 21,000 students in participating schools received TN lessons within their classrooms; but all enrolled students in the schools had the opportunity to gain exposure to activities in the non-classroom channels (cafeteria, school-wide, home, community, and media).

Time. Teachers in the TNDP were required to teach at least one of the five or more activities offered from each of the eight (*Food & Me*) or nine (*Food Time* or *Food Works*) lessons in the module that was appropriate for their grade level. The average number of activities taught per lesson was three, and each activity took about 30 minutes of instructional time. The average lesson time was about 90 minutes (but would have been longer if teachers had used all of the activities). The total teaching time for all lessons in a classroom module was about 12 hours. Time to plan the lesson activities was almost half of the total teaching time (about 5½ hours). Time to plan and teach a lesson increased with the grade level of students taught - from kindergarten through fifth grade. The yourSELF module for sixth through eighth grade took an average of eight hours to plan and teach.

Based on the data from this project, it would take 24 days or five weeks to offer a nutrition unit if one activity was covered per school day. One solution to the “time” problem is to integrate the activities into other subject areas so that no “extra” classroom time is needed. Some teachers did merge nutrition lessons into health, reading and science, but many indicated that nutrition was taught as a stand-alone subject. Some teachers reduced planning time by team teaching (they taught selected activities or lessons to multiple classes) or by involving others in the instruction.

Resources. Teachers reported frequent use of materials that were provided with the classroom modules such as the Teacher’s Guide, posters, and parent reproducibles. Curriculum components that were not replaceable (student magazines and parent newsletters) were used less in the second year than the first year, even though FNS was able to provide replacements. If teachers are expected to use the materials for more than one year, they need to be able to replenish their supplies by purchasing replacements, being able to download masters from a web site, or having copy-ready masters included with the module/kit. In addition to the materials that were provided as part of the modules, many teachers used additional materials and supplies to assist in teaching the lessons. Use of computers/Internet was more frequent in upper grades; books were used more in lower grades. Food was the supply used most often for the classroom lessons.

Cost. Across all four modules and all four States, food was the most frequently used supply. There was much variability across and within States related to the amount spent on food and other supplies purchased to teach the lessons (classroom modules were provided at no cost to schools). Some schools were able to use food purchased with school foodservice funds or were able to obtain monetary donations from the Parent Teacher Organization (PTO)/Parent Teacher

Association (PTA) or community organizations to buy food and other supplies. Art supplies were the second most frequently used supply.

The cost to teach *Food & Me* lessons ranged from \$53 to \$171 per classroom in the four TN DP States; *Food Time* lesson costs ranged from \$18 to \$112; *Food Works* lesson costs ranged from \$38 to \$71; and the *yourSELF* lessons ranged from \$34 to \$99 per classroom respectively.

KEY FINDINGS – NON- CLASSROOM CHANNEL EVENTS /ACTIVITIES (SCHOOL-WIDE, CAFETERIA, HOME, COMMUNITY AND MEDIA CHANNELS)

Steps. Steps associated with the TN DP total school events offered in non-classroom channels (cafeteria, school-wide, home, community, and media) included planning and conducting the activities with leadership from a coordinator. The coordinators were typically foodservice staff, classroom teachers, or school nurses. Individuals who helped plan and/or conduct events were typically school foodservice staff or classroom teachers.

Time and Cost. Events/activities offered in the cafeteria, school-wide, home, community, and media channels had an average cost of \$243 per event for schools in all States and ranged from \$0 to \$1,317 per channel event; home and community events had the highest average cost. In addition to that expense there was also a “time” cost. A typical event that was offered one time took from three to seven hours of the coordinator’s time to **plan** and four to five hours from the helpers. Time to **conduct** the events was about four hours for coordinators and five to ten hours for helpers. Generally, more than one person helped the coordinators with the events, usually a classroom teacher or school foodservice staff person. Finding the time and money to offer events in these various channels was not easy for school-based staff. If schools are to be expected to implement TN activities to reach students, parents, and others in the cafeteria, school-wide, home, community, and media channels, funding and technical assistance must be provided for schools to accomplish comprehensive TN programming.

Resources. Across all channels, the resources used most often for activities included food, print materials, posters or banners, and art supplies. Although some items were donated, most of the supplies were purchased with funding from the TN DP grants to schools.

Overlap in Channels and with Messages. An FNS guideline for channel events/activities was that they must communicate at least one of the four TN messages. Another guideline was to offer activities not only in the classroom but also in the cafeteria, for the school as a whole, in the community, for parents (by sending things home or involving them at school), and by involving the media to promote or cover TN events.

As project teams developed their TN project plans, it became apparent that there was overlap across the channels **and** the messages. School-wide events were strongly linked with both the cafeteria and the home channel, and activities offered in the community channel often involved the media. For example, an event, such as a health fair, often involved all the channels since it was a school-wide activity that used the cafeteria and was targeted to parents, students and the community with coverage by the media. Such an event could convey all four TN messages by offering demonstrations, information, taste testing and resources to teach students how to select a variety of foods including lower-fat choices such as fruits, vegetables and grains. Health fairs could also offer opportunities for families to be physically active by including dancing, hallway walking; demonstrating stretching or movement; or offering activities in the gym or outdoors as

part of the fair. As the schools followed the TNDP grant guidelines for offering comprehensive implementation of TN; they were able to transform the school environment into one that conveyed the basic messages about eating healthy and being active. Encouraging schools to plan fewer events or activities that involve more of the channels, instead of lots of events offered in singular channels, may be more consistent with how schools can approach comprehensive implementation while being less overwhelming.

PROJECT COORDINATION AND REPORTING

Site Coordinators. All participating schools (school districts in Idaho) were required by their States to have a minimum of one person designated as site coordinators to provide leadership for the TNDP at the local level. School foodservice directors were the most common type of site coordinator but almost 20% of coordination was accomplished by teachers. Each coordinator was assisted by a school-based team with typical members being (in order of frequency): school foodservice staff, classroom teachers, administrators, and physical education (PE) teachers.

Estimated **time spent**, per year, by coordinators ranged across States from 58 to 87 hours during Year 1 of the implementation phase and from 32 to 177 hours in Year 2 of the implementation phase. They worked on: developing and distributing information about the project, purchasing materials and supplies, meetings with teachers and foodservice staff, and talking to administrators about the project. They held an average of four to eleven meetings in Year 1 of the implementation phase and three to six meetings in the Year 2 of the implementation phase. At the end of the two-year implementation phase, site coordinators in each State were asked to provide input about “what it takes” to plan and implement nutrition education and nutrition-related messages throughout the school and community environment. The key findings and lessons learned from their input are summarized here:

Commitment

- Effective implementation of TN requires the commitment, leadership ability, time and energy of TN coordinators/co-coordinators. The leader guided the team/group and kept the momentum going.
- As TNDP schools discovered, finding time for the team to meet on a regular basis is challenging. Preparing a written plan was found to be more important than frequent meetings for carrying out events and activities. The TNDP schools recommended keeping the plan do-able, not taking on too many activities at once and incorporating TN events and activities into existing programs whenever possible.

Funding and Resources

- Funding is critical in implementing TN. Availability of the TN mini grants to local schools was helpful in planning and conducting TN events.

Training and Administrative Support

- Administrative support is crucial if comprehensive nutrition education is offered.

- State agencies' leadership for local TN schools is important to comprehensive TN implementation. TNDP State agencies provided school leaders with encouragement, continual updates about TN, served as a clearinghouse for local TN schools' ideas and best practices in nutrition education and physical activity.

Role of School Foodservice Staff. More school foodservice staff were site coordinators, members of the school-based project teams, and coordinated and/or helped with the channel events/activities than any other group. Clearly, foodservice staff was involved in a leadership role for this project by, focusing on comprehensive implementation of TN throughout the school, not just in the cafeteria. At the end-of-project interviews, site coordinators indicated the importance of buy-in from the foodservice department (and also administrators) for the success of such a project. It is interesting to note that involvement of classroom teachers in the foodservice program increased from 43% (of foodservice staff involving classroom teachers) during the year prior to implementation to 92% during the first year of implementation. Other groups also increased their involvement in the foodservice program. Involvement of community partners increased from 27% to 70% and involvement of parents increased from 38% to 68%.

Benefits. Outcome evaluation was not a component of the TNDP. However, on an End-of-Project Questionnaire, States asked site coordinators to share information about the benefits associated with comprehensive implementation of TN for these various groups.

Project Coordinators benefited by feeling that they made a difference at the school and student levels - from being able to provide students with new opportunities and information and seeing students choose nutritious foods, from participating in a national project that could help other schools and States, and from the grant management experience and interaction with others.

Teachers benefited from the resources/materials received and the chance to enhance and align the curriculum to include nutrition education/concepts.

Foodservice Staff benefited by being included as active members of the school team, by improving their relationship with teachers, and by receiving recognition for their role in school nutrition education and programming.

Schools benefited from the funding received to pay for events/activities, from collaboration and communication (team effort) among staff, from increased parent and community involvement, and from good public relations that resulted from school involvement in a project targeting student health.

Students benefited from increased knowledge and awareness about nutrition and physical activity, from the opportunity to try new foods and engage in fun learning activities about nutrition and from learning about healthy habits from their classroom teachers, their fellow students, and other role models inside and outside of the school.

Parents benefited from tasting healthy foods when attending school functions, from obtaining ideas for snacks and meals, from receiving information to help their children

make better choices for good health, and by gaining a better understanding of nutrition and TN.

Communities benefited by connecting with school staff, from being part of a comprehensive health project and from the nutrition information they received.

Routine Reporting. Schools outside of the TNDP provided feedback about the format and content of a proposed TN Reporting System for possible national use with all enrolled TN schools in all States. The pilot test of the Reporting System indicated that it was currently not practical for FNS to go forward with a nationwide routine TN Reporting System.

Contribution of State Project Staff. A time or resource cost that was not tracked in the TNDP but that was important to the success of comprehensive implementation was the time commitment of the State-level staff that coordinated this grant project. Hundreds, or possibly thousands of hours, were needed to support school-based staff through the planning phase as well as to train teachers, make site visits involving travel throughout the States, maintain ongoing communication, and manage the administrative aspects of the project, such as budget and reimbursement. The total number of hours was not reported but the involvement of State staff was crucial in coordinating comprehensive TN efforts in schools in their State. It is clear that just providing funding to schools is not enough. They need encouragement, support, and resources from State staff to accomplish and sustain nutrition education and positive changes in school environments.

RECOMMENDATIONS. The results of the TNDP indicated that it was possible to implement TN throughout schools and involve parents, community members, and the media. It took time (to plan, gather resources, and teach lessons or conduct events), involved a committed team (that had the support of the principal and school foodservice staff), and required resources (particularly classroom lessons, food, printed materials, and art supplies) for events in all channels. The following is a list of recommendations, generated through this project, which may assist others in comprehensively implementing TN:

- Successful implementation requires a committed, energetic, and enthusiastic leader. Given the potential times demands of implementing TN, sharing of leadership responsibilities between two individuals should be considered.
- Enough people should be involved so that turnover doesn't affect continuity and momentum. Ideally, a team that involves teachers, foodservice staff, administrators, parents, students, and community members should be formed.
- Money/funding is needed for resources, release time, and food. These can be funded through TN mini grants from the State agency. Food costs may be absorbed or offset by support from the school foodservice department.
- Support for nutrition training for teachers and foodservice staff by school administrators and release of staff time to plan and conduct TN events is crucial. The training needs to be on-going.
- Cooperation of school foodservice staff is integral to implementing and sustaining TN in schools.

- State agency support is an important component of successful TN implementation. The State agency can provide training and technical assistance to districts and schools, encouragement to school leaders, updates about TN, assistance with the media to promote TN and healthy school environments, and information linking nutrition lessons and State learning standards and benchmarks.

CHAPTER I: INTRODUCTION

- A. Overview of Team Nutrition
- B. Background for the Demonstration Grant Project
- C. Purpose of the Demonstration Project
- D. Team Nutrition Demonstration Project Activities

A. OVERVIEW OF TEAM NUTRITION

Team Nutrition (TN) is a nationwide initiative designed to help implement the Food and Nutrition Service (FNS) of the United States Department of Agriculture's (USDA) School Meals Initiative for Healthy Children (SMI)¹ by encouraging children to *eat a variety of foods; eat more fruits, vegetables, and grains; eat lower fat foods more often; and be physically active*. TN is a school-based initiative that encourages children to make healthy food and physical activity choices. Over 28,000 schools throughout the country have enrolled in TN as of February 2003 and there were 1,635 TN schools in the four participating States: 169 in Idaho, 280 in Iowa, 388 in Kansas, and 798 in Michigan. For more information about TN, refer to the web site: www.fns.usda.gov/tn/.

Team Nutrition consists of three interrelated strategies

- 1. Training and Technical Assistance** is provided to school foodservice staff to enable them to provide appealing meals that provide calories and key nutrients for growing children and meet the *Dietary Guidelines for Americans*. The support includes the dissemination of training materials, TN grants to States to develop training programs, and a resource system to enable foodservice personnel to access education and training programs.
- 2. Multifaceted Nutrition Education** is delivered in schools, at home, in the community, and through the media to build skills and motivate children to make healthy food choices. The curricula for TN includes four teaching modules to facilitate nutrition education in the classroom:

Teaching Module	Target Grades
<i>Food & Me</i>	Pre K and Kindergarten
<i>Food Time</i>	Grades 1-2
<i>Food Works</i>	Grades 3-5
<i>yourSELF</i>	Grades 6-8

- 3. School and Community Support** is used to promote healthy eating and physical activity by involving school administrators and other community partners. *Changing the Scene: Improving the School Nutrition Environment—A Guide for Local Action*² was developed to assist schools in improving the school environment so that nutrition messages taught in the classroom are reinforced throughout the school campus. Although support for school and community was always a part of the TN initiative, it was not separated as the third TN strategy until late 1999.

TN is based on the social marketing framework that assumes behavior is influenced by a variety of factors including intrapersonal, interpersonal, institutional, and community variables. TN messages can be delivered and reinforced through six communication channels including

¹SMI is an acronym referring to the USDA's final rule on establishing nutrition standards for school meals-including meeting specific calories and key nutrients per age or grade groups and *Dietary Guidelines* recommendations for limiting calories from fat and saturated fat.

²U.S. Department of Agriculture, *Changing the Scene: Improving the School Nutrition Environment—A Guide for Local Action*, USDA Food and Nutrition Service, September 2002.

classroom activities, cafeteria activities or promotions, school-wide events, home activities, community events, and media events and coverage.

B. BACKGROUND AND PURPOSE FOR THE DEMONSTRATION PROJECT

During the spring and fall of 1996, seven school districts, one from each of the Food and Nutrition Service (FNS) geographical regions, participated in the **TN Pilot Implementation Project**. These pilot districts implemented TN activities in an intensive manner over a short time period of eight to ten weeks, delivering positive nutrition messages through the six communication channels (classroom, cafeteria, school-wide, home, community, and media).

The TN Pilot Project consisted of teaching all lessons from the four curriculum modules in all classrooms of each of the relevant grades and conducting a set of core activities established by FNS. Results of the pilot project were based primarily on findings from student surveys and observations, with some corroboration and explanation from parent and teacher data. Data was collected using a pre-test/post-test study design including implementation (intervention) and comparison (no intervention) schools. Key findings were:

1. Students who were exposed to TN showed statistically significant, though modest gains in nutrition skills and knowledge (ability to identify healthier choices and apply *Food Guide Pyramid* concepts), and these gains remained significant six months after the intervention.
2. Students who were exposed to TN showed a statistically significant increase, relative to comparison group students, in motivation to eat healthier, as indicated by more positive responses on items assessing nutrition-related attitudes. The changes, while statistically significant and consistent at the six-month follow-up, were of small magnitude.
3. TN encouraged students to eat healthier, according to student responses to food consumption survey questions, although this positive impact faded by the six-month follow-up.

Multivariate analyses, which controlled for demographic characteristics of students and their household, were used to identify what factors influenced the students' self-reported eating behaviors.

The results of these analyses demonstrated that the "level of exposure" to TN messages through a variety of channels was the strongest prediction model and that future TN initiatives, as well as other nutrition education efforts, should focus on maximizing the exposure of their target groups to TN messages using multiple channels of communication.

Based on the results of the TN Pilot Implementation Project that demonstrated the importance of reaching students through multiple channels within their total environment, FNS initiated the **Team Nutrition Demonstration Project (TNDP)** as one option³ for the TN grant applications issued to State agencies in February 1999. The purpose of the TNDP was to develop, implement, and sustain models of *comprehensive and firmly established* TN initiatives;

³Normally, USDA awards all TN Grant funds to States to administer TN Training Grant. However in 1999, in order to broaden the focus of implementing TN, there was an opportunity for States to apply for either a TN Training Grant or the TNDP.

document what it takes to accomplish such initiatives; and generate guidance for all States to work towards multi-channel TN implementation. The TNDP lasted three years, including an implementation phase of two years (during Years 2 and 3).

Comprehensive Team Nutrition

As defined by FNS in the Request for Applications (RFA) for the TNDP, the comprehensive model included commitment to implementing a minimum number of activities/events that provided the TN messages in all six communication channels. While there was variation with respect to how the activities were implemented by each of the four States, FNS established these **minimum requirements** for participating schools:

1. Classroom channel activities consisted of teaching all lessons from the TN curricula modules:

- *Food & Me:* Pre K and Kindergarten
- *Food Time:* Grades 1-2
- *Food Works:* Grades 3-5
- *yourSELF:* Grades 6-8

Schools participating in the TNDP were expected to teach at least one activity from every lesson in all classrooms of at least one of the target grades for each of the modules. For example, a school with grades 1-5 needed to implement *Food Time* in all classrooms of either the first or second grade and *Food Works* in all classrooms of either third, fourth, or fifth grade. A middle/junior high school was expected to implement *yourSELF* in all classrooms of either sixth, seventh or eighth grade.

2. Cafeteria channel activities, promotions, or events included school meal promotions, food and nutrition displays or taste-testing events. The requirement for the cafeteria channel was to conduct *two* events in the cafeteria during each implementation year of the project (2000-2001 and 2001-2002). In addition to these activities, participating schools were required to implement a **foodservice initiative** including completion of at least 10 hours of **training** related to USDA's School Meals Initiative for Healthy Children during the two-year implementation and by January 2000, school lunches in participating schools had to be consistent with the *Dietary Guidelines for Americans*. The foodservice initiative was completed before the cafeteria channel events were conducted.

3. School-wide events were activities that conveyed TN messages to the entire student body. These included hallway displays, a series of public address announcements, special assemblies, a visiting chef, or an event in the cafeteria, gym, or playground in which all students could participate. Every school participating in the TNDP was expected to conduct at least *two* school-wide events during each year of implementation.

4. Home activities had the goal of facilitating interaction between students and parents related to the TN messages. Such activities typically involved parents in a nutrition activity taken home by students or an event at school to which parents were invited. Examples included activities from the TN lessons (brought home to parents by students), or TN messages that were either shared in a newsletter or through school menus. Schools participating in the

Demonstration Project were expected to provide at least *four* activities in the home channel in each year of implementation.

5. **Community** events were targeted to a broader audience, typically the school neighborhood. An example was a health fair or other event that reached beyond students and parents to convey TN messages to the community. These events were either held at school with community members participating, or occurred in the community with school-based staff partnering with community members to provide the event. Each school participating in the project was expected to implement at least *one* community event during each year of implementation.
6. **Media events and coverage** involved the media to either promote TN messages or provide promotional information or coverage of TN events through the local newspaper, radio, and/or television. Each school was expected to link with the media for coverage or involvement at least *once* during each year of implementation.

As State project staff worked with schools to develop work plans, it became apparent that activities planned for a particular channel would overlap with others. For example, a nutrition fair that was planned as a community channel event could also involve the cafeteria, school-wide, home, and media channels. FNS clarified that schools must conduct a minimum of six separate events during each year, one as a *primary* event for each channel (excluding the classroom channel). So, although *ten* total channel events were initially required, the guideline was adjusted to mandate a minimum of one primary event for each non-classroom channel with the understanding that an event could also be a *secondary* event in other channels. State project staff had the responsibility of classifying events for each channel.

Firmly Established Team Nutrition Initiatives

Firmly established initiatives were defined by FNS as projects that have taken steps to obtain an ongoing commitment to deliver TN messages beyond the TNDP scope and/or time frame. Although States were not expected to achieve statewide implementation of TN, projects that included several different school districts with more than one school in each district were expected to be more likely to achieve the goal of a firmly established initiative.⁴

C. TEAM NUTRITION DEMONSTRATION PROJECT ACTIVITIES

TNDP grants were awarded by the FNS through a competitive grant process to Idaho, Iowa, Kansas, and Michigan in the fall of 1999. Each State was required to designate a Project Director who was responsible for overseeing the implementation of the grant. Each State was also required to select a Social Scientist to assist in data collection and analysis for the project. Idaho was chosen by FNS as the lead State for the project and was given responsibility for coordinating communication between FNS and the other States. The Social Scientist from Idaho was designated as the Principal Investigator and was responsible for coordinating data collection and synthesizing data from the four participating States. The primary goal of the project was for all four States to document the **steps, time, and resources**, including cost, needed to implement

⁴All States involved multiple districts in the TN Demonstration Project; two States involved multiple schools within districts.

comprehensive TN through the six communication channels. The three-year project began in October 1999 and was scheduled to end August 30, 2002. FNS extended the grants through February 28, 2003 to allow compilation and synthesis of data.

As part of the TNDP, participating States were given the opportunity to influence the development of a **Team Nutrition Technical Assistance/Implementation Guide** intended to assist all States to move toward the goal of implementing a comprehensive, firmly established Team Nutrition initiative. At the beginning of the TNDP, States were provided with a draft of the TN Technical Assistance/Implementation Guide for use in this project during training and for participating schools to assist with planning and implementation of activities. Project staffs (State and local) were invited to make suggestions for topics they thought should be included in the guide and for a format that would be useful for users. The feedback from schools assisted FNS in defining the contents and format of the final TN Technical Assistance/Implementation Guide entitled *Team Nutrition—Getting it Started and Keeping it Going*.⁵

Participating States were also expected to provide input into the development and field-testing of a **Team Nutrition Routine Reporting System** intended to capture the scope and value of TN initiatives in schools throughout the Nation. These four States were given the opportunity to influence decisions about the type of data collected and the process for doing so. Input was also elicited about the feasibility of implementing a national reporting system for TN and the validity and usefulness of results generated by such a system. (See Chapter XII for more information about the Team Nutrition Technical Assistance/Implementation Guide and Routine Reporting System components of the TNDP.)

An overview of activities during the three-year TNDP is listed below:

**YEAR 1: SELECTION OF SITES, PLANNING, ASSESSMENT DEVELOPMENT AND TRAINING
(1999-2000 SCHOOL YEAR)**

- Monthly conference calls were made between project staff in the four participating States and FNS staff; and four face-to-face meetings were held in Washington, DC (October 1999; January, March, and May 2000).
- State implementation plans were developed, reviewed, and revised.
- Reporting forms (logs) for gathering and reporting data on the steps, time, and resources used to implement a comprehensive TN initiative in the four States were developed, reviewed, and revised. Participating States used final versions of the assessment logs to collect data in the second and third years of the three-year project. Assessment forms included: classroom lesson logs (for each of the four modules); a channel log for every event or activity conducted in each of the six channels; a site coordinator log; and demographic forms for schools, school foodservice staff, and participating teachers. An overview of the TNDP assessment is provided in Appendix A (page A-2); copies of all implementation assessment forms/logs used to collect data are provided in Appendix B.

⁵United States Department of Agriculture, Food and Nutrition Service, “Team Nutrition: Getting It Started and Keeping It Going – A Guide for Team Nutrition Leaders”, 2004.

- States established procedures for selecting schools for participation in the project, and prepared and distributed application materials to allow schools in their State the opportunity to apply. Sixty schools were selected by the four States as TNDP sites.
- States held trainings for school site coordinators and team members (teachers, administrators, and foodservice staff) from the 60 participating schools.
 - Idaho held three regional trainings for teachers, foodservice staff, and other members of school teams. Idaho used a cadre of regional trainers from the Idaho Department of Education.
 - Iowa held an orientation meeting for school personnel that combined planning and training for school leaders and also provided separate trainings for teachers (assisted by Cooperative Extension specialists) and school foodservice staff.
 - Kansas held a meeting for school site coordinators and also conducted teacher training. School coordinators and teachers received a school manual and/or a teacher manual written by the Kansas State Department of Education staff.
 - Michigan conducted one training workshop during the first year, three during the second year, and two in the final year. Co-coordinators from each school were required to attend; one was a school foodservice staff person and the other was a teacher or administrator.
- States used a draft version of the TN Technical Assistance/Implementation Guide during initial project training and provided the guide to schools for use during the two-year implementation. State staff and school-based staff provided suggestions to FNS regarding content and format of final guidance materials.
- A poster presentation was made at the annual conference of the American School Food Service Association (ASFSA) to introduce the TNDP to attendees. The presentation provided tools and ideas for school foodservice authorities to use when soliciting support from teachers, school administrators, and community agencies. Emphasis was given to forming a team within the school to deliver the TN messages, as well as improving the school nutrition environment.

YEAR 2: FIRST YEAR OF IMPLEMENTATION (2000-2001 SCHOOL YEAR)

- Monthly conference calls were held between State staff (Project Directors and Social Scientists) and FNS staff.
- Two on-site meetings were held in Iowa and Michigan. FNS and State project staff observed TNDP activities at participating schools and heard presentations from TNDP site coordinators during these visits.
- Demographic data describing the participating schools, teachers, school teams, and foodservice staff members were collected, analyzed, and summarized. This demographic data is provided in Appendix D of this report.
- States implemented comprehensive TN initiatives that included activities in all six-communication channels in the 60 participating schools. Implementation assessment data (steps, time, and resources) for the 2000-2001 School Year was collected using the log forms and analyzed by each State. At the end of the year, site coordinators completed a questionnaire to identify the steps they followed, barriers, and successes.

- FNS discussed the routine reporting concept with the TNDP staff in the four States, the director of the National Food Service Management Institute (NFSMI), and the Education Information Advisory Committee (EIAC)⁶. The purpose of the EIAC review is to advise the CCSSO of the nature of the data collection, whether the information being requested is already available from another approved data collection, or if not available, whether the requested information collection imposes the least possible burden on the respondent.
- A pilot TN routine reporting form was developed by FNS with input from project staff from each participating State. The draft routine reporting form was shared with site coordinators in the TNDP schools for feedback about the survey items and proposed process. This routine reporting form was eventually named the TN End-of-Year Reporting Form.
- Analysis of the classroom data and other channel log data began in May 2001. After using the forms during the first year of implementation, they were revised to improve the usefulness of the data. Findings from data collected for the classroom component of the TNDP are presented in Appendix E of this report. It was decided not to use data collected in Year 1 from channel logs because of confusion related to documenting channels involved and concerns about the accuracy of the cost data.
- A presentation was made at the annual conference of the Society for Nutrition Education (SNE). Representatives from each of the four TNDP States described how they had achieved comprehensive implementation with examples of activities from the six communication channels.
- Presentations were made at the State Director's Section Meeting of the ASFSA annual conference to introduce State agencies to TNDP goals and activities.

YEAR 3: SECOND YEAR OF IMPLEMENTATION (2001-2002 SCHOOL YEAR)

- Monthly conference calls were held between State staff (Project Directors and Social Scientists) and FNS staff.
- Meetings were held in Kansas and Washington, DC. FNS and State staff observed TNDP activities in participating schools and heard presentations from project staff during the meeting in Kansas.
- States continued implementing comprehensive TN initiatives; Year 3 of the project was the second year of school-based implementation. Assessment data (steps, time, and resources) for 2001-2002 were collected, entered, and analyzed by each State following the procedures developed during the previous year. The Principal Investigator prepared summary tables based on data from the four States (included in appendices of this report).
- Based on feedback from the TNDP schools, the pilot routine reporting form was revised. A web-based version was created and field-tested with a random sample of schools from

⁶EIAC is a committee, established by the Council of Chief State School Officers (CCSSO) that reviews and approves the data acquisition activities conducted by Federal agencies at the State and local education agency levels and in schools.

the TNDP States that were not participating in the TNDP⁷. Comments from this questionnaire were summarized, and then NFSMI tested the form in 75 randomly selected TN schools across the Nation.

- FNS staff used information generated from the TNDP to continue fine-tuning the TN Technical Assistance Guide. The revised document was distributed to the four TNDP States in April 2002 for review by participating schools. States provided feedback from schools using a set of questions developed by FNS. Additionally, six other State agency TN Coordinators external to the TNDP provided comments and suggestions for revision of the TN Technical Assistance/Implementation Guide. Four of the six State agencies' TN Coordinators also provided input on the End of Year Reporting form and process.
- During 2002, presentations related to the TNDP were made at annual conferences of the ASFSA, SNE, and the American Dietetic Association (ADA).
 - ✓ The presentation at ASFSA focused on unique ways that TNDP States comprehensively implemented TN in their schools.
 - ✓ At SNE, project staff shared accomplishments and strategies used by teachers and foodservice staff during project implementation.
 - ✓ The presentation at ADA described similarities and differences in ways that the four TNDP States comprehensively implemented TN in the six channels. Preliminary data from the process evaluation was presented along with ways that project findings were being incorporated into the development of the TN Technical Assistance/Implementation Guide.
 - ✓ Emphasis in all presentations included ways to form and maintain teams and partnerships to accomplish full implementation of TN messages through the six communication channels.

⁷Non-participating schools were randomly selected for testing to determine if schools that were not heavily involved in maintaining logs of TN activities would be able to provide data of TN activities with a once-a-year questionnaire.

CHAPTER II: METHODS AND DATA COLLECTION

- A. Demographic Data
- B. Classroom Channel Data
- C. Channel Data (All Channels Except Classroom)
- D. Site Coordinator Data

This chapter describes the development of the assessment instruments (logs) and methods used to collect, enter, analyze, and report the demographic data, site coordinator data, classroom data, and channel event/activity data. An overview of the assessment process is presented in Appendices page A-2. The overview identifies the title of all assessment forms, job title of the person that completed them, timeframe for completion, and type of information collected.

A. DEMOGRAPHIC DATA

TNDP specific demographic forms were developed and revised during the first year of the project. Final versions of the forms were distributed to the TNDP States (see Appendix B, pages B-3 through B-6). Human Subjects Review Boards at Iowa State University and Michigan State University approved the data collection forms and consent forms/statements for use in their respective States. Departments of Education in Idaho and Kansas reviewed the forms for data collection purposes in their States.

The major objective for collecting demographic information was to describe the characteristics of TNDP schools and school-based staff in the four States that participated. Additionally, information about schools, such as enrollment and percentage of the students who were approved for free or reduced-priced meals, was collected.

Methods used to collect the demographic information in the four States differed and included: mailing the forms, administering the forms during project trainings, or administering the forms during site visits to schools. Site coordinators or school principals completed the School Demographic Form providing information about their school foodservice programs, number of teachers participating in the TNDP, school team members, as well as information about themselves. Teachers completed forms (Teacher Demographic Form) providing information such as grade level taught; training in nutrition, physical education and health; and years of teaching experience. Additional information on TNDP schools, such as student enrollment, percentage of students approved for free and reduced-priced meals and average daily participation for breakfast, lunch and after-school snacks was obtained from, or confirmed by, the State agency.

All demographic data was kept confidential through use of codes assigned to schools, site coordinators, teachers, and school foodservice staff. Each State stored and summarized the demographic data collected in their State using either Microsoft Excel or the Statistical Package for the Social Sciences (SPSS) software. At the end of each year of the two-year implementation, summary tables with demographic data from each of the four States for Years 1 and 2 were prepared and are included in this report in Appendix C:

- School Demographic Table (page C-3)
- Teacher Demographic Tables (pages C-5 to C-6)
- School Foodservice Demographic Tables (pages C-8 to C-9)
- Site Coordinator Demographic Table (page C-11)
- School Team Demographic Table (page C-13)

B. CLASSROOM CHANNEL DATA

In order to collect data on the **steps, time, and resources** needed to implement the classroom channel in participating schools, classroom lesson logs (CLL) for each of the four TN lesson modules were developed by TNDP Social Scientists, Project Directors, and FNS staff members during 1999-2000. There was one CLL for each lesson (nine lessons/CLLs for *Food & Me* and eight lessons/CLL each for *Food Time* and *Food Works*). Only one CLL was developed to record information about all six *yourSELF* lessons because *yourSELF* was structured differently. Examples of the CLL forms for each module are in Appendix B (pages B8-B20) of this report and data from those logs is summarized in Chapter V.

Draft versions of the CLL were reviewed by project staff, a statistician, and teachers. Final edits were completed in June 2000, and forms were distributed to each of the four States for use by the 390 teachers in the 60 participating schools for the next two years of implementation.

The implementation of the classroom channel varied across participating States. Some provided the lessons at every grade level of the module/kit targeted, and others involved only selected grades (e.g., every other grade) so students would only receive lessons once during the two-year implementation phase.

Teachers recorded the following information on the CLL for each lesson:

- Persons involved in planning/preparing and teaching the lessons,
- Time spent planning and teaching all the activities selected from all of the lessons,
- How much classroom time spent on each activity,
- Activities within the lessons selected for teaching (at least one activity per lesson was required),
- Number of students taught,
- Components or items used from the TN modules (teacher guide, video, newsletter, poster, etc.),
- Supplies used (food, books, art supplies, handouts, etc.),
- Integration of lessons into other subject areas, and
- Cost (expenses and value of donations) for lessons.

Confidentiality was maintained by identifying teachers with unique codes on the CLL. Data was entered by a staff member or a graduate student under the direction of the Social Scientist (Iowa, Kansas, and Michigan) or by the Project Director (Idaho). Data were collected from 340 teachers (87%) during the 2000-2001 School Year and 259 teachers (75%) during 2001-2002. CLL analyses were sent from each State to the Principal Investigator, and summary tables were developed and are included in Appendix D of this report (pages D-2 through D-80).

C. CHANNEL DATA (ALL CHANNELS EXCEPT CLASSROOM)

A copy of the channel log is provided in Appendix B, pages B-22 through B-24 of this report. This log was used to document the **steps, time, and resources** used to accomplish the events, activities, or promotions in each channel other than the classroom channel (cafeteria, school-wide, home, community, and media).

The person who coordinated the channel events/activities completed the log. Data collected for each event in the five channels included:

- Persons involved in planning/preparing/conducting the event or activity,
- Time spent planning and conducting the events,
- TN message(s) communicated by each event/activity (added during Year 2),
- Primary and secondary communication channels (added during Year 2),
- Supplies used,
- Cost of purchased and donated items for the event or activity, and
- Average number of participants from various target groups per event.

Classroom channel data were provided for both years of the implementation. However, data collected on the channel logs during Year 1 were not used due to incomplete cost information and confusion about how to document the channels involved in each activity/event. The channel log provided in Appendix B (pages B-22 through B-24) is the revised log that was used to collect implementation assessment data about channel events in Year 2 of implementation (2001-2002).

The Principal Investigator prepared the four-State summary tables from the channel log data provided from each State. Medians and inter quartile ranges (25% and 75%) for the time data (to plan and conduct events) were calculated in addition to means and standard deviations since data for “time” were not normally distributed. Combined means (based on all States) were not appropriate to calculate or report for channel events/activities because the number of schools and channel events was much higher in one State (Idaho). Channel log data are summarized in this report in separate chapters, one for each channel and combined data for all five channels in Chapter XI.

- Cafeteria (Chapter VI)
- School-wide (Chapter VII)
- Home (Chapter VIII)
- Community (Chapter IX)
- Media (Chapter X)
- All Channels (Chapter XI)

Tables with data for each channel, and all channels combined, are provided in Appendix E; figures that represent the data in those tables are provided in each of the corresponding chapters of this report.

D. SITE COORDINATOR DATA

In addition to the data collection forms developed to gather information from teachers, schools, and foodservice staff, a log was developed for site coordinators (Site Coordinator Log, pages B-26 and B-27 of Appendix B). In this project/report, “site coordinator” was the person or persons (co-coordinators) responsible for providing leadership needed to plan and implement the project at the school level and for submitting the required assessment forms. There were 55 site coordinators in Year 1 of implementation and 45 in Year 2. The log completed by site coordinators documented:

- Activities completed (steps taken to conduct/complete activities),
- Time spent on the project (by the site coordinator),
- Channels focused on most during each year and planned for the next year, and
- Links formed with others (teachers, school foodservice staff, physical education teachers, parents, community members, and the media).

Data from the logs completed by site coordinators are summarized in Appendix F (pages F-3 to F-5).

In addition to completing the Site Coordinator Log at the end of each year of implementation, coordinators were asked to respond to qualitative end-of-the-project questions at the end of the implementation period. Some States gathered this data by sending coordinators the questions (End-of-the-Project-Survey); others asked coordinators to answer the questions at the last project meeting (either in writing, verbally, or using both of these methods). The questions are listed in Appendix F (page F-7), and the responses are summarized in Appendices pages F-8 through F-16.

CHAPTER III: STATE IMPLEMENTATION

(OVERVIEW, KEY PROJECT STAFF, RECRUITMENT AND SELECTION OF SCHOOLS, MEETINGS AND TRAINING, AND UNIQUE ASPECTS)

- A. Idaho
- B. Iowa
- C. Kansas
- D. Michigan

A. IDAHO:

Overview. At the time of submitting the grant application for the Idaho TNDP (April 1999), the October 1998 State administrative data for Idaho showed 146 School Food Authorities, 667 schools, 146 Foodservice/Child Nutrition Directors/Supervisors, 350 Single-Unit Managers, and 1,701 Production Staff. There were 55,900 students approved for free meals, 22,512 students approved for reduced-price meals, and 244,403 students with access to the National School Lunch Program (NSLP). Seventy-eight percent (78%) of Idaho School Food Authorities were using Nutrient Standard Menu Planning and 22% were using one of the Food Based Menu Planning options to plan menus to meet the *Dietary Guidelines for Americans*.

Prior to the TNDP grant, Idaho received four Team Nutrition Training (TNT) grants. Two of the grants included being part of a consortium of States within the Western Region of USDA. These grants established the foundation to develop models of comprehensive TN initiatives within schools in Idaho.

Key Project Staff.

- RoseAnna Holliday, MPH, RD; Project Director for the first year.
- Hydee Tubbs, MS, RD for the second and third years.
- Elaine Long, PhD, RD; Boise State University, Social Scientist for Idaho and Principal Investigator of the TNDP.
- Jhescie Morrison; TN Data Technician.
- SeAnne Safaii, MS, RD, LD; Program Specialist, Idaho Department of Education. Ms. Safaii was instrumental in coordinating the completion of the project.
- Mary Breckenridge, MS; State Director of Idaho Department of Education.

Recruitment and Selection of Schools. A survey was sent in March 2000 to all school district superintendents and school foodservice directors/supervisors to assess their interest in applying to be a Team Nutrition Demonstration School Site if Idaho was awarded a TNDP grant. Eighteen school districts (totaling 69 schools) indicated interest in participating. After receiving the TNDP award, grant applications were sent to all elementary and middle/junior high schools that indicated an interest in participating. Eleven districts submitted applications.

Grant applications received from districts were categorized according to Idaho's six geographical regions to involve schools throughout the State. School districts, rather than individual schools, were awarded the opportunity to be involved in the TNDP project and were provided funding between \$9,000 and \$15,000 per district. Eleven districts from four of the six regions were chosen for the TNDP. In Year 1 there were 25 schools including 14 elementary schools and 11 middle schools. In Year 2 there were 27 schools including 16 elementary schools and 11 middle schools.

Meetings and Training. The regional training for school site coordinators, principals, school foodservice staff, teachers, school nurses, and physical educators was called "Promoting Healthy Choices at School." This training fulfilled the ten hours of foodservice training requirement and emphasized team building, healthful eating, supporting quality nutrition programs, implementing

science-based health education curriculums with strong nutrition components, and culinary skills. The regional trainings were held on June 12-14, June 26-28, August 21-23, and September 22-23, 2000. Site coordinator training was conducted as a pre-session of regional trainings and addressed leadership, group process, attracting media coverage, effective techniques for building community partnerships, and implementation assessment.

Additional training for teachers occurred on August 28-29, 2000; September 18-19, 2000; and February 12, 2001. A cadre of regional trainers conducted these trainings. The objective was to provide teachers with supplementary tools necessary to effectively teach nutrition to kids.

A cadre of six regional trainers was established to be available to provide technical assistance as needed to participating sites. These individuals were under contract with the State Department of Education and had developed a professional rapport with local school districts in their regions prior to the TNDP.

Site coordinator meetings were held in June 2001 and May 2002. At the first meeting, site coordinators shared project activities with others, completed the Site Coordinator Log (for year 1), and received training to use *Changing the Scene: Improving the School Nutrition Environment—A Guide for Local Action*. At the second meeting, site coordinators shared key TN channel events held at their site(s), completed the Site Coordinator Log (for year 2) and End-of-the-Project Survey, and provided feedback on the TN Technical Assistance/Implementation Guide.

Unique Aspects of the Idaho Demonstration Project. A monthly electronic newsletter was sent by the Project Director to the site coordinators and cadre of trainers. The purpose of the newsletter was to provide ideas for communicating the TN messages using the six communication channels and to remind site coordinators of the important project dates. The site coordinators were asked to submit quarterly reports to the Idaho Project Director. The reports indicated activities planned for the past quarter, activities conducted during the past quarter, any deviations from the proposed plan, and activities planned for the next quarter.

The Project Director conducted site visits to all participating schools in spring 2001 and fall 2002. The cadre of trainers conducted site visits to schools, provided technical assistance, attended school-wide and community events, and communicated with the site coordinators frequently via e-mail and telephone.

B. IOWA:

Overview. Team Nutrition in Iowa is administered by the Bureau of Food and Nutrition, Iowa Department of Education. All 377 independent school districts in Iowa are required by the legislature to participate in the NSLP. Iowa's locally-controlled schools serve approximately 500,000 students using a community partnership model that invests curricular control in the local education agency.

Iowa has been involved in Team Nutrition initiatives since its inception by USDA. The Des Moines Public Schools participated in the 1996 TN Pilot Implementation Project, under the

direction of Julia Thorius. The first Iowa TN Training grant provided training and support for implementation of Team Nutrition in 25 schools through the regional structures called Area Education Agencies (AEAs).

Key Project Staff.

- Laura Sands, MS, RD; Consultant to IDE, was the Project Director.
- Katherine Thomas Thomas, PhD; Iowa State University, served as project Social Scientist.
- Christine Anders, MS; Consultant with IDE, was responsible for the budget oversight for Years 1 and 2.
- Mary Gregoire, PhD, Iowa State University, was a consultant on the project.
- Julia L.M. Thorius, MS, RD, LD; Chief, Bureau of Food and Nutrition, Iowa Department of Education (IDE) provided overall leadership for the project.

Susan Klein, MS, a nutrition specialist with Iowa State University Extension worked with project staff but was not a member of the State core team.

Recruitment and Selection of Schools. After Iowa was selected by the USDA for participation in the TNDP, an RFA was developed and in the fall of 1999 was sent to school personnel at all elementary and middle schools in the State, including school nurses, foodservice directors, physical education teachers, and principals. The application required schools to form teams with the following representatives: principal (or designee), a coordinator (school leader for the project), three classroom teachers (one representing each grade of the lesson modules), foodservice director, physical education teacher, parent, and community representative. Applicants submitted a one-page description of their school that included a plan for meeting the RFA guidelines. The principal signed the application indicating an understanding of the grant requirements and a willingness to facilitate full implementation of TN. A committee of four (Sands, Anders, Thomas, and Tom Rendon---the Ready to Learn Coordinator from Iowa Public Television) reviewed the applications and selected ten schools based upon the quality of the application and representation of geographic regions. Four schools were selected from the eastern region, one from the northern region, one from the northeastern region, and four from the central region. No applications were received from the western region of the State.

Meetings and Training. Eight meetings with the school teams were held over the three years of the project for training and/or information collection. The eight meetings were as follows:

1. In January 2000, representatives of the ten selected schools met with the core team in Des Moines. Three points were the focus of this meeting:
 - Defining full implementation
 - Outlining expectations for reporting of project activities
 - Explaining the purpose of the project
2. In March 2000, site coordinators and foodservice staff were introduced to Iowa's Pick a Better Snack (PABS) social marketing campaign, developed with a prior TN grant, in a

special training session. PABS provided ideas for promoting consumption of fruit and vegetable snacks using colorful simple drawings and messages such as: “Peel. Eat.” and “Dip. Eat.” Further, all of the TNDP schools were invited to the kick-off and training for the campaign to obtain ideas for activities and promotion.

3. Several schools conducted teacher and team training, assisted by the core team or Iowa State University Families Extension (ISUE) Health and Nutrition Specialists. The State core team, the school team, and the nutrition and health specialists from ISUE served as trainers and resources for all ten schools. Schools individualized the training to suit their needs and timeframes; thus some schools provided within-grade level training by ISUE during the summer, while other schools had the coordinator complete the training of classroom teachers at the beginning of the school year.
4. During the summer and fall 2000, the core team conducted site visits to the schools. The Social Scientist obtained informed consent from the teachers, team leaders, and other team members from each school, and teams were provided the necessary logs to record TN related activities (channel events and classroom activities).
5. During February 2001, Iowa hosted a site visit for FNS and the other Demonstration Project States’ staff including site visits to four of Iowa’s TNDP schools. The other TNDP schools had an opportunity to share via presentations, videos, and handouts.
6. Year 2 Implementation planning sessions were scheduled for schools in two locations during the summer and fall allowing most schools to attend a session in their region. These sessions were in response to turnover in leadership for the projects.
7. A tour of three TNDP schools in a daylong meeting in November 2001 focused on sharing TNDP events; six of the TNDP schools participated in the meeting and tours.
8. In April 2002, schools were invited to a debriefing session with the State core team. Representatives from eight schools attended the meeting; each made an oral presentation of the activities they conducted during Year 2 of the implementation.

In addition, two foodservice training sessions were completed: (1) During the summer 2000 foodservice training was conducted to assist foodservice directors in connecting foodservice activities with the TN lesson modules. The expectation was that foodservice directors would, in turn, train their school staff. (2) Healthy Cuisine for Kids was offered in May 2002; six schools participated in the training.

Unique Aspects of the Iowa Demonstration Project. Iowa encouraged the school teams to use the draft of the USDA Team Nutrition Technical Assistance/Implementation Guide to plan and conduct their programs. The leaders and teams were introduced to the guide and referred back to it throughout the project. Two additional areas of emphasis for the TNDP were use of the PABS social marketing campaign and enhancement of the school’s existing physical activity program. These were selected because each was consistent with one of the four TN messages. PABS encourages schools to offer snacks of fruits and vegetables. Schools were expected to meet all requirements of full implementation and to enhance existing physical activity opportunities in their schools in a measurable way. The funds could be used for training (including paying substitute teachers), supplies, materials, and other expenses related to the TNDP. A biweekly

e-mail newsletter was initiated for school team leaders, extension specialists, and others interested in TN. The newsletter, intended to motivate schools included tips, recipes, reports of events at TNDP schools, and reminders. ISUE field staff was an integral part of the training and support mechanism.

C. KANSAS:

Overview. TN in Kansas is administered by Nutrition Services in the Kansas State Department of Education (KSDE). October 1998 data indicated 1,672 schools participating in Child Nutrition Programs with almost 7,000 school foodservice employees. On an average day, 11% of the lunches served in Kansas schools were in the reduced-price category, while 30% were in the free category.

Prior to the TNDP, Kansas received TN grants in 1995 and 1997. The 1995 grant provided for initial development of a comprehensive training system for Kansas school foodservice personnel. The 1997 grant built on the foundation of the previous one; a standardized, job category-based framework was established for KSDE's formal training program.

Key Project Staff.

- Joyce Kemnitz, MS; Project Director, Nutrition Services, KSDE.
- Amanda Manning, MS, MPA, SFNS; Social Scientist and Consultant, President, Amanda Dew Manning & Associates, Inc.
- Lacey Rhymer, MEd; Project Assistant, Amanda Dew Manning & Associates, Inc.
- Traude Sander, MS; Training and Development Coordinator, Nutrition Services, KSDE.
- Jodi Mackey, BS; Team Leader, Nutrition Services, Kansas State Department of Education (KSDE).

Recruitment and Selection of Schools. Fifteen schools representing 11 school districts participated in the TNDP. In October 1999, brochures describing the TNDP were mailed to all superintendents, elementary school principals, school foodservice authorized representatives, and to schools that previously participated in a Coordinated School Health Workshop. An application packet was developed and mailed to the 40 schools that requested the packet. Representatives from 17 schools attended a TNDP informational meeting that was held to answer questions and clarify concerns from schools interested in applying for TNDP participation.

Fifteen applications were received by the deadline date. KSDE staff worked individually, and then cooperatively, to review each application and to determine clarification needed. Schools were contacted by phone and e-mail to make necessary changes in their application. Approval letters and signed agreements were mailed to each school on February 17, 2000.

Each school, as part of the application process, designated a site coordinator. In two cases, the same coordinator represented two participating schools within one district. Six coordinators

were classroom teachers, five were foodservice managers/directors, three were physical education teachers, and one was a family and consumer science teacher.

Meetings and Training. Site coordinators participated in a one-day meeting on April 25, 2000 at the onset of the project. The USDA TN lesson modules for each teacher, other TN materials and TN School Manuals were distributed to participating schools. The school manuals were developed for TNDP schools in Kansas and contained information on working with the media, leadership, and ideas for school-wide events and cafeteria promotions. In addition to providing extensive information on the day-to-day implementation of the TNDP, the first workshop provided information and sessions that involved participants in learning leadership techniques and team building. A second meeting for site coordinators was held April 17-18, 2001. This meeting focused on sharing successes from the first year, overcoming obstacles, and planning for the next school year. At the conclusion of the project, on April 15, 2002, a third meeting was held to gain information on how to ensure successful projects.

Eight hours of teacher training were required for each teacher participating in the TNDP. KSDE developed a series of seven workshops for presentation by a cadre of contracted trainers. The first workshop in the series was focused on nutrition issues of children including: obesity, eating habits, diabetes, eating disorders, allergies, special diets, iron status and anemia, and dietary fiber. Emphasis was placed on obesity since that is a primary health concern. The remaining six workshops addressed teaching one of the six 1995 *Dietary Guidelines for Americans*. Educational materials were developed to help the teachers understand current research related to the guidelines, how these guidelines impact their personal health, and what they mean to their students' short-term and long-term health.

A user-friendly Teacher's Manual was developed to serve as a reference to help teachers quickly identify appropriate activities located in a variety of resources. The manual included these sections: Children's Nutrition Issues, Classroom Activities and Take-Home Activities.

Foodservice personnel in all participating schools attended one or more of KSDE's School Meals Initiative (SMI) classes for at least 12 hours of training. The menu of classes included Basic Culinary Skills, Serving Quality Meals, Kansas Healthy E.D.G.E., Healthy Main Dishes, Healthy Yeast Breads, and Healthy Quick Breads and Desserts.

Unique Aspects of the Kansas Demonstration Project. Each of the participating schools implemented TNDP project activities for each of the 1995 *Dietary Guidelines* according to the following schedule:

- October—*Eat a Variety of Foods*
- November—*Choose a Diet with Plenty of Grain Products, Vegetables and Fruits*
- January—*Choose a Diet Moderate in Sugars*
- February—*Choose a Diet Low in Fat, Saturated Fat and Cholesterol*
- March—*Choose a Diet Moderate in Salt and Sodium*
- April—*Balance the Food You Eat with Physical Activity*

KSDE provided two community events for TNDP schools—one for each year of project implementation. *Body Walk* was available at the end of the first year and TN health fair kits were provided in the second year.

Body Walk is a unique educational program that teaches children about the importance of good nutrition and other healthy lifestyle choices through entertaining, experiential activities. The *Body Walk* program consists of:

- A 35- by 40-foot walk-through exhibit representing the human body;
- Classroom activities for use before and after students walk through the exhibit;
- A list of additional nutrition education resources;
- Information to help publicize the event and communicate with the media; and
- A take-home booklet for students to read with their families.

Health fair kits were developed by contacting groups and organizations that were potential providers of health fair materials. Their educational materials were reviewed and appropriate ones were selected for the kits. A packet of order forms was sent to each school to order materials for their health fair kits.

KSDE provided a colorful template to schools for a monthly parent newsletter. TN resources were used for newsletter content. KSDE issued nine newsletters: one issue to introduce TN (September), six issues to focus on a specific *Dietary Guideline* (October–April), and one issue each to promote *Body Walk* and the *TN Health Fair*. Each newsletter included a family-size healthy recipe and a food or nutrition educational activity for the family. Space was reserved for the school’s menus and articles about local TN activities.

D. MICHIGAN:

Overview. Michigan TN is managed cooperatively by the Michigan Department of Education (MDE) and Michigan State University Extension (MSUE). During the 2000-2001 School Year (the first year of the implementation) there were 888 School Foodservice Authorities in Michigan and a total of 9,000 foodservice staff for 3,549 school buildings and 1,706,790 students with access to the NSLP. There were 447,351 students approved for free meals and 103,979 approved for reduced-price meals. Six percent of the School Food Authorities were using Nutrient Standard Menu Planning, and 94% were using one of the Food Based Menu Planning options to plan menus that met the *Dietary Guidelines for Americans*.

Prior to receiving the TNDP Grant (Team Nutrition Training Grant, 1999), Michigan received three TNT grants (1996, 1997 and 1998). Major accomplishments of these grants included development of a Michigan Team Nutrition website, a training video, an idea booklet for TN schools (*Popular Team Nutrition Events*), a newsletter (*TEAMTALK*), a TN marketing kit (*Target Your Team*), and distribution of over 200 mini-grants to schools.

Key Project Staff.

- Chris Flood, MS; Project Director and Program Leader with MSUE

- Anne Murphy, PhD, RD; Social Scientist and Program Leader with MSUE
- Pat Hammerschmidt, MS, CHE; MSUE Administrative Coordinator
- Paula Kerr, MS, RD; Consultant to Michigan Department of Education (MDE) School Support Services
- Karen Shirer, PhD; State Leader, MSUE Family and Consumer Sciences
- Susan Anderson, MS, MPA, RD; Director, School Support Service, MDE

Recruitment and Selection of Schools. An explanation of TNDP project requirements and an application were sent to all TN Schools in Michigan inviting them to participate in the TNDP. Michigan TN had already completed several rounds of mini-grants¹ (1997-1999) so the concept of applying for grants was not new to TN schools. Unique aspects of this grant, compared to previous ones, was the length of the commitment (two years) and the fact that instead of the applicants designing their own project, the tasks for TNDP had already been identified (full implementation of TN).

Previously, selection of schools had been based on a competitive review process. This time, to ensure diversity among participating schools, the selection process for TNDP was based on specific school and applicant characteristics: size of district (student enrollment), experience with TN (new or veteran TN school), percentage of children approved for free or reduced-price school meals, geographic region, and job title/type of proposed site co-coordinators (a foodservice director/manager and a classroom teacher, physical education teacher, principal, family and consumer sciences teacher, health educator, MSUE staff, or parent). Fifteen completed applications representing 22 schools were received by the deadline. Screening interviews were conducted by the Project Director and Social Scientist during March 2000 to make sure applicants understood the requirements and expectations of this project (trainings, reporting, and comprehensive implementation of TN). Nineteen schools remained after screening interviews. Ten schools were selected randomly by category according to the previously mentioned specified categories. In Year 2 of the TNDP, there were nine schools.

Meetings and Training. Training, information, and support were offered to site co-coordinators using three methods:

- Five full-day training workshops were held (one during the year preceding implementation, two in Year 1, and two in Year 2 of the implementation phase). The site co-coordinators were required to attend.
- Site visits were conducted in both years of implementation by the Project Director and Social Scientist (separately in Year 1 and together in Year 2).
- An e-mail newsletter was sent electronically, and individual e-mail and phone communications were made on an as-needed basis.

Foodservice staff at each participating school completed at least ten hours of training over the two-year period. Most staff elected to complete courses in the Michigan Statewide Training Program for School Food Service Personnel or professional meetings such as the Michigan

¹Some TN grantee States designate all or part of their grant award for competitive local TN Training Grants to local school districts and/or schools for them to conduct various nutrition education and physical activities that reinforce the TN messages.

Dietetic Association, the Annual Michigan School Foodservice Directors Training or the Michigan School Food Service Association Meeting. All schools completed the School Meals Initiative review with a consultant from MDE.

Unique Aspects of the Michigan Demonstration Project.

School Selection. The ten participating schools were selected based on a random drawing of applicants according to specified characteristics of schools and co-leaders to achieve diversity among participants (district size, free and reduced price meal approval, experience with TN and position of site co-coordinators, and geographic location).

Michigan State University Extension (MSUE) Support. Each school was linked with the MSUE staff person in their region to offer support.

Co-coordinators. Sites/schools were required to have co-coordinators so that if one person could no longer be involved in the two-year grant, the other could provide continuity. One of the co-coordinators was required to be a foodservice manager/director, and the other needed to be a teacher, school staff, school administrator, parent, or extension staff. This approach also allowed the TNDP responsibilities to be divided between the two persons. Some co-coordinators were involved with more than one school. In Year 1 there were 15 co-coordinators for 10 schools and in Year 2 there were 12 co-coordinators for nine schools.

School Team Requirements. All schools were required to form teams that included, at a minimum, the foodservice director/manager, the principal, and the physical education (PE) teacher. The PE teacher was required to participate in the Michigan-developed Exemplary Physical Education Curriculum training.

Classroom Instruction. The lessons were taught using different approaches. In three schools, one person taught the lessons to multiple classes: (1) a life management education (LME) teacher taught *yourSELF* lessons to 12 classes of seventh and eighth graders; (2) a PE/Health teacher taught *yourSELF* lessons to six classrooms of sixth graders; and (3) an MSUE program assistant taught lessons to all the classes in two participating schools (21 classes). In three elementary schools, classroom teachers taught the curricula to their own students. In four schools, a team approach was used in which teachers taught TN curricula to other classes as well as their own.

Participating Grades. TN curricula were taught in alternate grades K, 2, 4 and 6/7 so that all students would receive the lessons during either Year 1 *or* Year 2 of implementation.

State-level Team Nutrition Steering Committee. Michigan has a long-standing advisory group that meets three times a year to provide suggestions and guidance to Michigan TN, including the TNDP, and also offers a direct means to share TN information and resources with the organizations they represent. The steering committee is composed of representatives from the Michigan Department of Community Health and Education, commodity groups (dairy, cherries, apples), retail/grocers, American Cancer Society, Governor's Council on Physical Fitness and the Michigan Dietetic Association. This group also includes foodservice directors, an Extension educator, a school health consultant, a county public health nutritionist, a pediatrician, and a school nurse.

Chapter IV: Demographic Information

A. Schools

B. School Meals

C. Site Coordinators and School Teams

D. Teachers

E. Foodservice Staff

A. SCHOOLS

Figure 4-1 includes the types of schools participating in the TNDP. During Year 1 of the two-year implementation phase of the TNDP (2000-2001), a total of 60 schools participated including 36 elementary schools, 20 middle/junior high schools, and four elementary/middle schools (Figure 4-1) with a total school enrollment of 21,554 students. In Year 2 one school in Michigan left the TNDP and two additional schools from Idaho joined the TNDP.

During Year 2 of the TNDP implementation (2001-2002), 61 schools participated including 38 elementary, 19 middle/junior high, and four elementary/middle schools; with a total school enrollment of 20,383 students. Page C-3 of the Appendices provides data for each of the four States related to participating schools.

Figure 4-1. Types of Schools Participating in the TNDP

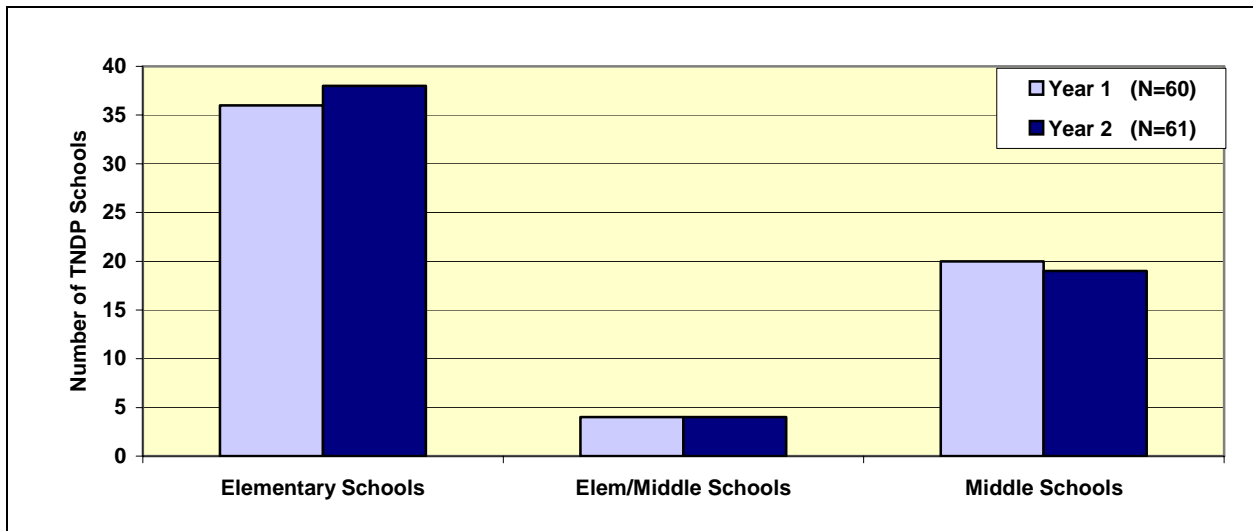
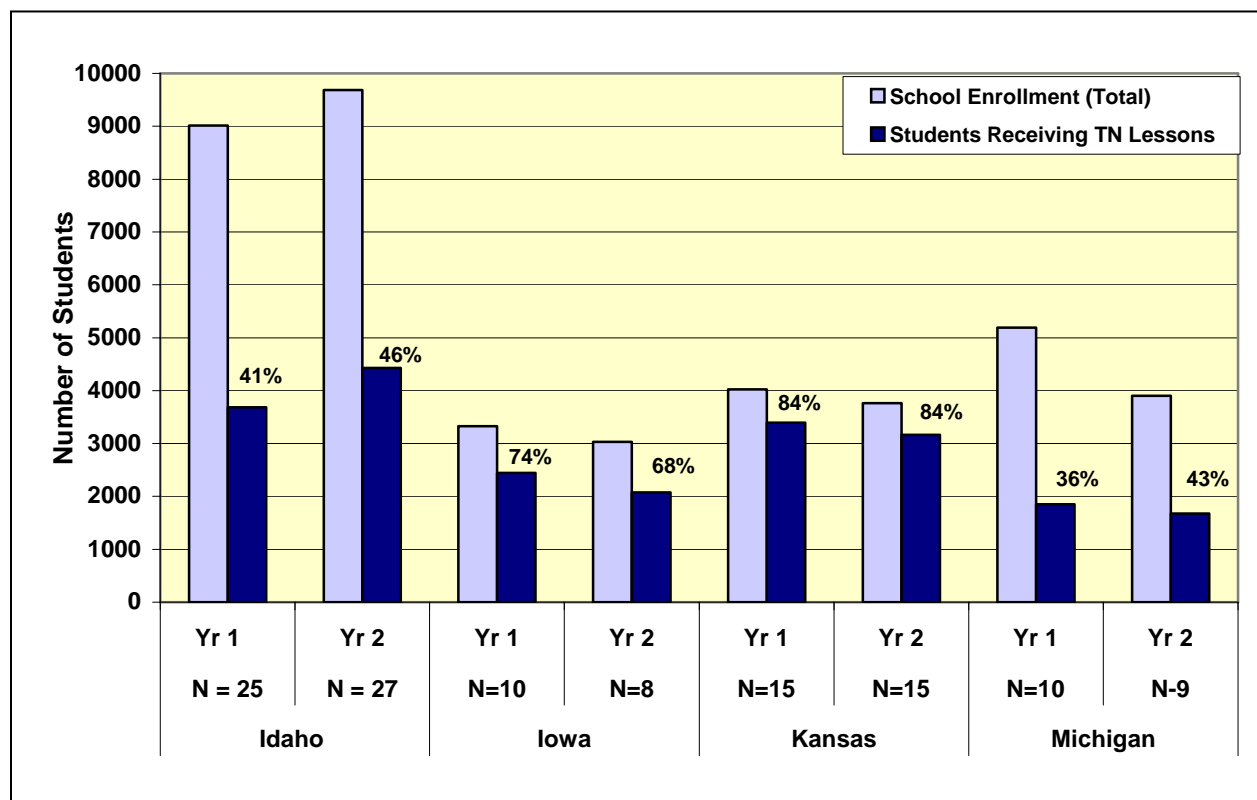


Figure 4-2 includes information about the number of students enrolled in participating schools and participating classrooms. The percentage of the enrolled students who received the TN curricula is indicated at the top of the bar for each State and each year of the two-year implementation. In Year One, 390 teachers taught the TN curricula from the grade-appropriate module to 11,374 students (53% of student enrollment) in the participating schools. Idaho involved the most schools (25) and students (9,012 in Year 1 and 9,688 in Year 2) but mean student enrollment by school was highest in Michigan (519 in year one, 434 in year two). Kansas' schools had fewer students on average, (268 in Year 1 and 251 in Year 2), than schools in the other three States. In Year 2, 346 teachers taught TN curricula to 11,339 students in the four States; 56% of students were in classrooms that participated in the TN curricula.

Figure 4-2. School Enrollment and Percentage of Enrolled Students Receiving TN Lessons*



*Refer to Appendices page C-3 for a table with data that relates to this figure.

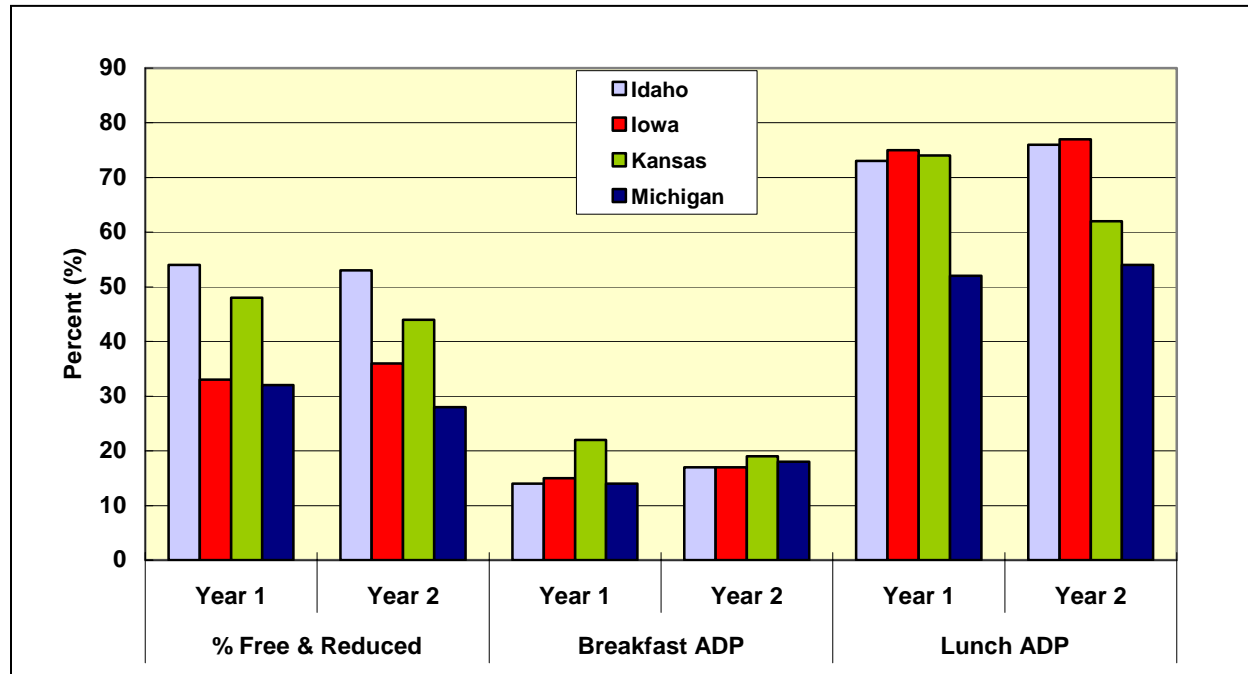
B. SCHOOL MEALS

Figure 4-3 provides data about school meals at participating sites. All schools participated in the National School Lunch Program. Eighty percent of school menus were planned at the district level by the foodservice director (in both years). In Year 1, 94% of school meals programs were operated by local school districts, rather than through a contract with a foodservice management company; that percentage dropped to 92% in Year 2. In the 2000-2001 School Year, 9,576 students from participating schools were approved for free and reduced-price meals (44% of enrollment in Years 1 and 2). The percentage ranged from 54% in Idaho's participating schools

to 48%, 32%, and 32% in Kansas, Iowa, and Michigan, respectively. Average Daily Participation (ADP) for school lunches in Year 1 ranged from 197 to 272 (66% of enrollment) and in Year 2; ADP for lunch was 67%.

About 84% of the schools participated in the School Breakfast Program in Year 1 and 78% in Year 2. The change in this percentage was due to attrition; the school that left the TNDP in Year 2 had a breakfast program. When the TNDP started, the ADP for school breakfast ranged from 51 to 74 students (16% of enrollment); in Year 2, ADP for breakfast was 18%.

Figure 4-3. Information about the School Meal Programs at Participating Schools*

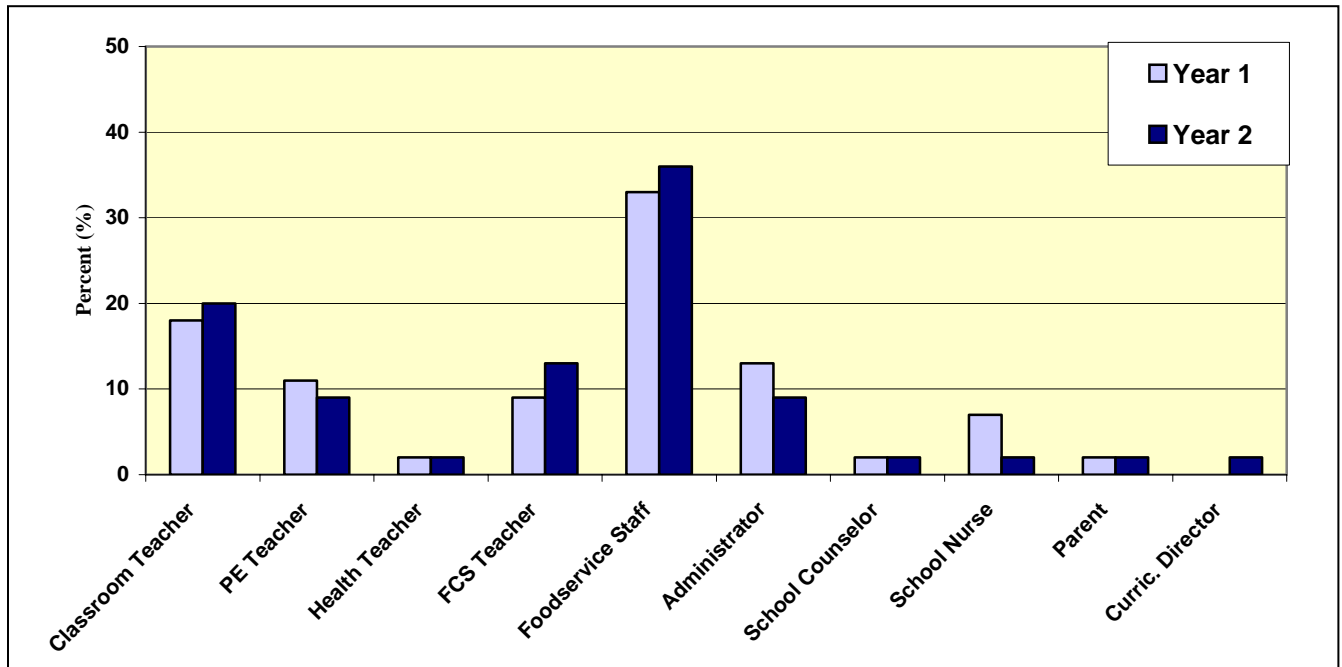


*Refer to Appendices page C-3 for a table with data related to this figure.

C. SITE COORDINATORS AND SCHOOL TEAMS

States required that all participating schools identify a site coordinator; Michigan required the involvement of two persons (co-coordinators) at each school. School teams were led by 55 site coordinators in SY 2000-2001 and 45 in SY 2001-2002. Some coordinators were responsible for more than one school. There were fewer coordinators than schools because coordinators in Idaho provided leadership from the district level to more than one school. The positions held by the coordinators are shown in Figure 4-4. The most frequent site coordinator was a staff member of the school foodservice department (especially in Idaho) or a classroom teacher (especially in Kansas). Iowa involved more administrators and school nurses as coordinators than the other States, although participation of these two groups decreased in year two. Others involved as site coordinators included a parent, a school counselor, a health teacher and a curriculum director.

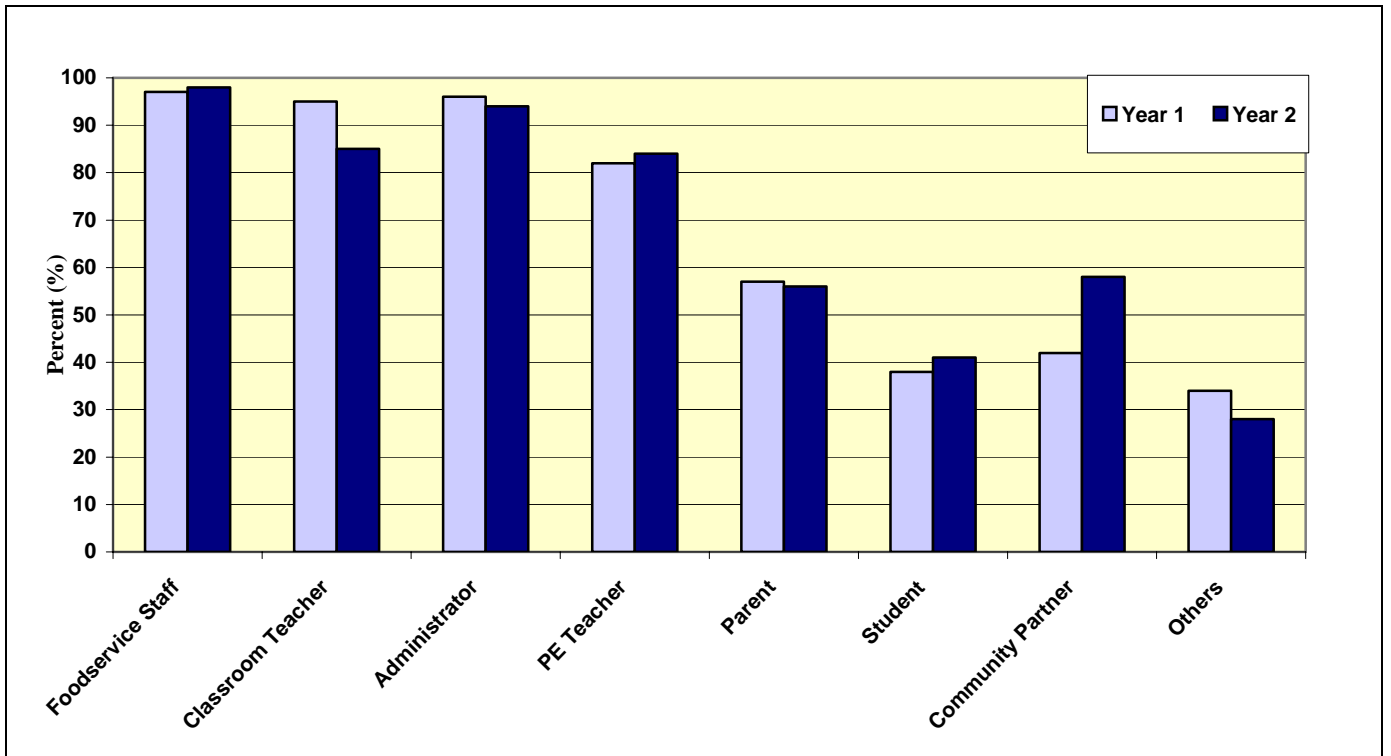
Figure 4-4. Job Titles of TNDP Site Coordinators*



Refer to Appendices page C-11 for a table with data related to this figure.

Participating schools were required by States to form a team to plan and implement the TNDP. Membership on school teams across all States is presented in Figure 4-5. During both years of the TNDP, the four most common team members included school foodservice staff, classroom teachers, school administrators, and physical education teachers. Iowa and Michigan had slightly greater representation on their school teams from parents than the other two States. Students were included on 38% of school teams in Year 1 and on 41% in Year 2. Both Idaho and Michigan had large increases in participation on their teams from community members during the second year of implementation; this resulted in a four-State mean increase from 42% to 58% of teams, including community members.

Figure 4-5. Job Titles of Persons on School Teams (other than site coordinators)*

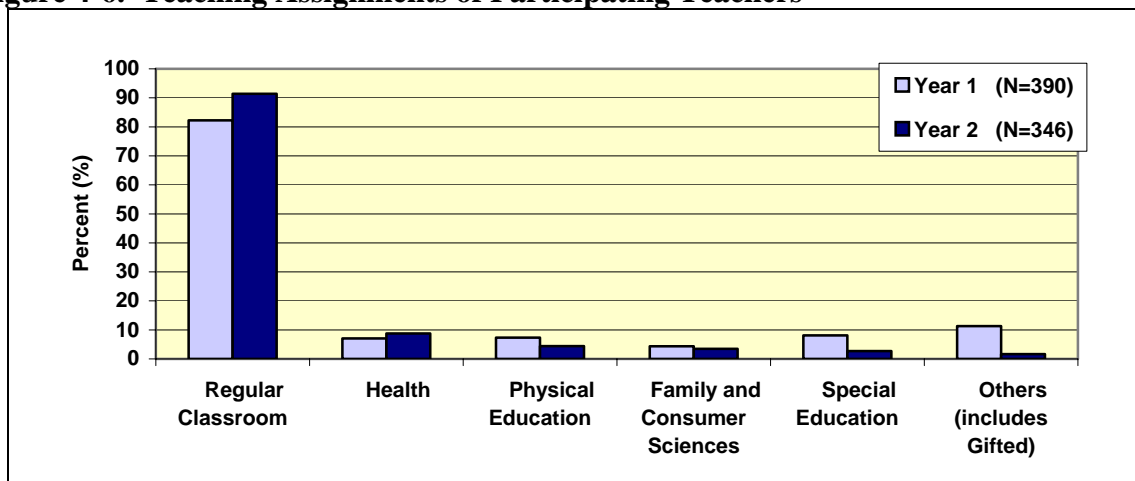


*Refer to Appendices page C-13 for a table with data related to this figure.

D. TEACHERS

Characteristics of the 390 teachers who were involved in the TNDP from the four States were documented on a one-page survey that was completed by teachers at the beginning of Year 1 and by new teachers in Year 2 of the implementation phase. Findings are summarized in Figures 4-6 through 4-9.

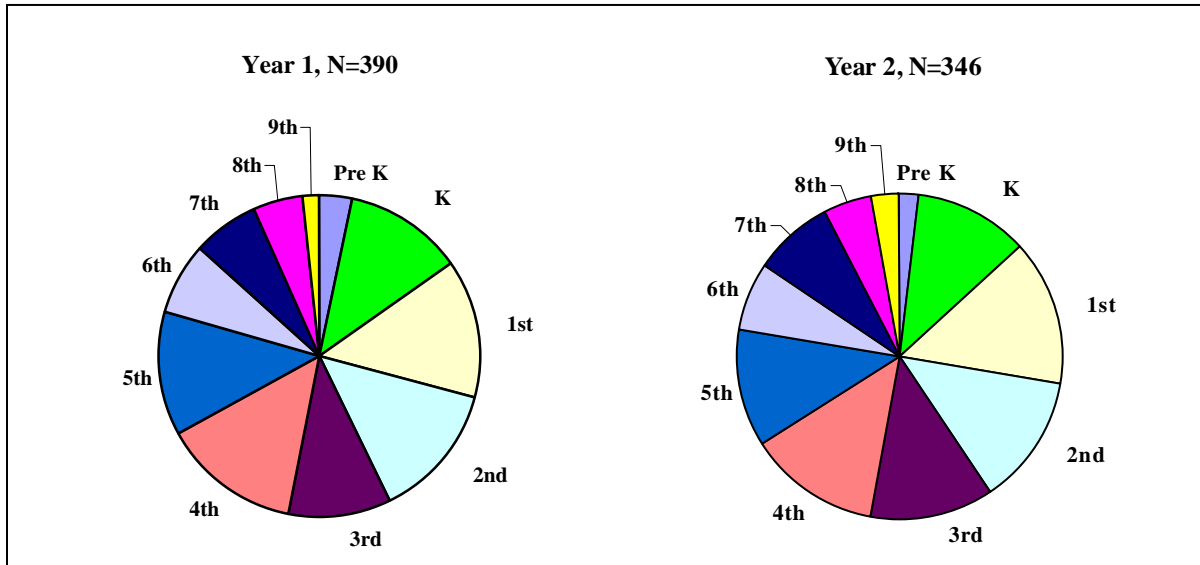
Figure 4-6. Teaching Assignments of Participating Teachers*



*Refer to Appendices page C-5 for a table with data related to this figure.

The majority of teachers participating in the TNDP taught in regular (grade level) classrooms (Figure 4-4). They comprised 82% of the participating teachers in 2000-2001 and 90% in 2001-2002. Other teachers involved in this project taught health, physical education (PE), family and consumer sciences (FCS), special education or other subjects (such as art, music, Spanish, or computer education). More health teachers participated in Idaho and more FCS teachers participated in Michigan than in the other States. Figure 4-7 shows the distribution of teachers by grade levels taught during Year 1 and 2 of this project.

Figure 4-7. Grade Levels Taught by Participating Teachers

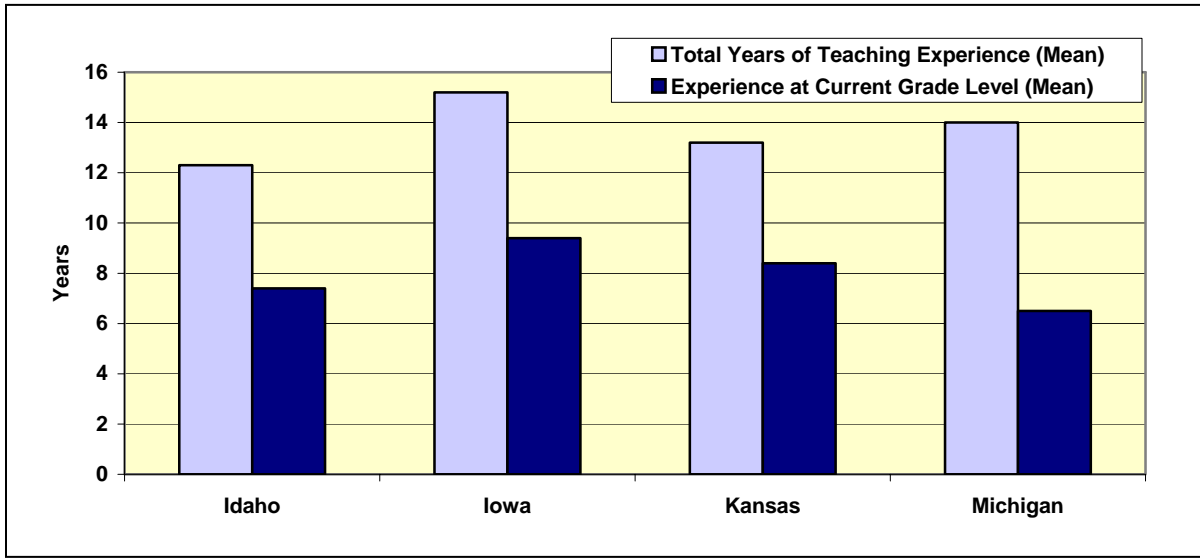


***Refer to Appendices page C-5 for a table with data related to this figure.**

Figures 4.8 and 4.9 and the table on page C-5 of the Appendices provide data about teaching experience and training of classroom teachers, and involvement of others in classroom nutrition activities. Teachers had an average of 13 years of total teaching experience and eight years at the current grade level; 29% of teachers had a master's degree; 34% had participated in nutrition workshops or other formal training; 33% had taken a college-level nutrition course; 64% had taken a PE methods course; and 52% had taken a college-level health education course.

Teachers in Iowa who participated in this project had the most total years of teaching experience and the most at their current grade level. Idaho teachers had the fewest *total* years of experience and Michigan teachers had the fewest at their *current* grade level. More teachers in Michigan had a master's degree than in the three other States. More teachers in Michigan than in other States had formal nutrition training such as from workshops but fewer had taken college-level nutrition or PE methods courses. Fewer teachers in Iowa than in other States had participated in nutrition workshops or other formal training; more Idaho teachers had taken a PE or health education methods course than participating teachers in the other States.

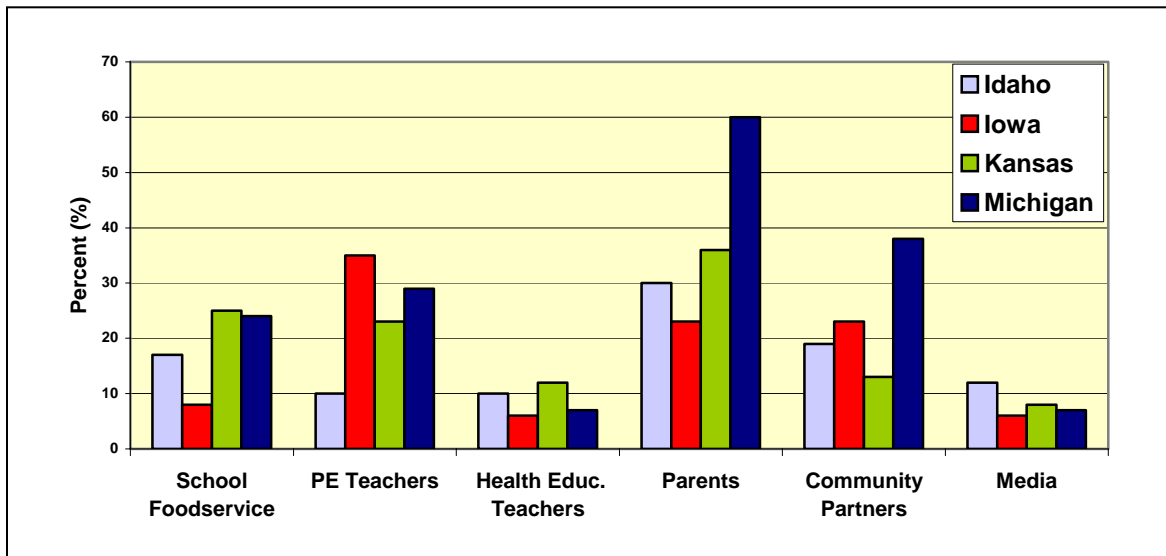
Figure 4-8. Years of Teaching Experience of Participating Teachers in Year 1*



*Refer to Appendices page C-5 for a table with data related to this figure.

Teachers reported providing a mean of 7.8 hours of nutrition instruction in their classrooms in the school year prior to the start of this project. Figure 4-9 shows involvement of other individuals involved in nutrition lessons as reported by teachers in the year before the project. Thirty-seven percent reported that they involved parents, 24% involved physical education (PE) teachers, 19% involved foodservice staff, 23% involved community partners, and 9% involved health teachers. More Michigan teachers involved parents and community partners than teachers in other States; Idaho teachers had the least involvement with PE teachers; and Iowa teachers had the least involvement with school foodservice staff.

Figure 4-9. Teachers' Involvement of Others in Classroom Nutrition prior to the TNDP*



*Refer to Appendices page C-6 for a table with data related to this figure.

E. FOODSERVICE STAFF

Fifty-three school foodservice staff members were involved in the TNDP at the beginning of Year 1 (2000-2001) of the TNDP. See Appendices page D-9. Average length of foodservice experience was 12.4 years with staff in Michigan having the most years of experience (14.6 years). Iowa foodservice staff had the least years of experience (9.7) but the highest percentage of staff with a bachelor's degree. Approximately 33% of participating foodservice staff across the four States was certified by the ASFSA or by the State.

CHAPTER V: CLASSROOM CHANNEL

- A. RFA Requirements
- B. Team Nutrition Lesson Modules
- C. Steps to Implementing TN through Classrooms
- D. Time Spent on Classroom Implementation
- E. Resources and Cost of Classroom Implementation
- F. Summary of Classroom Channel Findings

A. RFA REQUIREMENTS

According to the Request for Applications (RFA) for the TNDP:

Classroom activities will be fully implemented using materials developed by Scholastic, Inc. for USDA. That is, schools participating in the Demonstration Project should expect to implement each grade-focused module, if appropriate for that school, in a single-grade. For example, a 1st-5th grade school would have to implement Module 2 in either first or second grade and Module 3 in either third, fourth, or fifth grade.

Module 1 (*Food & Me*) is appropriate for pre kindergarten or kindergarten

Module 2 (*Food Time*) is targeted to first or second grade

Module 3 (*Food Works*) is appropriate for third, fourth, or fifth grades

yourSELF, a middle school curriculum, is directed toward grades six, seven, or eight

Fully implemented means that all classes in the grade levels selected participate. Further, each class should be exposed to activities associated with each lesson in the pertinent module.

B. TN LESSON MODULES

The classroom modules differed slightly in format/organization as shown in Table 5-1. The *Food & Me* module included nine lessons, with each lesson containing a minimum of four activities to a maximum of seven. There were a total of 52 activities in the nine lessons in *Food & Me*. The *Food Time* and *Food Works* modules contained a total of eight lessons in each module; each lesson was comprised of sequential activities identified as “Getting Started,” “Activity 1,” “Activity 2,” “Activity 3” (in two of the eight lessons), “Wrap It Up,” and “Taking It Further” for a total of 42 activities across the eight lessons in those two modules. The *yourSELF* module contained six lessons: “Are You Normal?,” “Feed Me,” “Snack Attack,” “Move It,” “Just For You,” and “What’s Your Goal?” The *yourSELF* lessons were not subdivided into activities. The Teacher’s Guides for *Food & Me*, *Food Time*, and *Food Works* identified subject areas related to each lesson: art, science, language, social studies, cooking, music and movement. The *yourSELF* Teacher’s Guide did not identify subject area links.

Table 5-1. Classroom Lesson Modules

	<i>Food & Me</i>	<i>Food Time</i>	<i>Food Works</i>	<i>yourSELF</i>
Grade Level	Pre-K and K	1-2	3-5	6-8
Lessons	9	8	8	6
Activities	52	42	42	0

C. STEPS TO IMPLEMENTING TN THROUGH CLASSROOMS

Persons Providing Lessons

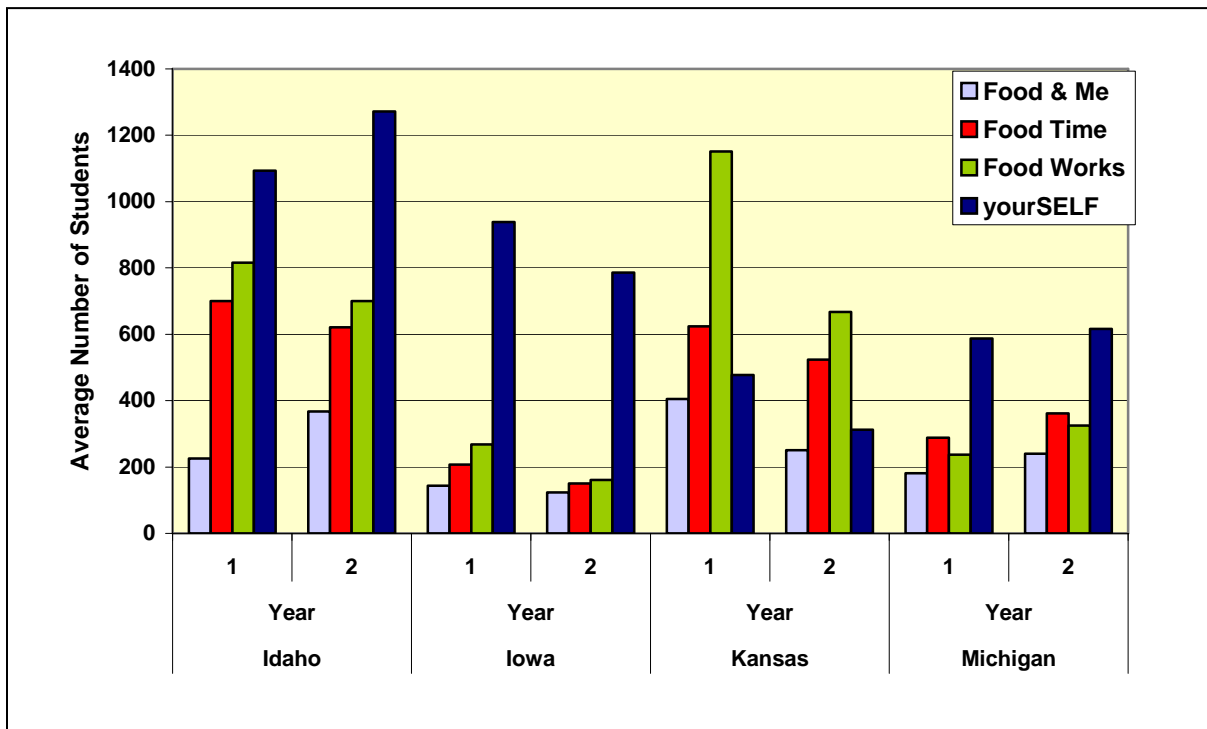
Figures in Appendix D (pages D-23, D-46, D-69 and D-79) show the job titles of individuals who were involved with planning, preparing or teaching the classroom TN lessons. Data that

those figures were based on are provided in corresponding Tables 1.1.7, 2.1.7, 3.1.7 and 4.1.5 on pages D-6, D-29, D-52, and D-74 of Appendix D. Teachers were more involved than any other group, in all four participating States, and their involvement was even greater in Year 2 than during the first year. School foodservice staff members were more involved in Idaho and teaching assistants were involved in all States. Parents were more involved in Michigan, as were Extension staff, particularly in Year 2 of the implementation. In Iowa, school nurses were more involved during Year 1. For the *yourSELF* lessons, PE teachers, health teachers and FCS teachers were more involved.

Participants

Across the four States, a total of 21,554 students were enrolled in schools that participated in the TNDP in Year 1 and 20,383 students in Year 2. Fifty-three percent of the students (and 56% in Year 2) were in classrooms that participated in the classroom channel component of the TNDP. The number of students who were taught each of the lessons and the percent of teachers offering the various lessons for each module is provided in Appendix D, Tables D-1.1.9, 2.1.9, 3.1.9 and 4.1.7 on pages D-7, D-30, D-53, and D-75. This information is summarized for both years in Figure 5-1.

Figure 5-1. Average Number of Student Participants in TN Classroom Lessons*



*Refer to Appendices D (pages D-7, D-30, D-53, D-75) for data related to this table.

Lesson Integration

Teachers were asked whether they integrated the nutrition lessons into other subject areas (and if so, which subjects) or if they taught the lessons as a stand-alone subject (nutrition). Findings are summarized in Tables D-1.1.8, 2.1.8, 3.1.8 and 4.1.6 and in the figures presented on pages D-24, D-47, D-70, and D-80 of Appendix D. *Food and Me* integration into reading and science increased from Year 1 to 2 in all States. *Food Time* (grades 1-2) lessons were most often connected with health education (especially in Idaho), science, reading (especially in Idaho and Kansas), and fine arts in Idaho and Iowa. *Food Works* lessons, like the other modules for elementary school, were integrated most into health but were also taught in science and reading. *yourSELF* lessons were integrated into science, health (especially in Idaho), PE (except in Iowa). In Michigan, the *yourSELF* lessons were not integrated into other subjects as much, perhaps because they were commonly taught as the nutrition unit of the FCS class in middle schools.

D. TIME SPENT ON CLASSROOM IMPLEMENTATION

Lesson Planning Time

Participating teachers reported “time outside of class spent planning/evaluating” for each lesson for *Food & Me*, *Food Time*, and *Food Works*. Middle school teachers reported total planning time for the six *yourSELF* lessons on one log. Planning times, for each lesson, are provided in Appendices pages, D-5, D-28, D-51, and D-72, Tables D-1.1.4, 2.1.4, 3.1.4, and 4.1.2. Graphs that correspond to those data tables are provided on Appendices pages D-21, D-44, and D-67.

Table 5-2. Average Time (Minutes) Spent Planning Classroom Lessons*

Module (# lessons)	Idaho		Iowa		Kansas		Michigan	
	Year		Year		Year		Year	
	1	2	1	2	1	2	1	2
<i>Food & Me</i> (9)	31	30	65	29	31	30	25	36
<i>Food Time</i> (8)	49	39	42	40	52	42	32	22
<i>Food Works</i> (8)	41	35	40	42	36	32	44	51
<i>yourSELF</i> (6)	43	29	28	65	41	30	63	24

***Refer to Appendices D (pages D-5, D-28, D-51, D-72) for data related to this table.**

Summary of Table 5.2:

Table 5-2 presents average planning times (minutes) for lessons in the four classroom modules taught in participating classrooms in the four States. Figures that illustrate the findings are presented in Appendix D, pages D-21, D-44 and D-67. General conclusions include the following:

- Average planning time per lesson for *Food & Me* was fairly consistent across the four States in both years (approximately 30 minutes), except for Year 1 in Iowa, which averaged 65 minutes.
- Average planning time per lesson for *Food Time* was about 40 minutes for all States except Michigan where the Year 1 average was 32 minutes and the Year 2 average was 22 minutes. Planning time was generally half of reported teaching time (Table 5-3) for this module.
- Like *Food & Me* and *Food Time*, average planning time per lesson was about half of the teaching time (Table 5-3) for *Food Works*. Year-to-year planning time for *Food Works* was fairly consistent in all States.
- There was no consistency across States in planning time for *yourSELF*; this may be attributed to the structure of the module. It averaged from a low of 24 minutes in Michigan (Year 2) to a high of 65 minutes in Iowa (Year 2). Even within States, there was little consistency from Year 1 to Year 2. For example, Iowa and Michigan reported changes of over 35 minutes in planning time from Year 1 to Year 2; and in Iowa the change was an increase, whereas in Michigan the change was a decrease.
- In Idaho and Kansas, planning time decreased from Year 1 to Year 2 for all modules; it decreased in Michigan and Iowa for *Food Time* and increased for *Food Works*. Planning time decreased in all States for *Food Time*.

Lesson Teaching Time

Teachers were required to teach at least one activity from each lesson in the TN classroom module appropriate for their grade. Teachers reported classroom **time** (minutes) spent teaching each of the activities for every lesson from the module designed for their grade level. Blank logs for each module are provided in Appendix B-7 of this report. Teaching time for *lessons* was calculated by summing times recorded for all activities taught within a lesson. Therefore, average times to teach activities within lessons, as well as for lessons as a whole were available. The average teaching times for each of the four modules (all lessons combined), for each year of implementation in the four States, are presented in Table 5-3.

Times spent teaching *lessons* are provided in Appendix D, Tables 1.1.1, 2.1.1, 3.1.1 and 4.1.1; those results are provided in graph form in figures in Appendix D, pages D-19, D-42, D-65, and D-77. Data tables for each of the lesson *activities* are located in corresponding figures provided on pages D-20, D-43, and D-66 of Appendix D. Data indicating the percentage of teachers who choose to teach the various activities are presented in Appendix D: Tables 1.1.3, 2.1.3 and 3.1.3 (pages D-4, D-27, D-50).

Although data for *activities* were not included in Table 5-3, according to Tables D-1.1.2, 2.1.2, and 3.1.2 in Appendix D, it took 30 to 35 minutes on the average to teach an activity; time increased with grade level of the modules. In Year 2, teachers taught more activities in *Food & Me* and *Food Time*; therefore, teaching times increased.

Table 5-3. Average Teaching Time (Minutes) for Classroom Lessons

Module (# of lessons)	Idaho		Iowa		Kansas		Michigan	
	Year		Year		Year		Year	
	1	2	1	2	1	2	1	2
<i>Food & Me</i> (9)	67	64	87	97	67	78	54	106
<i>Food Time</i> (8)	99	99	90	109	89	85	55	55
<i>Food Works</i> (8)	97	113	78	82	76	70	154	95
<i>yourSELF</i> (6)	83	77	67	88	53	43	69	55

*Refer to Appendices D (pages D-3, D-26, D-49, D-72) for data related to this table.

Summary of Table 5-3:

- Average time to teach lessons from Year 1 to Year 2 varied within and across States. It increased in Idaho for *Food Works*; for all modules in Iowa; and for *Food & Me* in Kansas and Michigan; and it decreased for the other three modules in Kansas.
- Teaching time increased in Iowa, Kansas, and Michigan for *Food & Me* (Pre K and K).
- Average time to teach the *Food Time* lessons (grades 1-2) remained the same from Year 1 to Year 2 for Idaho and Michigan, increased in Iowa, and decreased slightly in Kansas.
- Teaching time increased in Idaho and Iowa for *Food Works* (grades 3-5) and decreased in Kansas and Michigan. The increase in teaching time in Idaho was probably related to the fact that more activities were taught within lessons during Year 2.
- For the middle school curriculum, *yourSELF*, teaching time for lessons decreased in three States and increased in Iowa.
- Across the four modules, *Food Time* took the longest time to teach in Year 1 in all States except in Michigan (where *Food Works* had the longest teaching time).

Planning and Teaching Time

Table 5-4. Average Time Spent Planning and Teaching Lessons* and Modules for all States (Combined for Year 1 and 2)

Module	Lesson (Time to plan)	Lesson (Time to teach)	Lesson (Plan+Teach)	Module (Planning)	Module (Teaching)	Module Total (Plan+Teach)
<i>Food & Me</i>	.6 hours (34 minutes)	1.3 hours	1.9 hours	5.2 hours	11.6 hours	16.8 hours
<i>Food Time</i>	.7 hours (40 minutes)	1.4 hours	2.1 hours	5.3 hours	11.3 hours	16.6 hours
<i>Food Works</i>	.7 hours (40 minutes)	1.5 hours	2.2 hours	5.3 hours	12.7 hours	18.0 hours
<i>yourSELF</i>	.7 hours (41 minutes)	1.2 hours	1.9 hours	3.3 hours	4.9 hours	8.2 hours

****Food & Me* contains nine lessons, *Food Time* and *Food Works* have eight, *yourSELF* has six**

Summary of Table 5-4:

- About 34 to 41 minutes were used to plan an average lesson which accounted for about 33% of the total time needed to teach *and* plan lessons. Teaching time was about twice as long as time for planning. Time to plan was shortest for *Food & Me* (Pre K and Kindergarten).
- Time needed to plan, to teach, and combined times for planning and teaching a lesson increased with grade level, except for *yourSELF* which has fewer lessons. Combined planning and teaching times ranged from just under two hours for a lesson for *Food and Me* and *yourSELF* to 2.2 hours for an average lesson for *Food Works*. Since teaching time for an entire lesson was 90 minutes and an average activity took about 30 minutes, teachers in the TNNDP were teaching about three of the activities from each kit.
- Time to plan for the entire module was shorter (3.3 hours) for *yourSELF* (which has six lessons) and longer (5.2 to 5.3 hours) for the three modules for elementary school grades (which have eight or nine lessons per module).
- Total time to teach all lessons in a module (with the exception of *yourSELF*) ranged from approximately 11½ hours for *Food & Me* and *Food Time* to almost 13 hours for *Food Works*. If teachers provided one activity per day from these modules and took about 30 minutes to teach an activity, it would take about five weeks to complete the curriculum.
- On an average, it took teachers about eight hours to plan and teach *yourSELF* and from 16½ to 18 hours to teach one of the three modules for K-5 grades.

E. Resources and Cost of Classroom Implementation

Module Items Used

In order to determine **resources** used for the classroom lessons, participating teachers were asked to indicate on each classroom log which of the components included in each classroom module they used. Components provided with each of the four modules varied. For the elementary school modules, the percentage of teachers using each component was calculated for each lesson and averaged for all lessons in a module. Results are presented by module in the tables in Appendix D, Tables D-1.1.5, 2.1.5, 3.1.5 and 4.1.3 on pages D-5, D-28, D-51, and D-73.

Table 5-5 summarizes information about which components/items teachers used when teaching the module appropriate for their grade level. Since the items in each module varied, the components listed in the table do also.

Summary of Table 5-5:

- Most teachers in all four States, especially for *yourSELF*, reported using the **Teacher Guide** that was supplied with the classroom modules. Teachers were more likely to use the **Teacher Guide** for *yourSELF* than the other modules.
- Other than the Teacher Guide, the most frequently used item for *Food & Me* was the **parent reproducibles**, with 29 to 59% of the teachers using them. In Iowa, more than half of the *Food & Me* teachers used the parent reproducibles both years. Use was similarly high in Michigan in Year 1 but not in Year 2.
- For *Food Time*, the **poster** was the most frequently used item other than the Teacher Guide, with between 23-45 % of the teachers using it. However, use of the poster decreased from Year 1 to Year 2 in all of the States except Idaho.
- For *Food Works*, there was no clear pattern of usage of the items from the module across the four States. Other than the Teacher Guide, the **magazine** was generally the most popular item in Idaho, Iowa, and Kansas whereas the **poster** was the most popular item in Michigan. Use of items from this kit was generally lower in Kansas than in the other three States; this may have been due to Kansas' strategy to concentrate on a *Dietary Guideline* each month. Use of the *Food Works* magazine and the newsletter decreased in all States from Year 1 to Year 2.
- For *yourSELF*, similar to *Food Works*, there was no clear pattern of usage for items across the four States except that use of the **opening video** decreased from Year 1 to Year 2 in all States. In general, Kansas used items from *yourSELF* module less frequently than other States.
- Usage of **posters** generally increased as grade level increased.
- Usage of most module components decreased from Year 1 to Year 2 in all four modules.

Table 5-5. Average Percentage (%) of Teachers Using Module Components*

Module Component	IDAHO		IOWA		KANSAS		MICHIGAN	
	Year		Year		Year		Year	
	1	2	1	2	1	2	1	2
<i>Food & Me</i>								
Teacher Guide	73	80	75	49	69	89	89	69
Magazine	10	9	20	7	14	9	21	29
Take-out Newsletter	15	9	14	2	12	5	5	19
Poster	21	17	22	11	17	15	42	36
Reproducibles	32	29	59	56	31	32	52	29
<i>Food Time</i>								
Teacher Guide	68	72	76	79	63	45	63	66
Video	31	26	27	15	26	16	20	23
Magazine	14	17	22	13	11	11	22	35
Newsletter	15	6	21	16	12	9	16	19
Poster	36	44	40	37	33	23	45	40
Audiotape: Teachers	15	0	29	44	28	13	29	0
Student Quiz	23	2	36	56	28	38	36	3
Lunchroom Link	24	28	22	25	21	19	13	34
<i>Food Works</i>								
Teacher Guide	78	80	93	76	64	50	67	44
Video	32	38	36	26	20	13	37	24
Magazine	42	36	44	32	24	20	55	31
Newsletter	18	15	24	22	12	7	32	14
Poster	37	29	14	30	23	17	64	38
Lunchroom Link	25	23	20	24	18	9	34	22
<i>yourSELF</i>								
Teacher Guide	96	94	91	88	82	78	92	100
Video	55	44	64	50	25	6	62	67
Opening Video	52	39	82	63	18	17	85	67
Poster	70	50	91	63	46	39	69	67
Optional Activities	56	67	45	50	21	28	38	11
Closing Video	48	17	45	13	11	6	62	67

*Refer to Appendices D (pages D-5, D-28, D-51, D-73) for data related to this table.

Supplies and Materials Used (other than in the module)

Teachers were also asked to indicate which additional supplies and materials used with each lesson. Data are provided for each module in Appendix D (Tables D-1.1.6, 2.1.6, 3.1.6, and 4.1.4). Corresponding figures with the information in graph form are located in Appendices pages D-22, D-45, D-68, and D-78.

The percentages of teachers using the various supplies and materials are provided on the next page as Table 5-6.

Summary of Table 5-6:

- Across all four modules and all four States, **food** was the most frequently used supply.
- **Art supplies** were the second most frequently used supply. They were especially popular for *Food Time* and *Food Works*, particularly in Idaho and Iowa and for *Food Works* in Michigan.
- Teachers reported highest use of **food preparation equipment** with *Food & Me* and *yourSELF* lessons.
- **Handouts and brochures** and **books** were used somewhat frequently with all modules.
- The *yourSELF* module was taught with a greater variety of all supplies and teachers reported the highest usage of **computer/Internet, food preparation equipment, handouts and brochures, other materials and supplies, posters and banners, and videos**, compared to the other modules.
- **Decorations** were the least used materials for all modules.

Table 5-6. Average Percentage of Teachers Using Additional Supplies with Each Module in All States

	Idaho		Iowa		Kansas		Michigan	
	Year		Year		Year		Year	
	1	2	1	2	1	2	1	2
<i>Food & Me</i>								
Art Supplies	28	25	33	40	28	27	27	40
Books	33	32	64	53	50	44	59	46
Computer & Internet	1	5	3	7	4	2	0	6
Decorations	2	3	3	4	3	5	6	10
Food	65	72	71	69	58	57	52	54
Food Prep Equipment	46	24	41	42	25	29	28	50
Handouts and Brochures	13	4	18	33	18	18	23	19
Other Materials & Supplies	4	3	25	2	7	5	17	14
Posters & Banners	18	7	15	25	15	9	37	31
Videos	3	5	5	4	7	9	11	6
<i>Food Time</i>								
Art Supplies	49	52	61	55	35	32	41	39
Books	29	34	40	31	28	16	10	29
Computer & Internet	6	7	2	12	5	6	1	0
Decorations	7	8	7	3	1	4	1	3
Food	46	49	27	21	35	40	20	24
Food Prep Equipment	25	25	9	6	15	21	5	8
Handouts & Brochures	27	32	24	22	24	29	39	25
Other Materials & Supplies	9	8	27	4	14	11	6	12
Posters & Banners	26	32	26	19	19	21	25	18
Videos	10	10	4	3	13	11	2	3
<i>Food Works</i>								
Art Supplies	31	38	24	32	21	14	61	43
Books	13	19	2	10	13	11	21	22
Computer & Internet	6	10	10	14	11	9	4	5
Decorations	4	9	3	14	2	5	0	3
Food	46	41	32	18	29	28	32	15
Food Prep Equipment	18	16	8	8	9	9	33	9
Handouts & Brochures	31	28	25	2	29	23	23	39
Other Materials & Supplies	11	10	32	10	13	10	3	3
Posters & Banners	21	19	8	14	18	17	22	33
Videos	7	9	3	6	7	6	19	3
<i>yourSELF</i>								
Art Supplies	48	17	45	25	29	33	31	11
Books	26	22	27	25	14	11	31	11
Computer & Internet	30	28	55	63	36	28	15	22
Decorations	4	0	0	0	0	0	0	0
Food	78	50	55	88	32	39	54	78
Food Prep Equipment	67	50	45	38	18	33	46	11
Handouts & Brochures	67	61	27	38	46	78	46	78
Other Materials & Supplies	30	33	55	63	36	28	15	22
Posters & Banners	51	33	27	25	25	44	38	33
Videos	15	28	27	50	18	11	31	22

Costs Associated with Teaching Classroom Modules

The average cost of teaching all lessons in each of the four modules is summarized in Figures 5-2, 5-3, 5-4, and 5-5 that follow. Costs do not include the expense of purchasing the lesson modules; they were provided by USDA FNS for schools participating in the TNDP. The cost of these four modules ranged from \$24 to \$35 each.

The costs of teaching the modules were divided into actual expenses and the value of donated items. More detailed data about cost to teach the classroom lessons are provided in Appendices (pages D-8, D-31, D-54, and D-76).

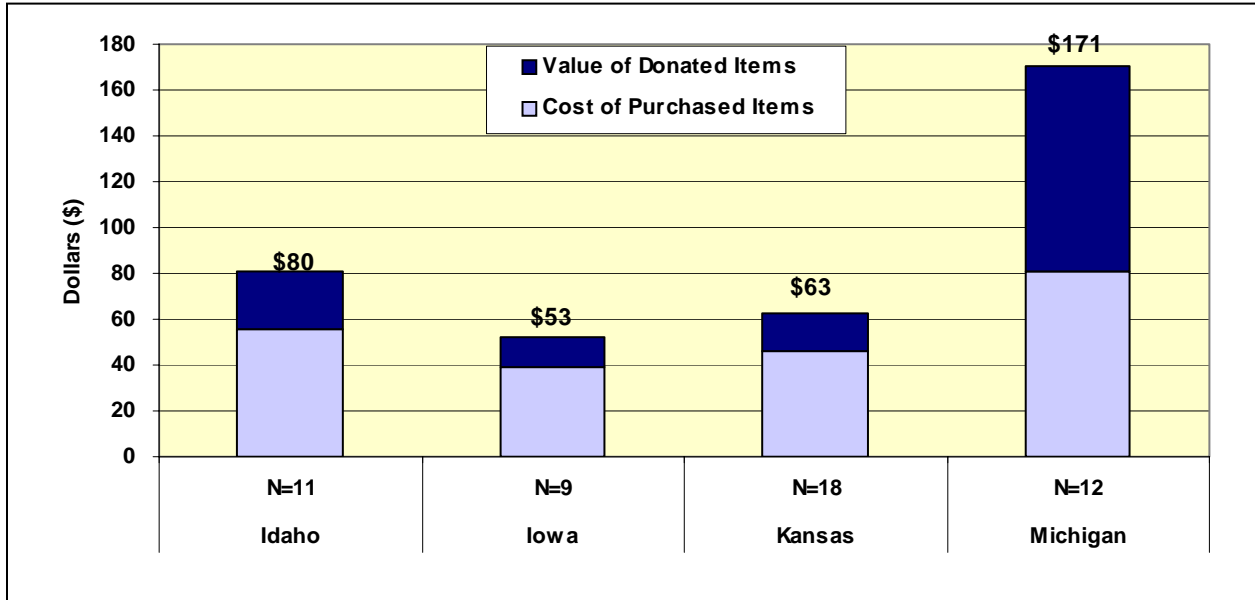
Pre K and Kindergarten Lessons (Food & Me). Figure 5-2 shows the cost to teach *Food & Me* was highest in Michigan at \$171 (due to cost of food used in lesson activities) and ranged from \$53 to \$80 in the other three States. The average cost of purchased and the value of donated items per classroom was \$92. **Purchases** were about \$55 per classroom for food and supplies. The average value of **donated** items was \$36 per classroom. Seventy-one percent of the TNDP grant funds used for *Food & Me* were used to buy food.

Grades One and Two (Food Time). Figure 5-3 shows the cost to teach *Food Time* lessons were highest in Idaho (\$112) and lowest in Iowa (\$18). The average cost of purchased and the value of donated items per classroom was \$68. **Purchases** averaged \$48 while **donated** items were valued at \$21 (per classroom) for supplies, services, and food. Seventy percent of the TNDP grant funds were used to buy food.

Grades Three through Five (Food Works). Figure 5-4 shows the cost to teach *Food Works* lessons ranged from \$38 in Iowa to \$71 in Idaho. The average cost of purchased and the value of donated items per classroom was \$56. **Purchases** were about \$40 per classroom for supplies, food and services and the average value of **donated** items was \$16. Eighty-two percent of the TNDP grant funds were used to buy food.

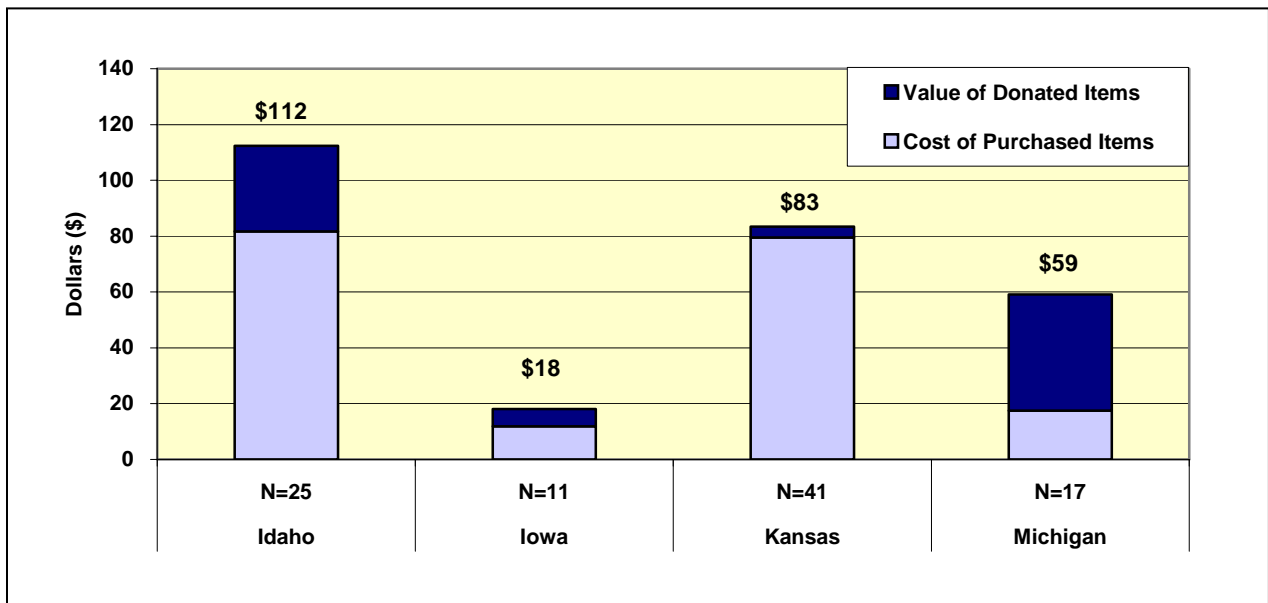
Grades Six through Eight (YourSELF). Figure 5-5 shows the overall costs for *yourSELF* ranged from \$34 per classroom in Michigan to \$99 in Kansas. The average cost of purchased and the value of donated items, per classroom was \$64. **Purchases** were about \$61 per classroom for supplies, food and services. The average value of **donated** items was only \$3 per classroom. Sixty-four percent of TNDP grant funds were used to buy food. Donations of materials, food, and services were much lower for those who taught the *yourSELF* lessons.

Figure 5-2. Average Cost of Teaching *Food & Me* Lessons per Classroom*



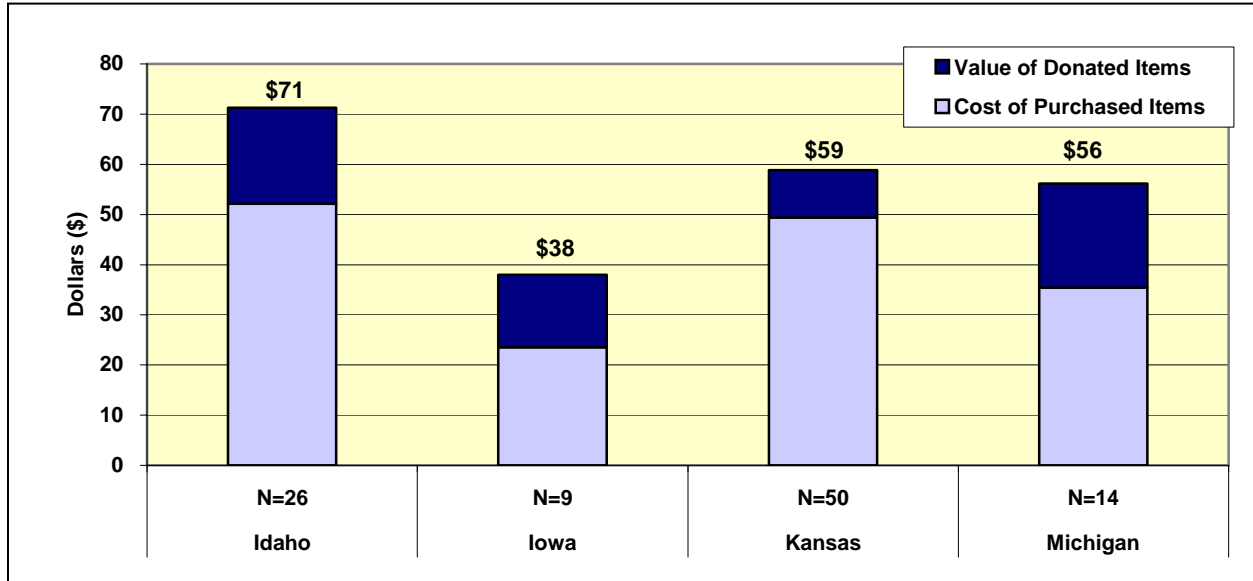
*Refer to Appendices page D-8 for a table with data related to this figure.

Figure 5-3. Average Cost of Teaching *Food Time* Lessons per Classroom*



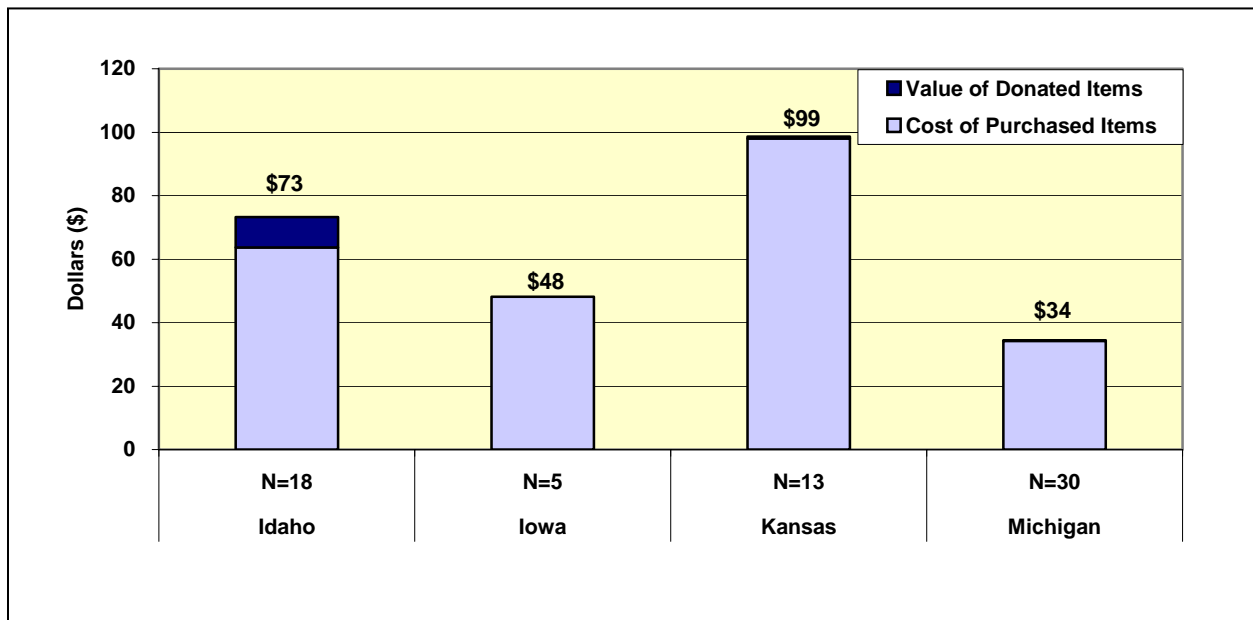
*Refer to Appendices page D-31 for a table with data related to this figure.

Figure 5-4. Average Cost of Teaching *Food Works* Lessons per Classroom*



*Refer to Appendices page D-54 for a table with data related to this figure.

Figure 5-5. Average Cost of Teaching *yourSELF* Lessons per Classroom*



*Refer to Appendices page D-76 for a table with data related to this figure.

F. SUMMARY OF CLASSROOM CHANNEL FINDINGS

- Across the four States, a total of 21,554 students were enrolled in schools that participated in the TNDP in Year 1 and 20,383 students in Year 2. Fifty-three percent of the students (and 56% in Year 2) were in classrooms that participated in the classroom channel component of the TNDP.
- About 34 to 41 minutes were used to plan an average lesson which accounted for about 33% of the total time needed to teach *and* plan lessons. Teaching time was about twice as long as time for planning.
- Most teachers in all four States, especially for *yourSELF*, reported using the Teacher Guide that was supplied with the classroom modules.
- Across all four modules and all four States, **food** was the most frequently used supply. Art supplies were the second most frequently used supply.
- The cost to teach *Food & Me* lessons ranged from \$53 to \$171 per classroom in the four TNDP States; *Food Time* lesson costs ranged from \$18 to \$112; *Food Works* lesson costs ranged from \$38 to \$71; and the *yourSELF* lessons ranged from \$34 to \$99.

CHAPTER VI: CAFETERIA CHANNEL

- A. RFA Requirements
- B. Steps to Implementing TN through Cafeteria Events
- C. Time Spent on Cafeteria Channel Implementation
- D. Resources and Cost of Cafeteria Channel Implementation
- E. Summary of Cafeteria Channel Findings

A. RFA REQUIREMENTS

Foodservice Initiatives were defined in the RFA for the TNDP as follows:

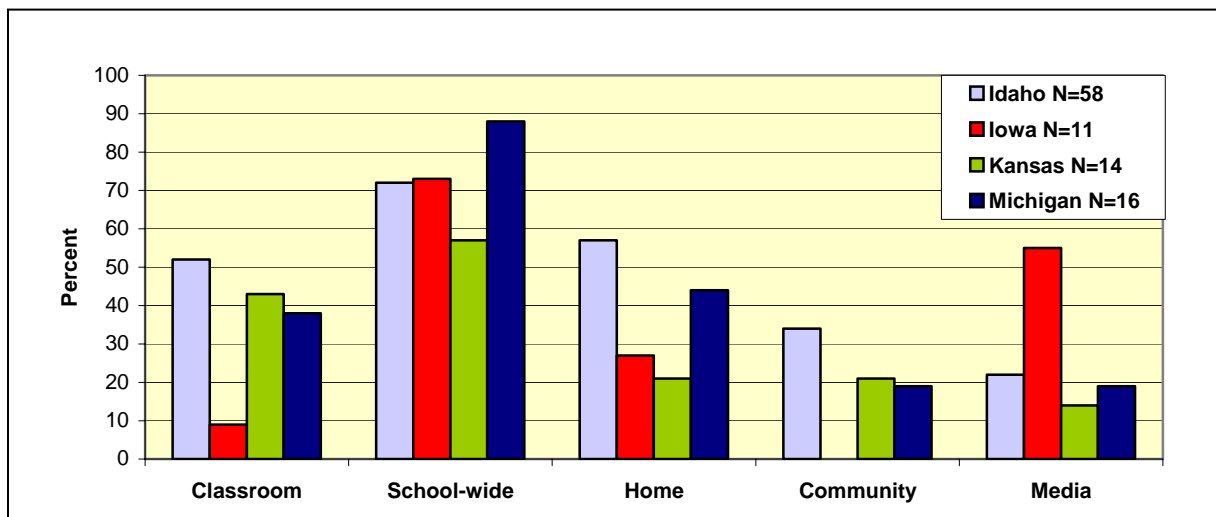
Foodservice Initiatives require that by the start of the 2000-01 School Year, the lunches served are consistent with the Dietary Guidelines for Americans. In addition, participating schools should provide all of their foodservice staff with at least 10 hours of training during the two-year implementation period that is consistent with USDA's School Meals Initiative. Finally, each participating school is expected to implement two nutrition promotion events in the cafeteria during each year of the project.

Descriptions of training for foodservice staff in the four States were provided in Chapter III. All States used the same log form to collect information about events offered in the cafeteria channel (see Appendices pages B-22 to B-24). A total of 99 cafeteria events were completed in the TNDP. The number of events in each State that contributed to this total was: Idaho (58), Iowa (11), Kansas (14) and Michigan (16).

Relationship with Other Channels

As shown in Figure 6-1, in all States, the channel **most** commonly linked with cafeteria events was the school-wide channel. The channels that foodservice initiatives linked with **least** often were community and media channels, except in Iowa where 55% of the cafeteria events were linked with the media. The largest variance across States occurred for the classroom channel (52% of the events were linked with the classroom channel in Idaho compared to 9% in Iowa). The highest variance within a State occurred for Iowa with linkage between channels ranging from 0% (for community channel) to 73% (for school-wide events).

Figure 6-1. Relationship between Cafeteria Channel Events and Other Channels (%)*



*Refer to Appendices page E-3 for data related to this figure.

Messages Communicated

Figure 6-2 indicates that the TN messages communicated most often by events in the cafeteria channel were “eat a variety of foods” and “eat more fruits, vegetables, and grains” and the message communicated least in all States was “be physically active.” The message that had the most variability across States was “eat lower-fat foods more often” which was communicated in 94% of the events in Michigan and only 21% in Kansas. Iowa reported the most variability within a State with percents ranging from 0% of the cafeteria events communicating the message to “be physically active” to 91% of their events communicating the message “eat more fruits, vegetables, and grains.”

Figure 6-2. Team Nutrition Messages Communicated by Cafeteria Events*



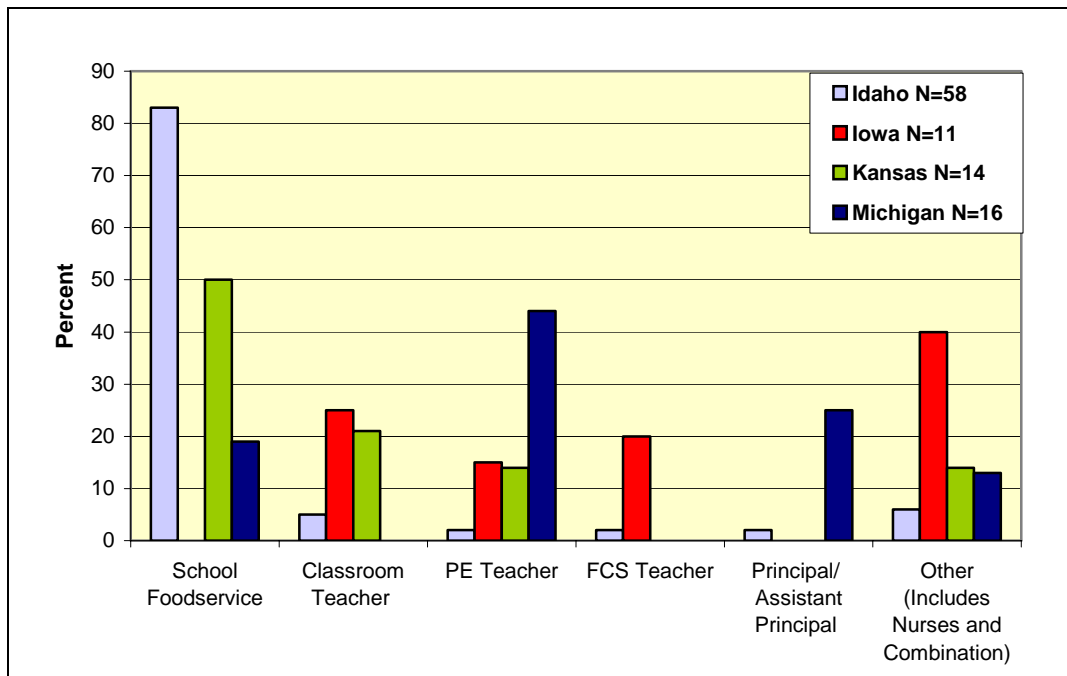
*Refer to Appendices page E-3 for data related to this figure.

B. STEPS TO IMPLEMENTING TN THROUGH CAFETERIA EVENTS

Event Coordinators

School foodservice staff was primarily responsible for planning, preparing, and conducting cafeteria events (Figure 6-3) except in Iowa where no events were coordinated by school foodservice staff. This was because in Iowa, all channel activities were coordinated by team leaders/coordinators—foodservice staff was on the TN team, but were not coordinators. PE teachers were the only group that coordinated cafeteria events in all four States ranging from a low of 2% in Idaho to a high of 44% in Iowa.

Figure 6-3. Job Titles of Cafeteria Channel Event Coordinators (%)*



*Refer to Appendices page E-3 for data related to this figure.

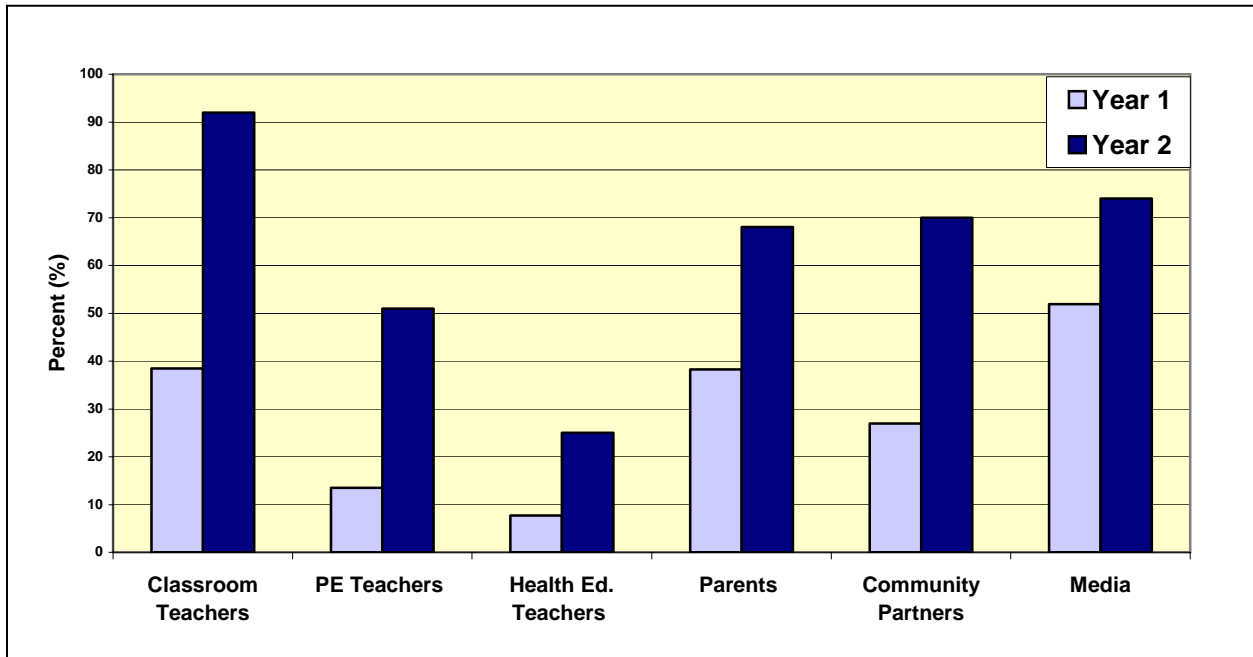
Event Helpers

In all States, foodservice staff was the most common group to assist coordinators with cafeteria events; in Iowa, they assisted with all the events in the cafeteria channel (see Appendices page F-4). In three States, teachers were the second most common group to assist with cafeteria events. Students were the third most common group and helped in 40% of the events in Idaho, 18% in Iowa, 36% in Kansas, and 50% of the events in Michigan. In at least half of the cafeteria channel events in Michigan, helpers included teaching assistants or principals. PE teachers, FCS teachers, school nurses, and community members helped for a higher percentage of activities in Iowa than all other States combined. In Iowa, the team planned all events—the team was headed by the school leader (who coordinated the events) but was assisted by teams that were required to have PE teachers, FCS teachers, school nurses, and community members.

Additionally, there was an increase of foodservice staff involvement of others in the school foodservice program from Year 1 to Year 2¹ (Figure 6-4). In Year 1 of the project, 41% of school foodservice staff in participating schools reported that they involved classroom teachers in their programs, 38% involved parents, and 27% involved community partners. Foodservice program involvement increased for these three groups during Year 2 (2001-02) with 91% involving classroom teachers, 69% involving parents, and 71% involving community partners.

¹In this instance, Year 1 refers to the first year of the TNDP (i.e., the year that preceded the implementation phase); Year 2 refers to the second year of the TNDP (i.e., the first year of implementation).

Figure 6-4. Foodservice Staff Involvement of Others*

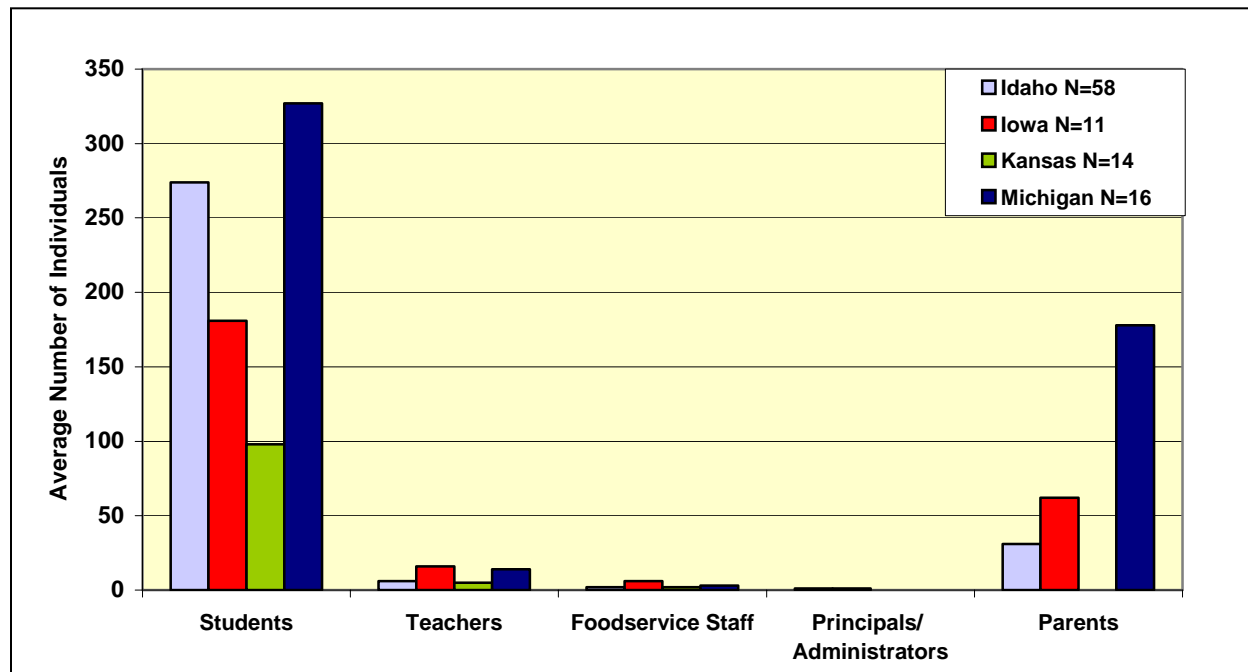


***Refer to Appendices page C-9 for tables with data related to this figure.**

Audiences Reached

Figure 6-5 indicates that in all States, students were reached by cafeteria events more than any other group (see Appendices page E-6, Table E-1.1.9). A total of 24,513 students were reached by the 99 events (mean number of students=248 and range of 98 to 327). Except in Kansas, large numbers of parents were reached by cafeteria events. In Kansas, very few parents were reached through cafeteria events because such events were often categorized as being a secondary channel with school-wide events as the primary channel. Therefore, in Kansas, parents reached were recorded under the school-wide channel. In Michigan, an average of 178 parents was reached with each cafeteria event. This might be due to the fact that many of the cafeteria events were also school-wide events in which parents were invited. The average number of teachers reached through the cafeteria events was higher in Iowa (16) and Michigan (14) than in Idaho (6) and Kansas (5). A total of 31,227 persons (all groups, all States) were reached through cafeteria channel activities with an average of 315 per event and a range of 107 per event in Kansas to 531 per event in Michigan.

Figure 6-5. Cafeteria Channel Event Participation/Attendance*



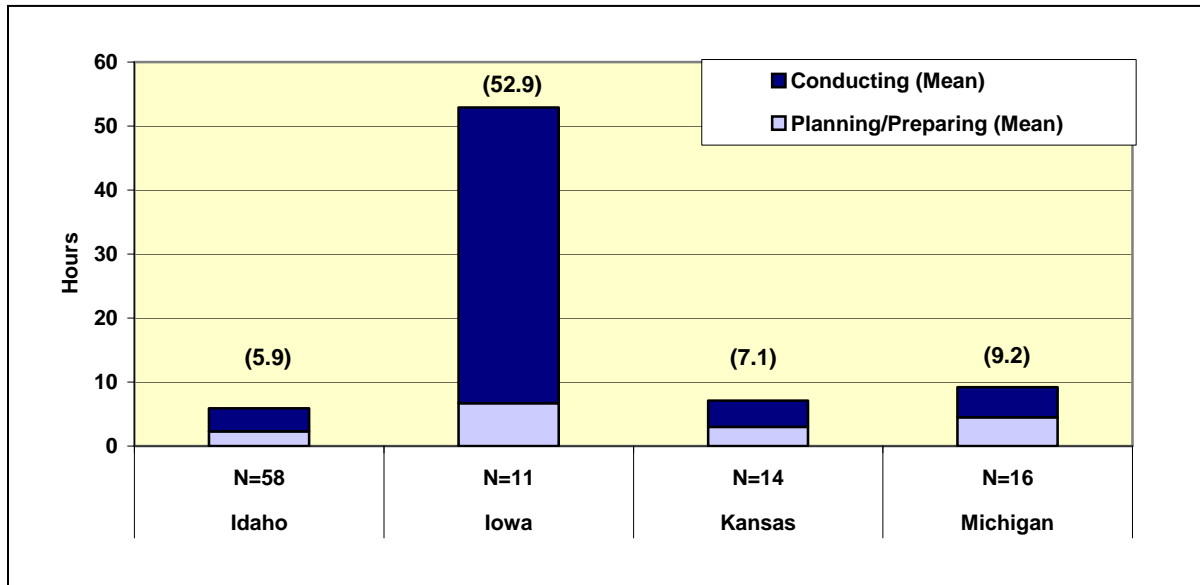
*Refer to Appendices page E-7 for data related to this figure.

C. TIME SPENT ON CAFETERIA CHANNEL IMPLEMENTATION

Event Coordinators

Figure 6-6 indicates that average time spent planning and preparing for cafeteria channel events by the event coordinator ranged from 2.3 to 6.7 hours (Table E-1.1.4). Coordinators spent from 3.6 hours in Idaho to 46.2 hours in Iowa conducting the events. Time to plan and conduct events in Iowa was longer because their activities were offered multiple times throughout the year. For example, in two schools a healthy snack cart provided nutritious snacks (fruit and carrots) every day. Another school had a daily Breakfast-in-a-Bag program. One school worked with students to create poems based on the daily menu and Food Guide Pyramid. Conducting the cafeteria events took longer in all States than planning/preparing the event. Combined planning *and* conducting times were shortest in Idaho and longest in Iowa. The shorter times in Idaho may be due to the involvement of the foodservice director at the district level. The director could plan and conduct the same events at various schools, therefore taking less time per school, on the average.

Figure 6-6. Time Spent by Coordinators to Plan/Prepare and Conduct Cafeteria Events (Hours)*



*Refer to Appendices page E-4 for data related to this figure.

Event Helpers

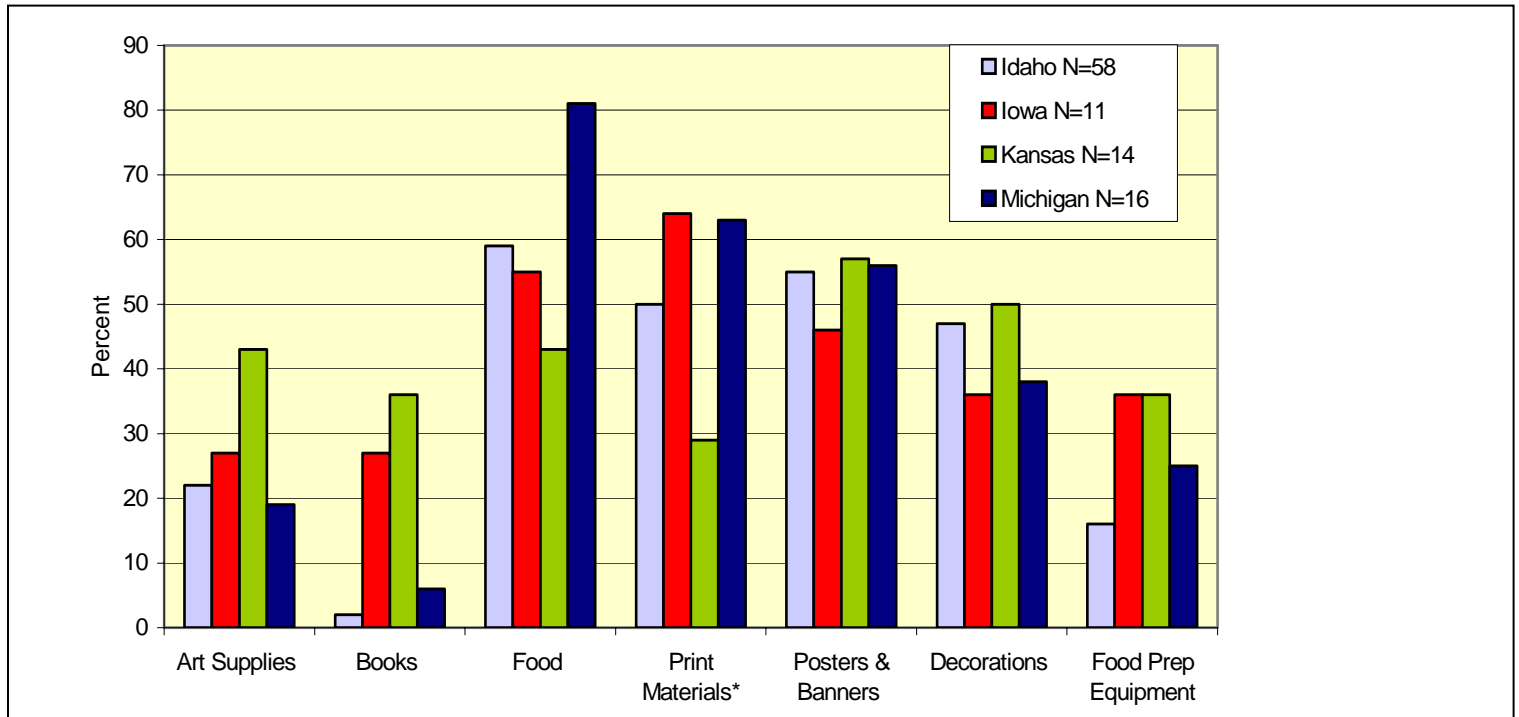
Hours spent by persons who helped plan/prepare cafeteria events ranged from 2.0 to 3.2 in three States (see Appendices page E-5, Table E-1.1.6). In Iowa, the planning time of helpers averaged 28.3 hours because their cafeteria channel events occurred throughout the year. Helpers in all States but Iowa spent an average of 1.9 to 4.9 hours conducting events. Planning time was shortest in Idaho and longest in Iowa; these results were consistent with time spent by coordinators. Planning time contributed by helpers was shorter in three of the States (Idaho, Kansas, and Michigan) than time spent by coordinators.

D. RESOURCES AND COST OF CAFETERIA CHANNEL IMPLEMENTATION

Supplies

Figure 6-7 shows that the most frequently used supplies were food (especially in Michigan), followed by posters/banners, handouts, brochures and other printed materials. The least-used supplies were videos, computers/Internet, and books; Kansas had the highest usage of art supplies and books and lowest usage of printed materials. Food preparation equipment was used least in Idaho.

Figure 6-7. Materials and Supplies Used for Cafeteria Channel Events (%)*



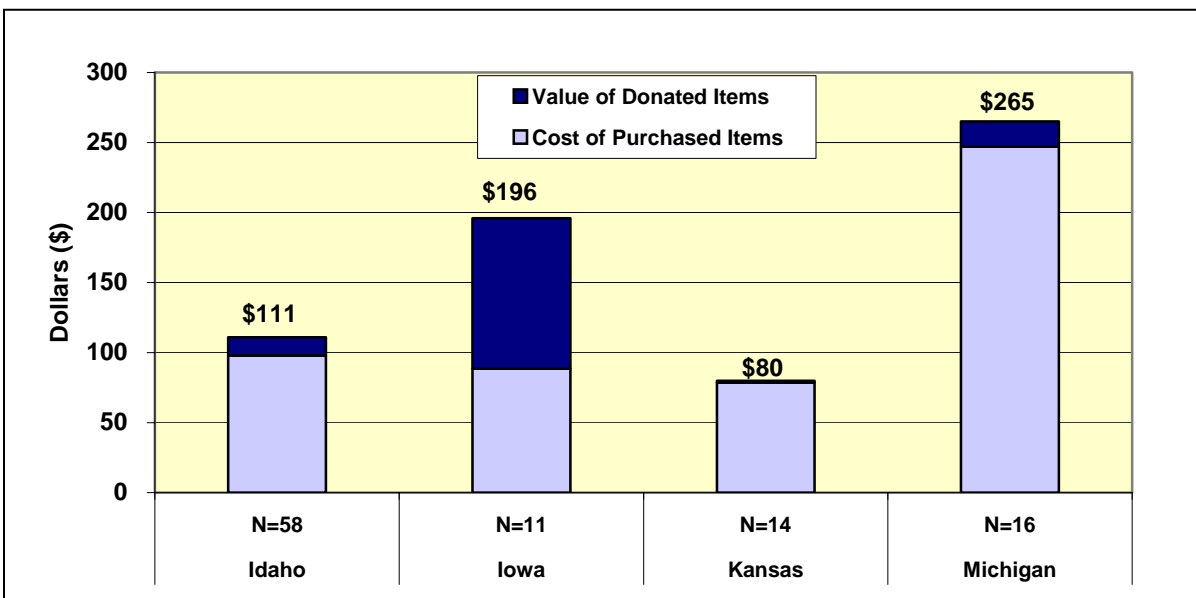
***Refer to Appendices page E-5 for data related to this figure.**

**Printed materials included handouts, brochures, and other printed materials.*

Cost

Figure 6-8 indicates that the total cost of cafeteria channel events ranged from \$80 in Kansas to \$265 in Michigan (see Appendices page E-6, Table E-1.1.8). Materials and food were the primary cost in all four States with the mean cost of purchased items per event ranging from \$79 in Kansas to \$247 in Michigan. TN funds were used to pay most of the cost for cafeteria events, except in Iowa where the value of donated items was greater than purchases from TNDP funds. The foodservice department donated food in three States, materials in two States, and services in one State. Iowa had the highest average value of \$107 donated per event by school foodservice, community, and parents combined. In Iowa, two schools involved grocery store sponsors who donated most of the food for their events. Parent donations were minimal in all four States.

Figure 6-8. Average Total Cost of Conducting Cafeteria Channel Events*



*Refer to Appendices page E-6 for data related to this figure.

E. SUMMARY OF CAFETERIA CHANNEL FINDINGS

- The cafeteria channel was linked most commonly with school-wide events.
- Students were reached more often by cafeteria events than any other groups.
- *“Eat a variety of foods”* and *“Eat more fruits, vegetables, and grains”* were the most communicated messages. *“Be physically active”* was the TN message least communicated through cafeteria events.
- In Idaho and Kansas, foodservice staff was the group most likely to coordinate cafeteria events. In Iowa, teams coordinated cafeteria events; in Michigan, PE teachers coordinated the highest percentage of events.
- Foodservice staff involvement of others in the school foodservice program, particularly teachers, parents, and community partners, increased between pre-implementation and first year implementation.
- Students were the most frequent participants in cafeteria events; parents were the second most frequent participants.
- Planning time for event coordinators was shorter than time spent to conduct the activities.
- The most frequently used supplies for cafeteria events were food, posters/banners, handouts, brochures and other printed materials.
- Average cost per cafeteria event ranged from \$80 to \$265, depending on the scope of the event, and reached an average of 98 to 327 students per event.

CHAPTER VII: SCHOOL-WIDE CHANNEL

- A. RFA Requirements
- B. Steps to Implementing TN through School-wide Events
- C. Time Spent on School-wide Channel Implementation
- D. Resources and Cost of School-wide Channel Implementation
- E. Summary of School-wide Channel Findings

A. RFA REQUIREMENTS

The RFA for the TNDP defined the school-wide channel as follows:

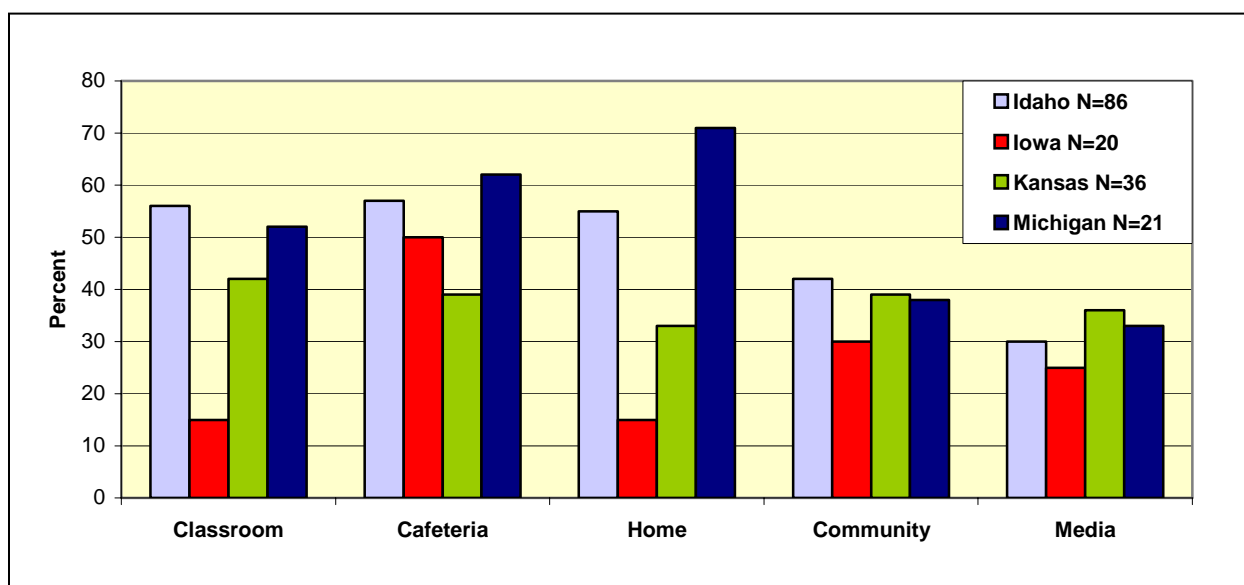
School-wide events refer to activities that convey Team Nutrition messages to the entire student body of each school participating in the Demonstration Project. These might include hallway art displays, a series of PA announcements, special assemblies, or cafeteria exhibits. Every school participating in the Demonstration Project is expected to implement at least two such activities during each year of the project.

TNDP Schools conducted a total of 163 school-wide events in all four States (Idaho-86, Iowa-20, Kansas-36; and Michigan-21).

Relationship with Other Channels

Figure 7-1 indicates the primary channel that school-wide events linked with overall among the four States was the cafeteria channel. The next most popular channels for linkages with school-wide events were the home and classroom channels.

Figure 7-1. Relationship between School-wide Channel Events and Other Channels (%)*

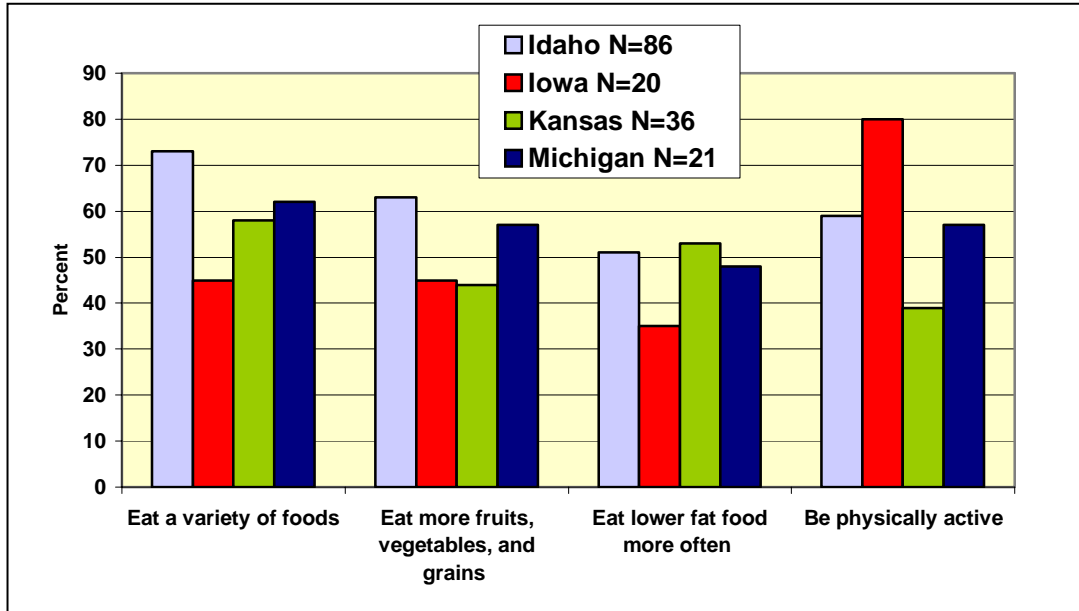


***Refer to Appendices page E-8 for data related to this figure.**

Messages Communicated

As indicated in Figure 7-2 (see Appendices page E-8, Table E-1.2.1), the TN messages primarily communicated for the school-wide channel events were: “*Eat a variety of foods,*” and “*Be physically active.*” Iowa communicated the “*Be physically active*” message in 80% of their school-wide events. Iowa required a physical education teacher to be a member of the school team and required schools to enhance the physical activity program as a part of the TNDP. This may have influenced the promotion of this message in their school-wide events.

Figure 7-2. Team Nutrition Messages Communicated by School-wide Events (%)*



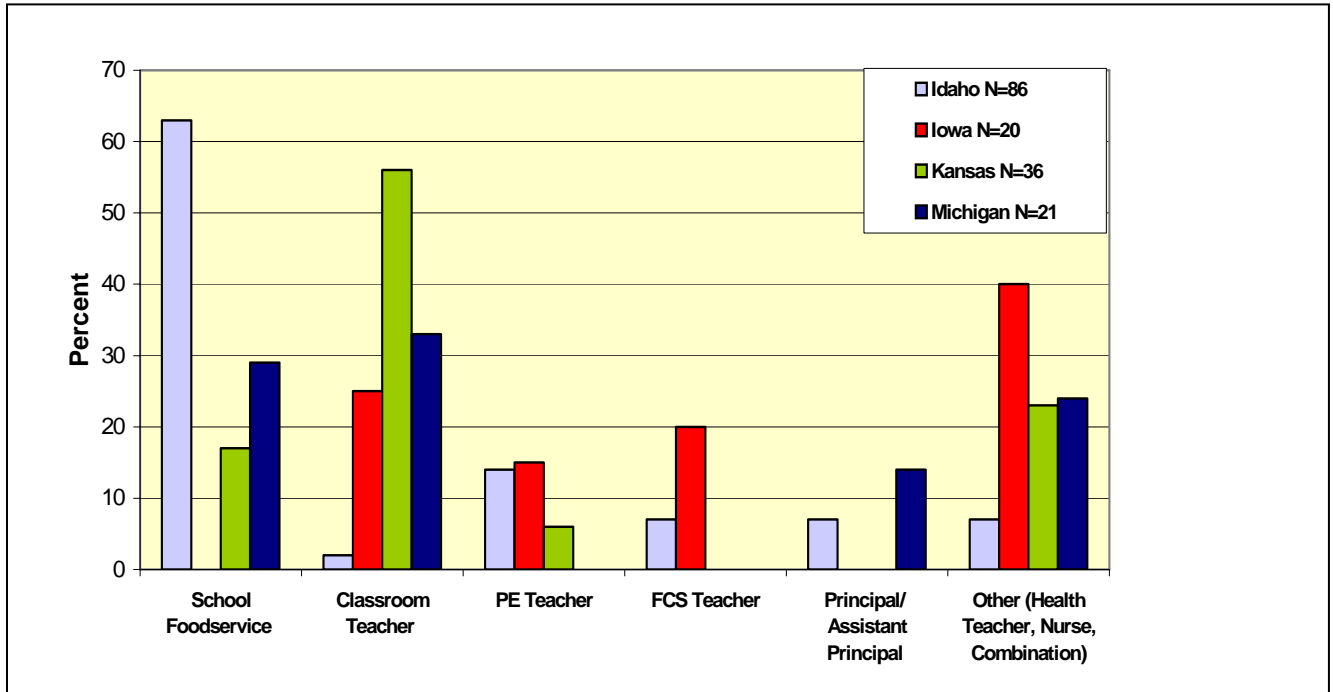
*Refer to Appendices page E-8 for data related to this figure.

B. STEPS TO IMPLEMENTING TN THROUGH SCHOOL-WIDE EVENTS

Event Coordinators

Figure 7-3 shows that classroom teachers in Kansas and Michigan were the primary persons in charge of school-wide events. In Idaho, school foodservice staff conducted 63% of school-wide events. In Iowa, school nurses and others conducted 40% of school-wide events.

Figure 7-3. Job Titles of School-wide Event Coordinators (%)*



*Refer to Appendices page E-8 for data related to this figure.

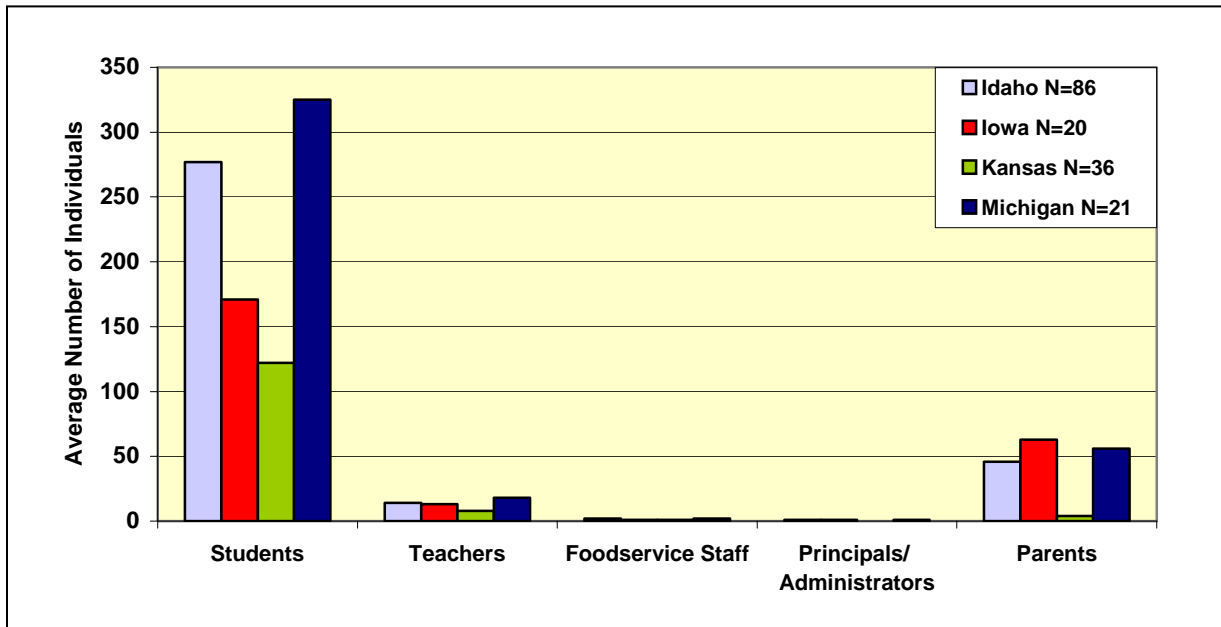
Event Helpers

As displayed in Table E-1.2.5 in the Appendices page E-9, classroom teachers in all four States were primarily responsible for helping the coordinator plan, prepare, and conduct school-wide events. In all States, students were involved in the planning, preparation, and conducting of 40% or more of school-wide events; every State also had assistance from principals/assistant principals and parents in 30% or more of events. Events held in Iowa had a higher number of PE teachers, nurses, FCS teachers, and health teachers involved than did other States. The increased involvement of some of these staff in Iowa may have resulted because the application for participation in the TNDP was mailed to PE teachers, school nurses, and FCS teachers (as well as foodservice directors).

Audiences Reached

As Figure 7-4 illustrates, students were the main audience for school-wide events (Table E-1.2.9). The four States combined reached a total of 38,404 students through school-wide events. Idaho reached a substantially larger number of people than the other States (n=23,807) because they had more schools participating and conducted more events per school. Nevertheless, the average per event for each category of participant was fairly similar across the States. The one exception was in Kansas where the average numbers of parents reached per event (n=4) was much smaller than for other States.

Figure 7-4. School-wide Channel Event Participation/Affendance per Event*



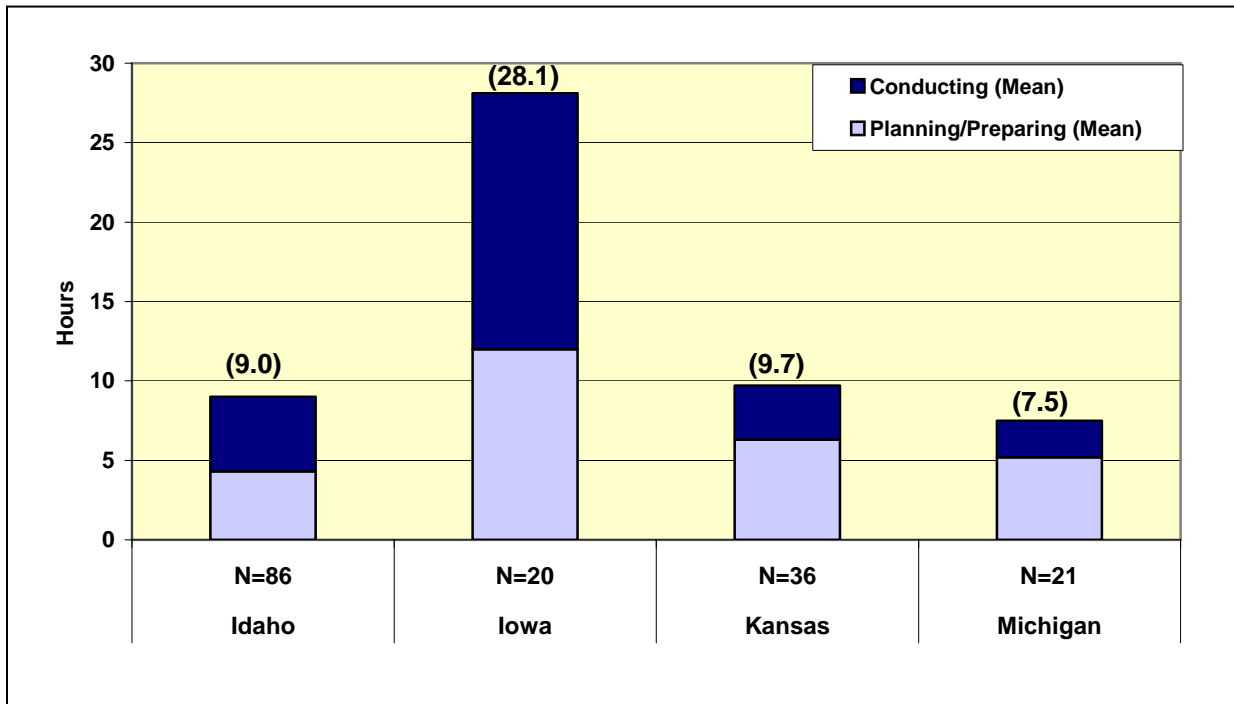
*Refer to Appendices page E-12 for data related to this figure.

C. TIME SPENT ON SCHOOL-WIDE CHANNEL IMPLEMENTATION

Event Coordinators

As indicated in Figure 7-5 and Table E-1.2.4 in Appendix E, it took the *person coordinating the event* an average of between 4.3 hours to 12.0 hours to **plan and prepare** the school-wide events. In Idaho, Kansas, and Michigan, the mean was closely aligned with a range of 4.3 to 6.3 hours. These three States also had similar times spent **conducting** the events, with a mean ranging from 2.3 hours to 4.7 hours. In Iowa significantly higher times were reported for both planning and conducting events. Iowa utilized a team approach in their TN events that accounted for the difference in planning/preparing time for the events; most of the event planning was at meetings with several people present, so the time reported for planning included the entire team.

Figure 7-5. Average Time Spent by Coordinators to Plan/Prepare and Conduct School-wide Events*



*Refer to Appendices page E-9 for data related to this figure.

Event Helpers

Across the four States, the average **planning and preparing** time by *persons who helped* with the school-wide event had a range of 4.3 hours to 90.1 hours as indicated in Table E-1.2.6 (see Appendices page E-10). Three of the four States were closely aligned with a range of 4.3 hours to 4.6 hours; the exception was Iowa.

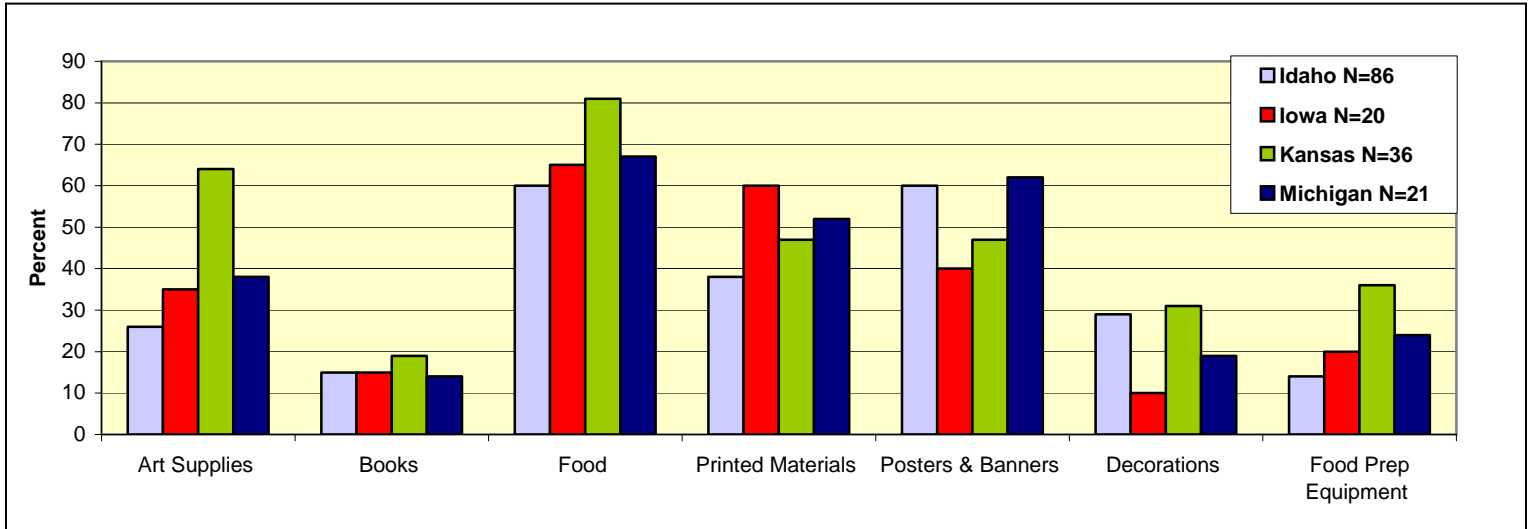
D. RESOURCES AND COST OF SCHOOL-WIDE CHANNEL IMPLEMENTATION

Supplies

As Figure 7-6 indicates, food was the primary material/supply used in the school-wide channel events in all four States. Posters and banners were used as frequently as food in Idaho and nearly as frequently in Michigan. In Kansas, art supplies were used nearly as often as food. Printed materials such as handouts and brochures were also used frequently in all States.

The high use of posters in Michigan was attributed to the TN School Banner given to each school at the beginning of the project. Idaho had a high use of posters and banners because the site coordinators conducted identical school-wide events in nearly all of their schools and used the same supplies each time.

Figure 7-6. Most Commonly Used Materials and Supplies for School-wide Events*



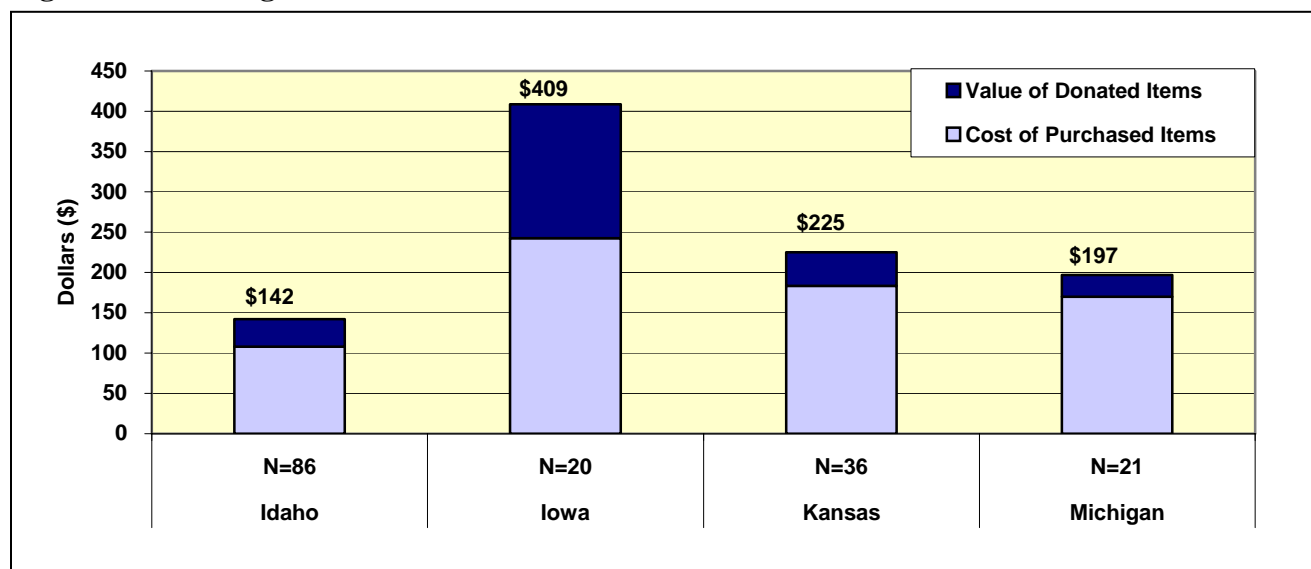
***Refer to Appendices page E-10 for data related to this figure.**

**Printed materials included handouts, brochures, and other printed materials.*

Cost

According to Figure 7-7, cost of school-wide events ranged from \$142 to \$409. The majority of funding for implementation of the school-wide channel events across all four States was derived from the TNDP grant funds (see Table E-1.2.8 in the Appendices page E-11). Across the four States, the average total cost per event ranged from \$108 to \$242 for purchased items. Across all four States, the total average cost of donated items per event ranged from \$27 to \$166. Iowa received the highest value of donated items with materials donated by parents and food donated by community partners and the foodservice department being the primary sources. Parents in Michigan frequently donated food for school-wide events.

Figure 7-7. Average Cost of School-wide Channel Events*



*Refer to Appendices page E-11 for data related to this figure.

E. SUMMARY OF SCHOOL-WIDE CHANNEL FINDINGS

- The school-wide channel was most often linked with cafeteria events; home was the second most popular channel for linkage.
- The messages communicated most frequently by school-wide events were “*Eat a variety of foods,*” and “*Be physically active*” but all messages were conveyed through school-wide activities.
- Coordinators were typically foodservice staff in Idaho and classroom teachers in Kansas. Iowa coordinators were usually classroom teachers, FCS teachers, PE teachers, and school nurses. Michigan coordinators were usually classroom teachers, foodservice staff, and principals.
- Classroom teachers in all States were primarily responsible for helping the coordinator plan, prepare and conduct school-wide events. In all States, students assisted in 40% or more of school-wide events; every State also had assistance from principals/assistant principals and parents in 30% or more of events.
- For the States that conducted non-recurring school-wide events, it took about 4 to 6 hours of the coordinator’s time to plan and prepare the event and about 2 to 5 hours to conduct it. The average time commitment for helpers to plan and prepare for non-recurring events was 4 hours.
- Food was a frequently used supply for school-wide events, as were posters, banners, handouts, brochures, and other printed materials.
- Average cost per school-wide event ranged from \$142 to \$409, depending on the scope of the event, and reached an average of 122 to 325 students per event.

CHAPTER VIII: HOME CHANNEL

- A. RFA Requirements
- B. Steps to Implementing TN through Home Events
- C. Time Spent on Home Channel Implementation
- D. Resources and Cost of Home Channel Implementation
- E. Summary of Home Channel Findings

A. RFA REQUIREMENTS

The RFA defined the home channel as follows:

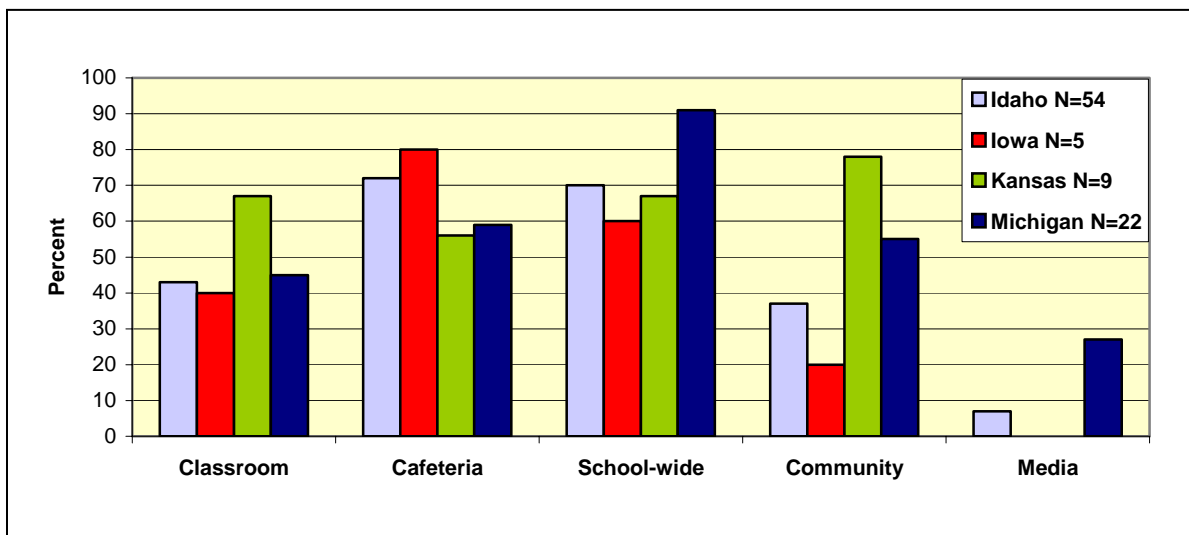
Home activities aim to get students and parents to interact in ways that serve Team Nutrition objectives. Such activities may include involving parents in a homework assignment or distribution of take-home materials with appealing games/puzzles; the Scholastic materials provide a variety of suggestions and relevant materials. Such activities could also bring parents and their children to the school to participate in healthy snacks or a classroom play. Schools participating in the Demonstration Project are expected to provide at least four such occasions for students in each participating class.

TNDP schools across the four States conducted a total of 90 home activities targeted to parents or events in which parents were invited to school. In Idaho, a recipe was prepared at parent/teacher conferences for participants to sample. In a drawing, cookbooks were given to parents. Information on the average nutrients for a week of school menus was also sent home. In Iowa, one school planted a vegetable garden in the spring and sold the vegetables at a student store during the fall open house. A vegetable soup recipe was provided for those who purchased vegetables. Two schools in Iowa produced fruit and vegetable cookbooks as part of home channel activities. Kansas distributed a monthly TN newsletter and provided other take-home materials with community events (*Body Walk, health fairs*). Michigan implemented the home channel by inserting information consistent with TN messages into the monthly take-home menus. They used *Target your Team* material previously developed by the State, which included prepared messages to insert into school menus.

Relationship with Other Channels

Figure 8-1 indicates that Idaho and Iowa primarily linked home events with the cafeteria channel. In Kansas, 78% of home events were linked with the community channel, and in Michigan, 91% of home events were linked with school-wide events.

Figure 8-1. Relationship between Home Channel Activities and Other Channels (%)*

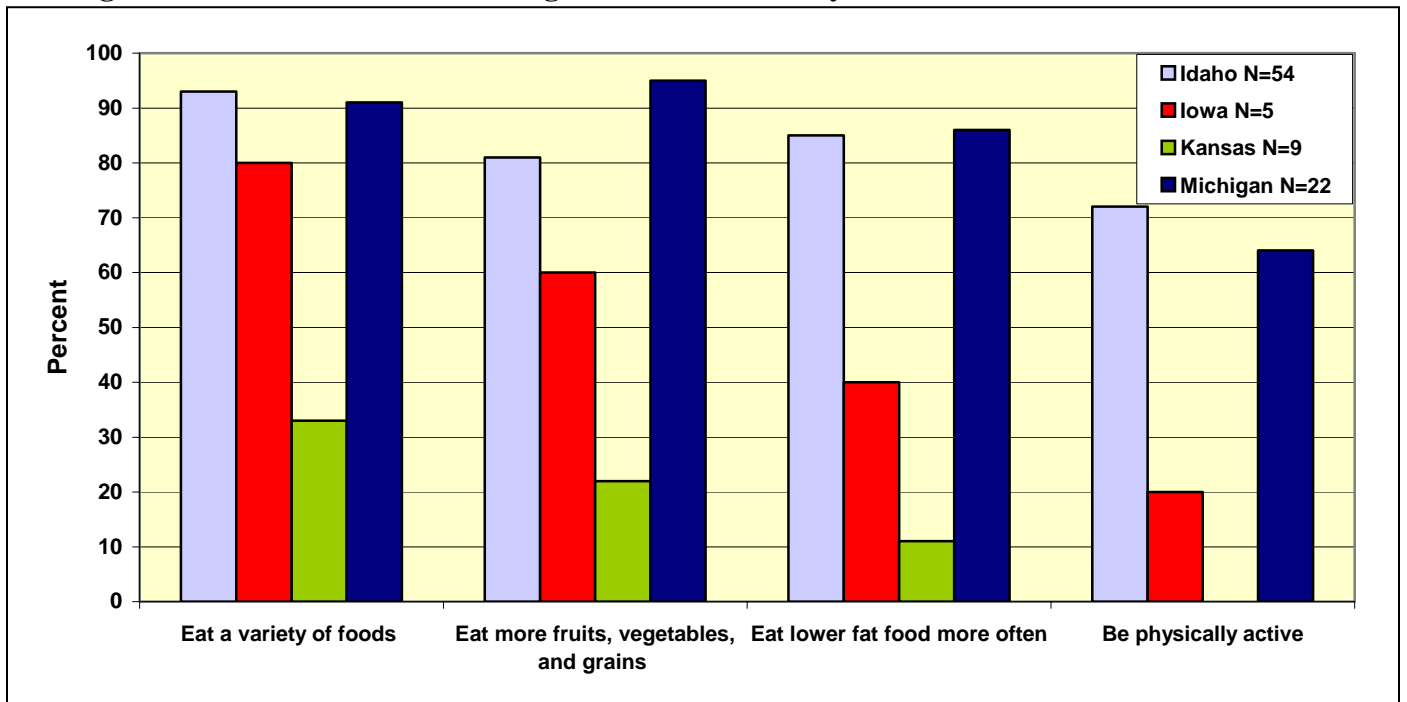


*Refer to Appendices page E-13 for data related to this figure.

Messages Communicated

As Figure 8-2 indicates, the main messages communicated through the home channel were “Eat a variety of foods,” and “Eat more fruits, vegetables, and grains.” All four TN messages were communicated in two-thirds of the home events in both Idaho and Michigan. Other months focused primarily on food-related nutrition messages. Data for Kansas on messages communicated for home events was incomplete.

Figure 8-2. Team Nutrition Messages Communicated by Home Channel Activities*



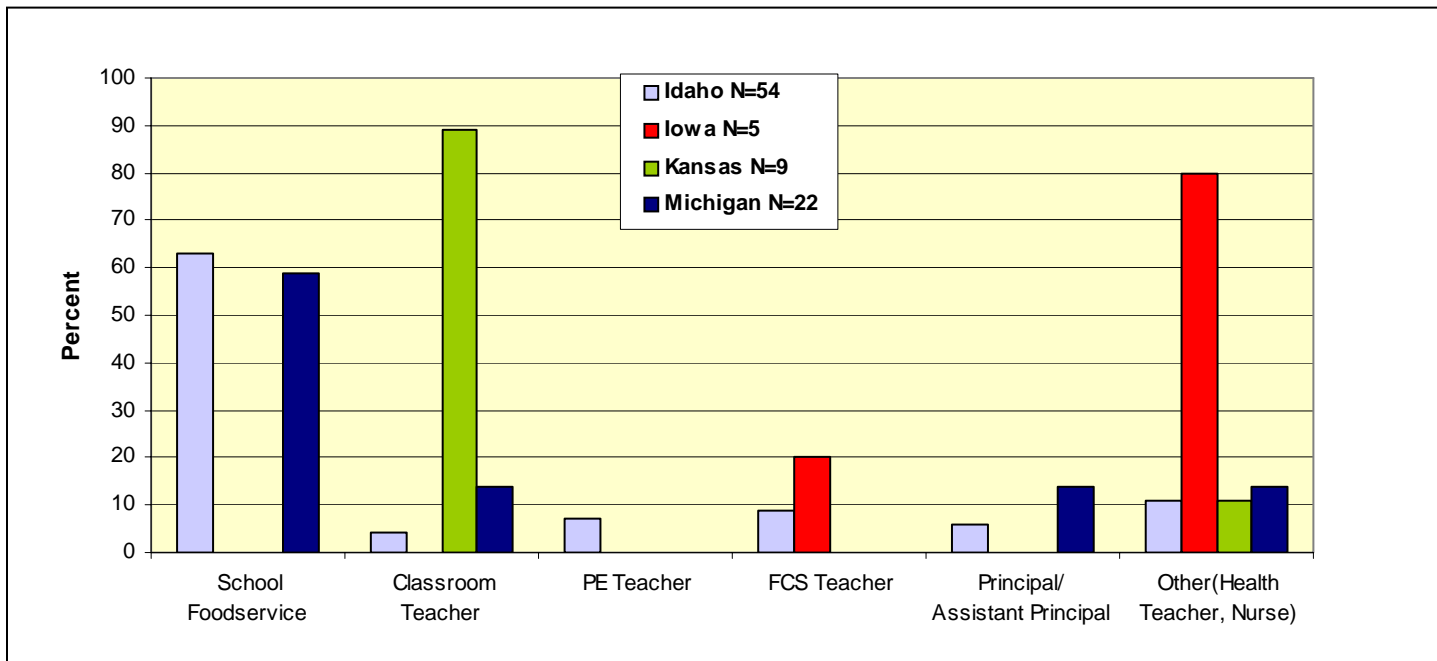
*Refer to Appendices page E-13 for data related to this figure.

B. STEPS TO IMPLEMENTING TN THROUGH HOME ACTIVITIES/EVENTS

Activity/Event Coordinators

As shown in Figure 8-3 and Table E-1.3.5 (see Appendices page E-14), the person primarily responsible for helping to coordinate, plan, and conduct activities for the home channel varied. In Idaho and Michigan, it was the school foodservice staff; in Iowa, it was school nurses (included in “Other”); and in Kansas, it was classroom teachers.

Figure 8- 3. Job Titles of Home Channel Activity Coordinators (%)*



***Refer to Appendices page E-13 for data related to this figure.**

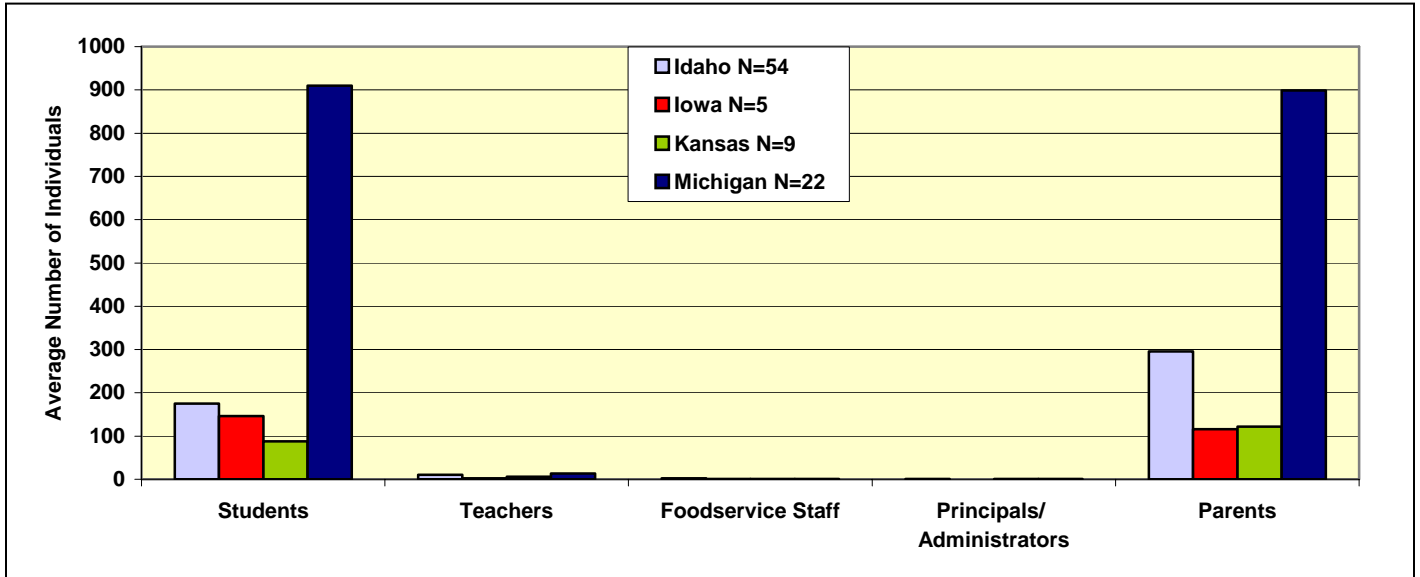
Activity/Event Helpers

Classroom teachers, school foodservice staff, parents, and principals were the primary activity/event helpers (see Appendices page E-14, Table E-1.3.5). Idaho and Michigan were more likely to have school foodservice staff as helpers; Iowa was more likely to have classroom teachers and school nurses as helpers. Kansas had community members and classroom teachers as primary helpers.

Audiences Reached

As shown in Figure 8-4, the four States combined reached 30,997 students through home channel activities and events. Idaho (n=296) and Michigan (n=899) reached substantially more parents per home event than Iowa (n=116) or Kansas (n=122); Michigan also reached substantially more students (n=910) per home activity/event than the other States. Michigan schools included TN messages on the menus sent home to parents so they counted parents and students who received menus. Although not shown in figure 8-4, Iowa (n=80) and Michigan (n=23) reached more community partners per event than Idaho (n=1) and Kansas (n=1) (see Appendices page E-17, Table E-1.3.9).

Figure 8-4. Home Channel Participation/Attendance Per Activity/Event*



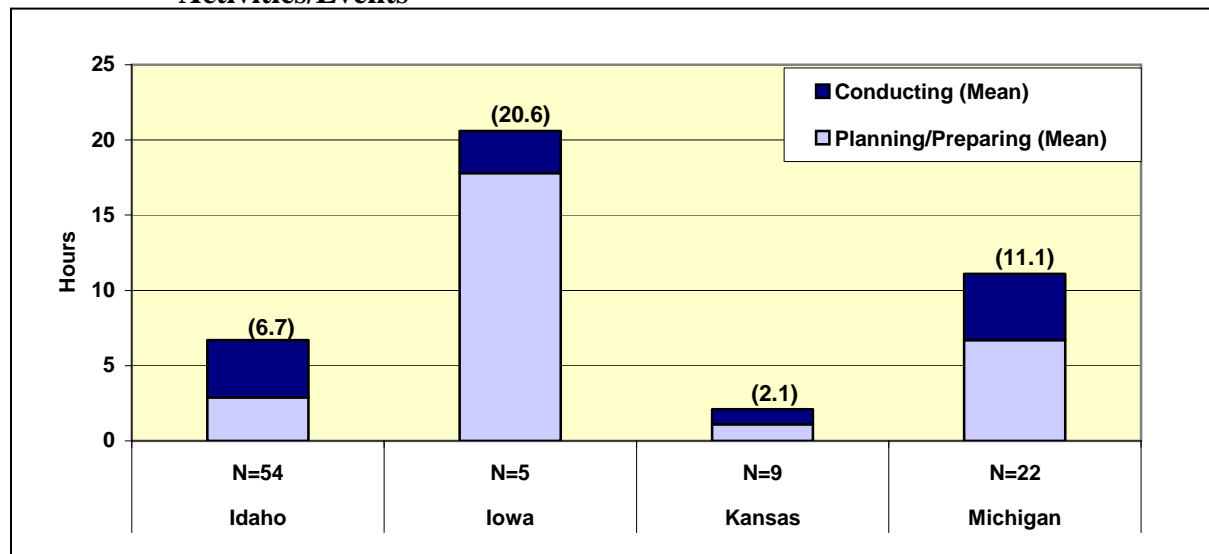
*Refer to Appendices page E-17 for data related to this figure.

C. TIME SPENT ON HOME CHANNEL IMPLEMENTATION

Event Coordinators

As Figure 8-5 and Table E-1.3.4 (see Appendices page E-14) indicates, the person coordinating the event spent an average of between 1.1 hours in Kansas to 17.8 hours in Iowa **planning and preparing** the home events. In three of the States, the mean was relatively similar with a range of 1.1 to 6.7 hours. Iowa was the exception with a mean of 17.8 hours; two Iowa schools produced cookbooks as home events. The cookbooks required extensive planning and preparation time. The mean for **conducting** the event ranged from 1.0 hour in Kansas to 4.4 hours in Michigan. In all States except Idaho, it took more time to plan and prepare the activities/events than to conduct them.

Figure 8-5. Time Spent by Event Coordinators to Plan/Prepare and Conduct Home Activities/Events*



*Refer to Appendices page E-14 for data related to this figure.

Event Helpers

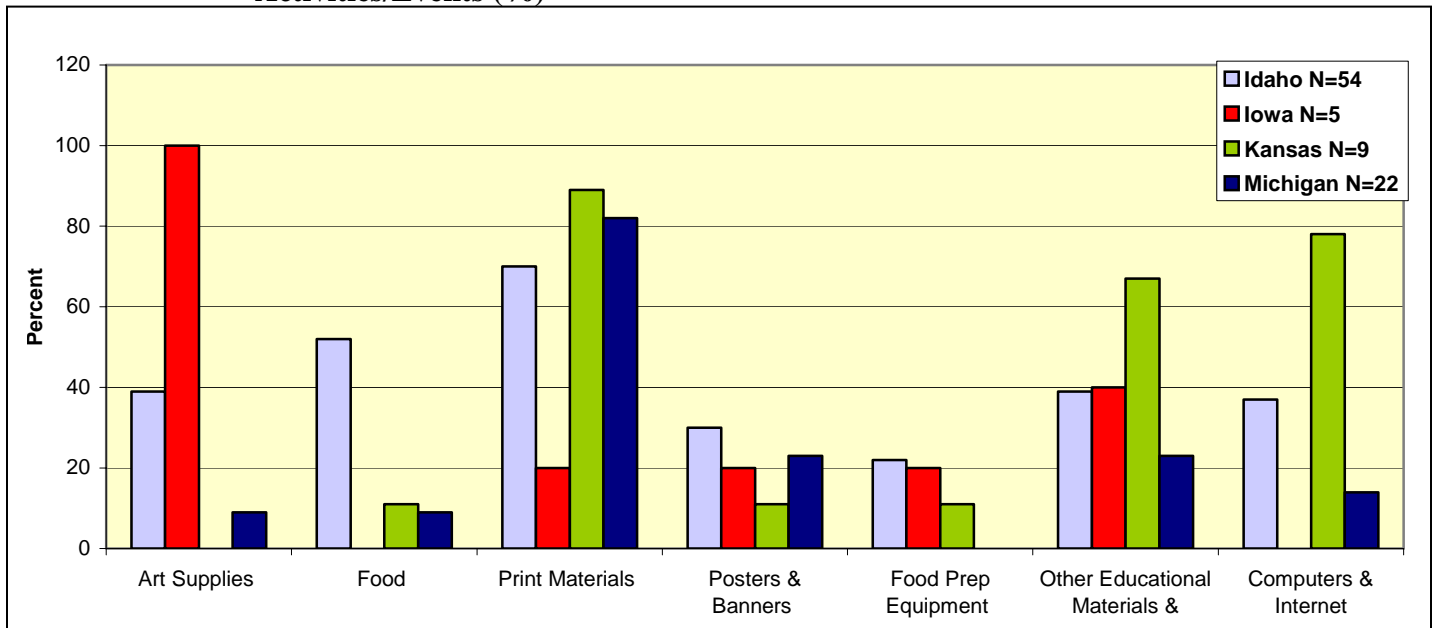
It took *persons who helped* the event coordinator with **planning/preparing** the home activities/events an average of between 0.7 hours to 53.8 hours (see Appendices page E-15, Table E-1.3.6). Three of the four States had means between 0.7 hours to 5.3 hours. Iowa was the exception with an average of 53.8 hours; the production of cookbooks required more time. Planning and preparation time was low for Kansas because the Department of Education prepared newsletters to send home to parents that covered each Dietary Guideline and most schools utilized the newsletters. The newsletters contained family nutrition activities, a game or puzzle, recipes and an area for each school to insert an update about TN classroom activities.

D. RESOURCES AND COST OF HOME CHANNEL IMPLEMENTATION

Supplies

As Figure 8-6 indicates, in all four States, handouts, brochures, and other printed materials were the supply most frequently used to conduct home activities/events; it was likely that these types of materials were easiest to send home to parents. Other educational supplies and computers/Internet were second most frequently used in all States; Kansas, in particular, reported high usage of computers/Internet with 78% of their home channel activities/events including computers/Internet.

Figure 8-6. Most Commonly Used Materials and Supplies for Home Channel Activities/Events (%)*



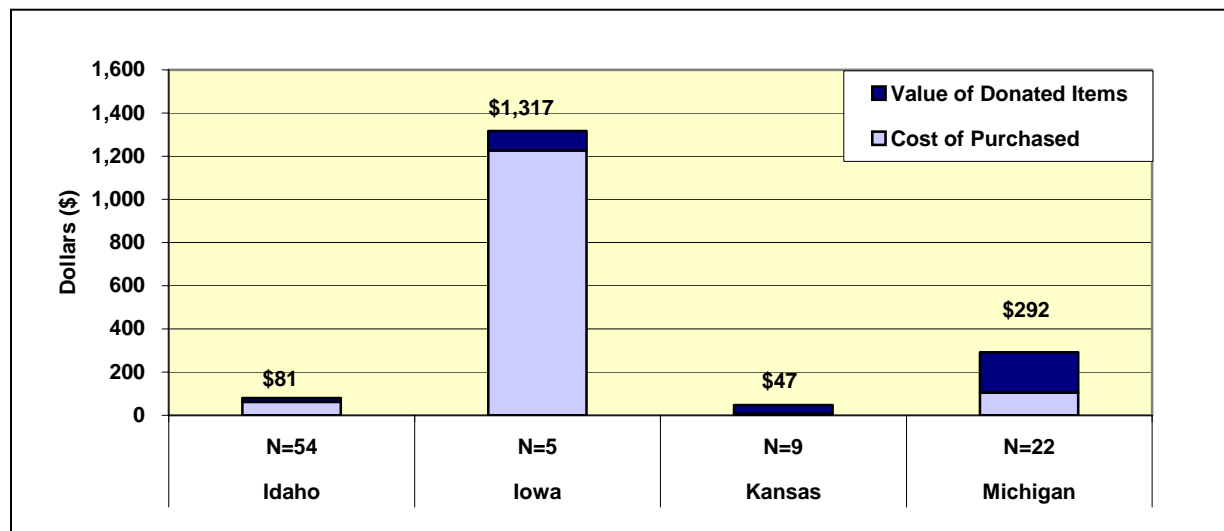
***Refer to Appendices page E-15 for data related to this figure.**

** Printed materials included handouts, brochures, and other printed materials.*

Cost

Figure 8-7 indicates that there was wide variance among the four States in the average cost of home activities/events, ranging from a low of \$47 per event in Kansas to a high of \$1,317 per activity/event in Iowa. Cookbooks produced in Iowa increased the mean cost of home channel activities in that State. In Idaho and Iowa, the cost of home events was primarily paid for by TN grant funds, whereas Kansas relied on food donations from parents and Michigan had a community donation to print a parents' newsletter.

Figure 8-7. Average Cost of Conducting Home Channel Activities per Activity/Event*



***Refer to Appendices page E-16 for data related to this figure.**

E. Summary of Home Channel Findings

- The activities/events for the home channel were most closely linked with school-wide and cafeteria events (such as parents being invited to an event in the cafeteria in which all students were involved).
- The messages communicated most frequently by home channel activities/events were “*eat a variety of foods,*” and “*eat more fruits, vegetables, and grains*”.
- Coordinators were typically either classroom teachers or school foodservice staff members; in Iowa school nurses coordinated most of these events.
- In all States except Idaho, it took more time to plan and prepare home events/activities than to conduct them. Idaho was organized on a district level so home events/activities were duplicated at all participating schools in the district.
- Classroom teachers, school foodservice staff, parents, and principals were the most frequent helpers for activities/events in the home channel.
- Print materials (brochures, handouts, newsletters, etc.) were commonly used for home channel activities. Computers/Internet were the second most common supply used.
- There was wide variance among the four States in the average cost of home activities/events, ranging from a low of \$47 per event in Kansas to a high of \$1,317 per activity/event in Iowa. Cookbooks produced in Iowa increased the mean cost of home channel activities in that State.

CHAPTER IX: COMMUNITY CHANNEL

- A. RFA Requirements
- B. Steps to Implementing TN through Community Events
- C. Time Spent on Community Channel Implementation
- D. Resources and Cost of Community Channel Implementation
- E. Summary of Community Channel Findings

A. RFA REQUIREMENTS

The community channel was defined by the TNDP RFA as follows:

Community events are targeted to a larger audience, typically, the school neighborhood. Examples include participation in community fairs, chef demonstrations, or tasting events. Each school participating in the Demonstration Project is expected to implement at least one community event during each year of the project.

Two States (Kansas and Iowa) provided additional guidance to assist schools in distinguishing community events from other events (such as school-wide). Kansas communicated to their schools that “the purpose of the community channel is to engage the community at large in actively participating in the school’s commitment to nutrition and physical activity for students, and to continue to support these efforts.” The State agency in Kansas provided specific support for this channel through the *Body Walk* and *Health Fair kits*. *Body Walk* was a 35- by 40-foot mobile exhibit representing the human body in an interactive format where students walk through the body guided by trained parents who explain the function of various organs and systems. The *Body Walk* event was preceded by classroom activities and supported by additional resources including a parent booklet. *Health Fair kits* were a resource kit designed to assist schools in conducting health fairs.

Iowa required community events to be held off campus and to focus on a community audience. Thus in Iowa, schools identified existing community events and made a TN connection. Popular events included fun runs and walks such as Relay for Life, the Diabetes Walk and similar local events, community food events highlighting restaurants, and health fairs sponsored by non-school agencies (e.g., hospitals). Two schools encouraged students to participate in fun runs sponsored by local agencies. In one case the school entered a TN float in the parade associated with the fun run. The float carried the four TN messages. In the other case, the school sponsored a booth at the end of the race where participants could taste healthy snacks created by students and take home Team Nutrition art depicting the messages. The art was created by students and placed on or in grocery bags donated by a local store.

In Idaho, one community event was a bike rally sponsored by TN with a donated mountain bike as one of the prizes awarded by a drawing. TN leaders in Idaho also extended the TN messages into the community by promoting TN and sharing information about the TNDP at school board meetings and the local Rotary Club business meetings.

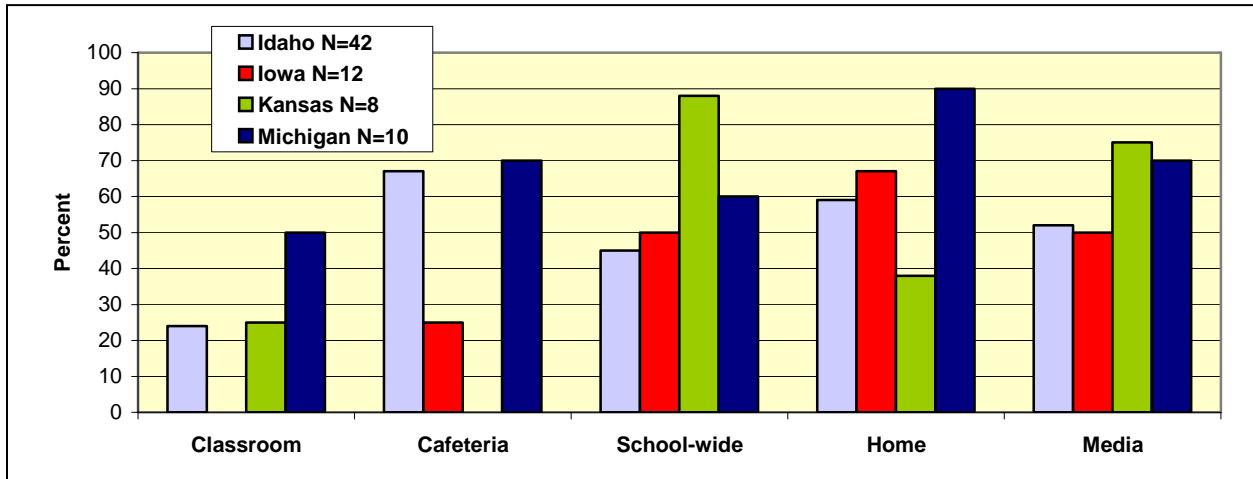
In Michigan, a typical community channel event was a health fair, located at the school, but open to the community. Various agencies and organizations related to children’s health were recruited to participate ensuring that all TN messages would be promoted to some extent. At one school the PE teacher participated in the Healthy Kids Fair by offering students the opportunity to be physically active in a safe and supervised environment while parents visited the numerous booths, displays and demonstrations to learn more about healthy eating.

In the second year of implementation, the TNDP schools in the four States planned and conducted 72 events where community was the primary channel. Idaho held 42 events; Iowa 12; Kansas 8; and Michigan held 10.

Relationship with Other Channels

Figure 9-1 shows that the community channel was often related to school-wide, home, and media channels. Over half of the community channel events were covered by the media; events in this channel gained more media attention than events in other channels. The classroom channel was the least frequent connection for community events. In Iowa, the State requirement for off-campus events explained the lack of a classroom connection as schools were instructed to hold community events off-campus and focus on non-school audiences. Kansas reported no community events related to the cafeteria, where as for Idaho, the cafeteria was the primary linkage for community events.

Figure 9-1. Relationship between Community Channel Events and Other Channels (%)*

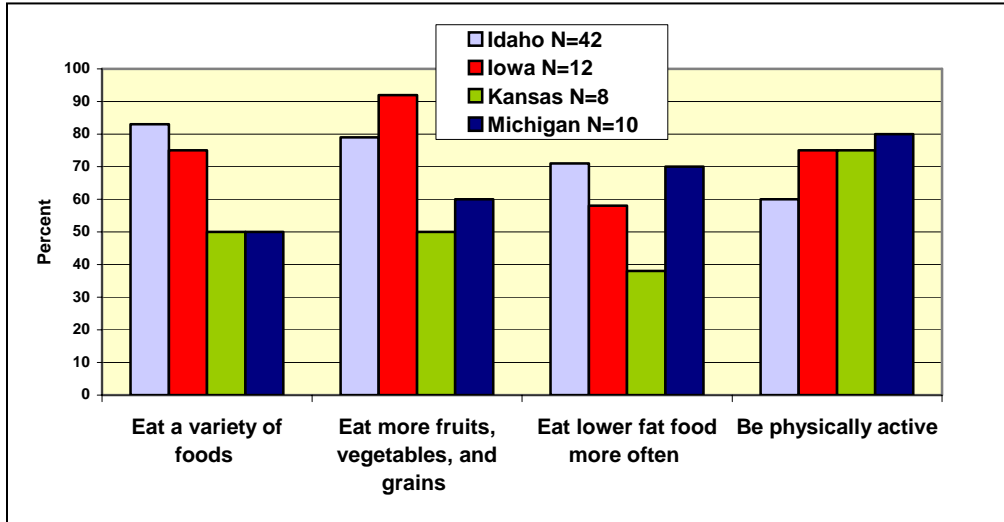


*Refer to Appendices page E-18 for data related to this figure.

Messages Communicated

Figure 9-2 shows that most of the events communicated more than one TN message. No single message dominated community events within or across States.

Figure 9-2. Team Nutrition Messages Communicated by Community Channel Events (%)*



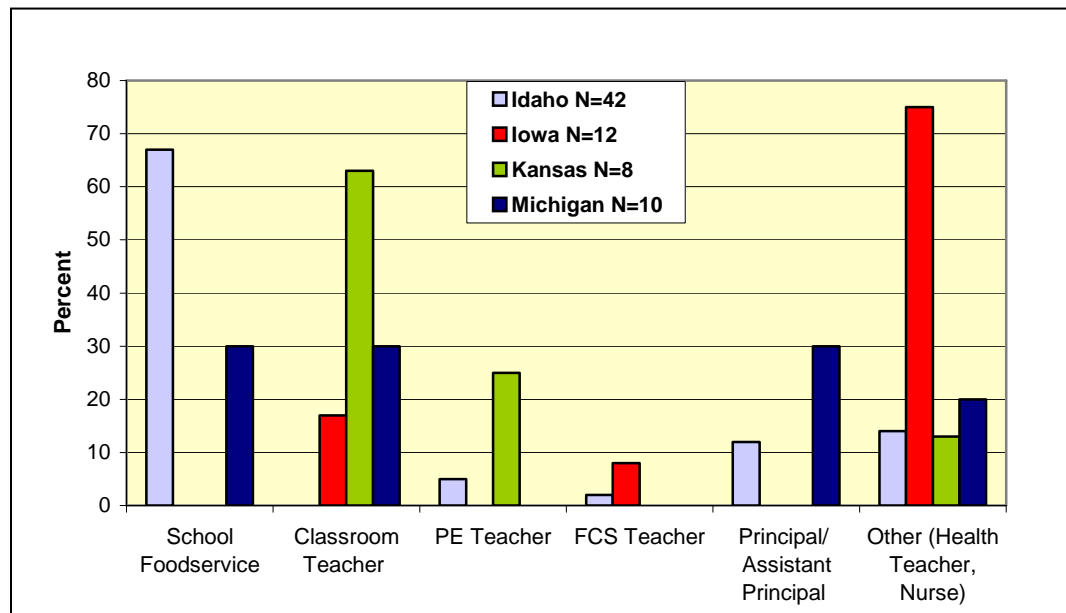
*Refer to Appendices page E-18 for data related to this figure.

B. STEPS TO IMPLEMENTING TN THROUGH COMMUNITY EVENTS

Event Coordinators

Figure 9-3 shows that community events in Idaho were most often coordinated by school foodservice staff. This was due to the fact that Idaho used a district model rather than a school model. Thus, foodservice staff was more involved in Idaho than in other States. Community events were primarily coordinated by a combination of two persons in Iowa and by classroom teachers, school foodservice staff, or principals in Michigan. Most of the Kansas community events were conducted by classroom teachers.

Figure 9-3. Job Titles of Community Channel Event Coordinators (%)*



*Refer to Appendices page E-18 for data related to this figure.

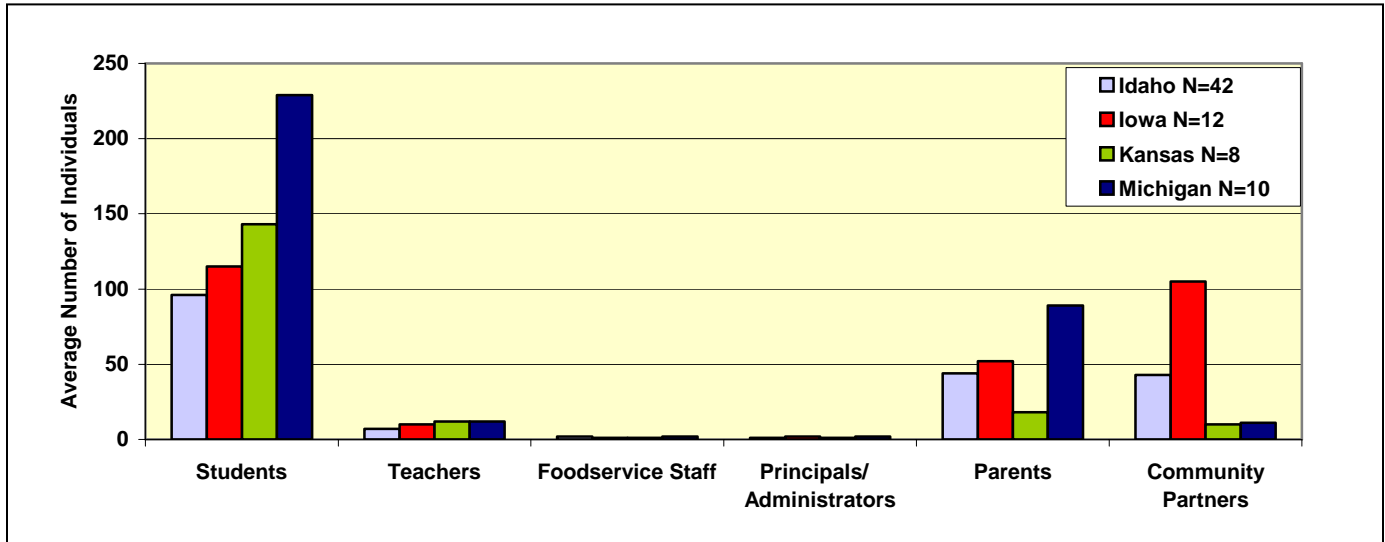
Event Helpers

Overall, classroom teachers, school foodservice staff, and principals were the most frequent event helpers for community channel events (see Appendices pages E-19, Table E-1.4.5). In Idaho, school foodservice staff helped with 71% of the events and classroom teachers helped with 57% of the events. In Iowa, classroom teachers helped with 58% of the events and foodservice staff assisted with half of the events. In Kansas, classroom teachers, students, and parents helped with the events. In Michigan, principals and assistant principals helped with 100% of the events and school foodservice staff helped with 80% of events.

Audiences Reached

Figure 9-4 shows the most frequent attendees at community events were students, parents, and community partners. Both the type of event and the State requirements for schools explained the varied attendance at community events by community members. The average attendance at Idaho events by other community members is not representative of the typical community event in Idaho. For example, the mean attendance (n=1,687) by “others in the community” at community events in Idaho was likely inflated by one particular event with very high attendance. Another community event in Idaho involved dissemination of TN information from a radio station. The estimated number of listeners that heard the information was included in the number of persons reached. Each Iowa event reached an average of 115 students, 52 parents and 105 community partners; Kansas events reached an average of 143 students, 18 parents and 10 community partners per event; Michigan events reached an average of 229 students, 89 parents, and 11 community partners, and Idaho events reached an average of 96 students, 44 parents, and 43 community partners (see Appendices page E-22, Table E-1.4.9).

Figure 9-4. Community Channel Event Participation/Attendance*

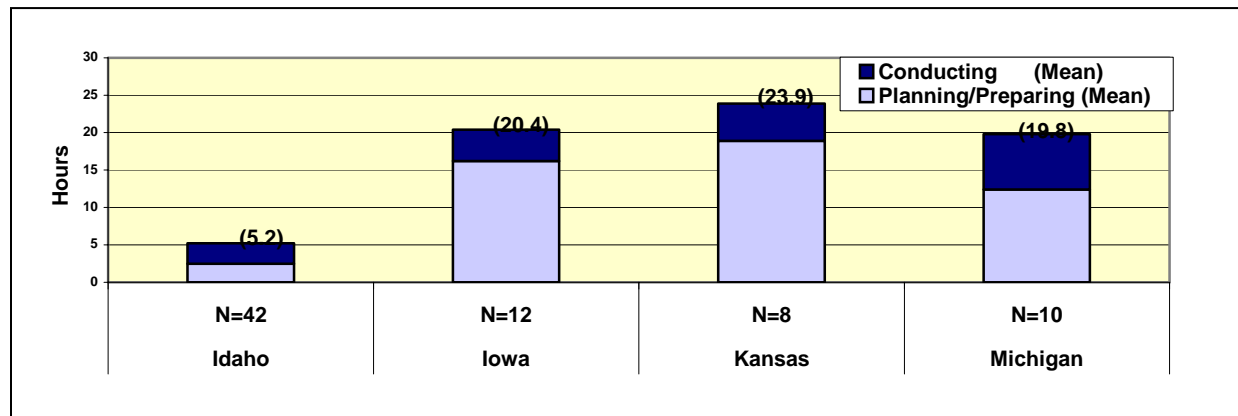


*Refer to Appendices page E-22 with data related to this figure.

C. TIME SPENT ON COMMUNITY CHANNEL IMPLEMENTATION

Figure 9-5 shows that Iowa, Kansas, and Michigan reported about 20 to 2 hours spent by the event coordinator for planning/preparing and conducting a community event. Idaho reported less time than the other States in both planning and conducting community events for persons who coordinated the events.

Figure 9-5. Time Spent by Coordinators to Plan/Prepare and Conduct Community Events*



*Refer to Appendices page E-19 for data related to this figure.

Event Helpers

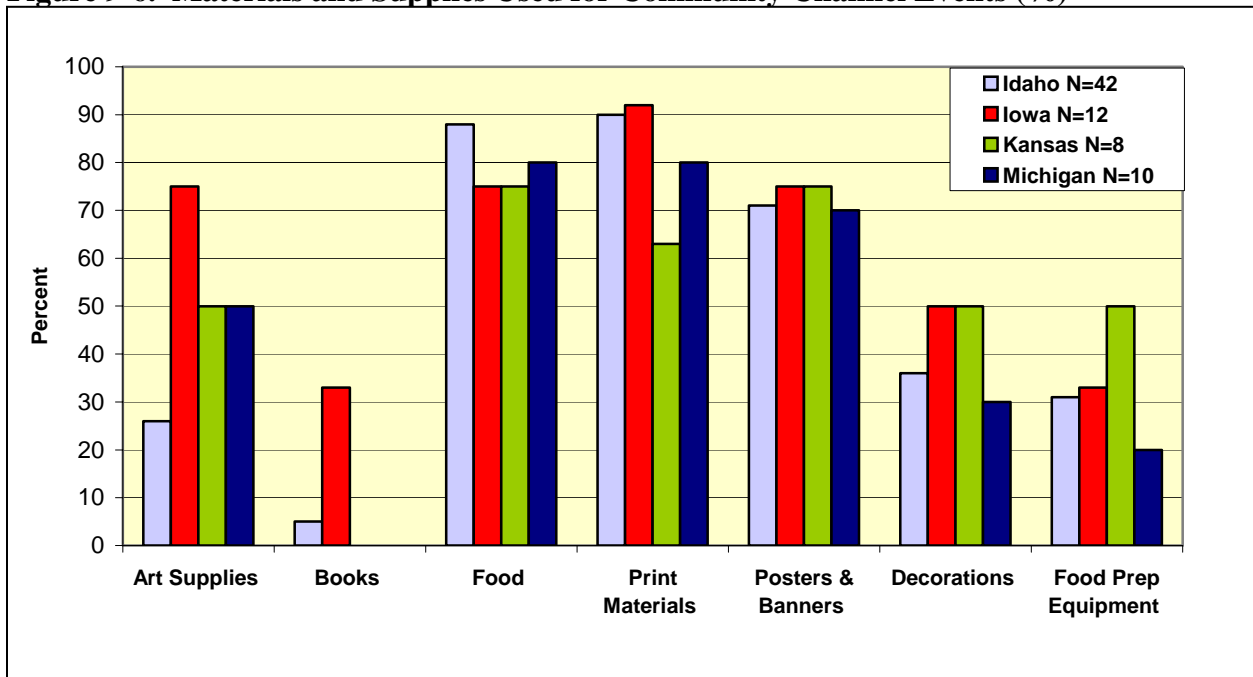
Time was also reported for those assisting the coordinator in planning and conducting the community events (see Appendices page E-20, Table E-1.4.6). Kansas and Michigan reported similar mean times for planning (14 and 13 hours), while Idaho was the lowest (3.7 hours), and Iowa the highest (110 hours). Iowa’s planning average was likely higher because the events had to be held off-campus, thus demanding more planning time. Idaho’s planning times were lower, probably due to the leadership provided at the district level rather than the school level.

D. RESOURCES AND COST OF COMMUNITY CHANNEL IMPLEMENTATION

Supplies

Materials and supplies used in order of frequency for community events were handouts, brochures and other printed materials; food; and posters and banners. (Figure 9-6). These findings were likely associated with the nature of the events—that is, handouts, brochures and other printed materials, food, posters and banners worked well with health fairs (a typical community event). Brochures and handouts provide information to large groups, food attracts participants, posters and banners provide visual impact and attract visitors to the booths and displays.

Figure 9-6. Materials and Supplies Used for Community Channel Events (%)*



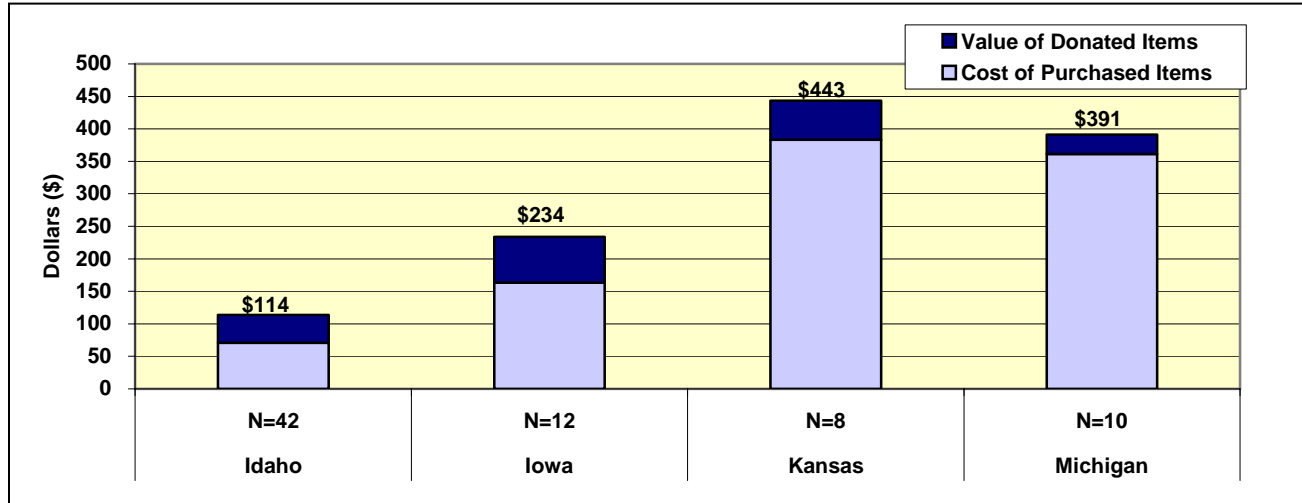
***Refer to Appendices page E-20 for data related to this figure.**

* Printed materials included handouts, brochures, and other printed materials.

Cost

Figure 9-7 illustrates the cost of items purchased and the value of donated items for community events was between \$114 and \$443. The value of purchased items was greater than donations in all States. The majority of donations were from the community (as opposed to parents and school foodservice). Table E-1.4.8 in the Appendices page F-21 presents expenditures by purchased and donated categories.

Figure 9-7. Cost of Conducting Community Channel Events*



*Refer to Appendices page E-21 for data related to this figure.

E. SUMMARY OF COMMUNITY CHANNEL FINDINGS

- There was no consistency across States as to the coordinator of community events. Community events in Idaho were most often coordinated by foodservice directors; two persons coordinated in Iowa; either classroom teachers, foodservice staff or principals coordinated in Michigan; and Kansas events were mostly coordinated by classroom teachers.
- Community events in Idaho were most often coordinated by foodservice directors; two persons coordinated in Iowa; either classroom teachers, food service staff or principals coordinated in Michigan; and Kansas events were mostly coordinated by classroom teachers.
- The community channel was often related to school-wide, home, and media channels. Over half of the community channel events were covered by the media; events in this channel gained more media attention than events in other channels.
- Most of the events communicated more than one TN message. No single message dominated community events within or across States.
- Overall, classroom teachers, school foodservice staff, and principals were the most frequent event helpers for community channel events.
- The most frequent attendees at community events were students, parents, and community partners.
- Iowa, Kansas, and Michigan reported about 20 hours by the event coordinator for planning and conducting a community event whereas Idaho reported about five hours for planning and conducting the event.
- Event helpers in Kansas and Michigan reported similar mean times for planning (14 and 13 hours), while Idaho was the lowest (3.7 hours), and Iowa the highest (110 hours).
- Handouts and brochures, food, and posters/banners were the most frequently used materials and supplies in all four States.

- The cost of items purchased for community events was between \$114 and \$443. The value of purchased items was greater than donations in all States.

CHAPTER X: MEDIA CHANNEL

A. RFA Requirements

B. Implementing TN through the Media

A. RFA REQUIREMENTS

A media event was defined by the TNDP RFA as follows:

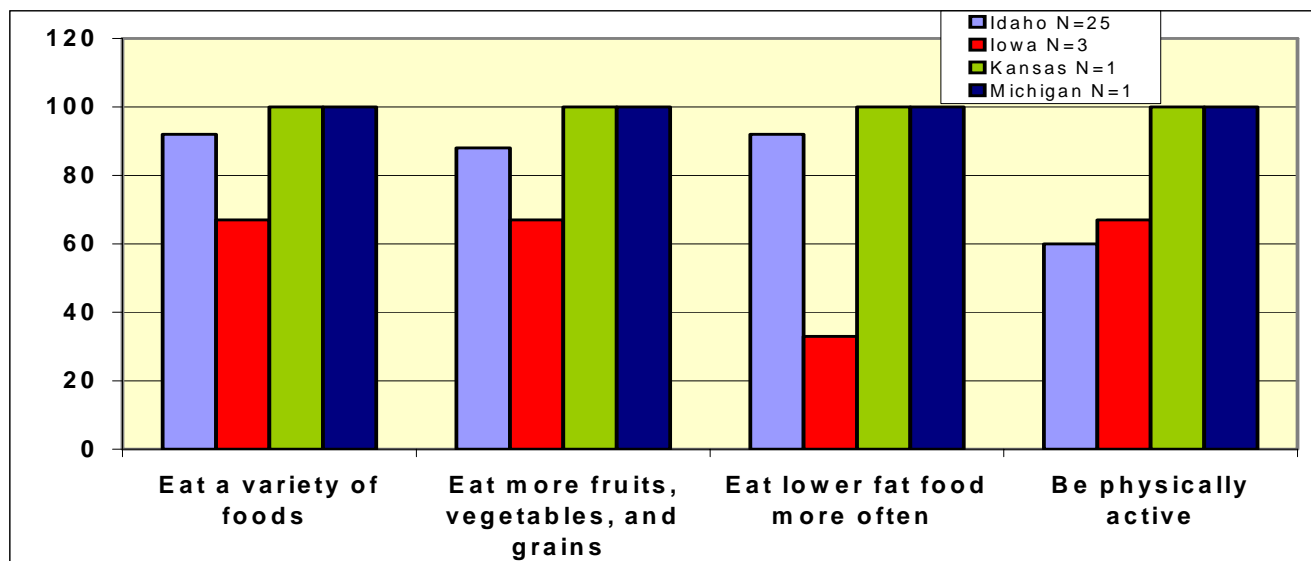
Media events and coverage involves coverage of school and community TN events by local newspaper, radio, and/or television. Each school participating in the Demonstration Project is expected to conduct at least one media event during each year of the project.

The concept of media as a primary channel event was inconsistent with the definition of the media channel and the guidance provided by USDA. Thus, most media events were conducted as secondary rather than primary channels, and the number of media primary events held was rather low. Idaho had 25 primary media events; Iowa had three; Kansas and Michigan had one media event each. Since there were so few primary media events, interpretation of the data is tenuous at best; therefore, the organization of this chapter differs from the previous channels. Some events could have been labeled school-wide events with media coverage. There were blurred lines between events, and in some cases, the arbitrary designation of a media event as a primary channel event. Idaho media events included the USDA Power Panther visiting schools for Eat Smart. Play Hard.™ school assemblies, health fairs, fun runs, and other events.

B. IMPLEMENTING TN THROUGH THE MEDIA

Media coverage was the preferred method of meeting criteria for this channel. Local newspapers, radio stations, and television provided media exposure of the messages during Year 2 of implementation. This information is presented in Figure 9-1; the reader should note that data presented are based on only one event in Kansas and Michigan that used “media” as the primary channel and only three events in Iowa.

Figure 10-1. Team Nutrition Messages Communicated by Media Channel Events (%)*



*Refer to Appendices page E-23 for data related to this figure.

Relationship with other Channels

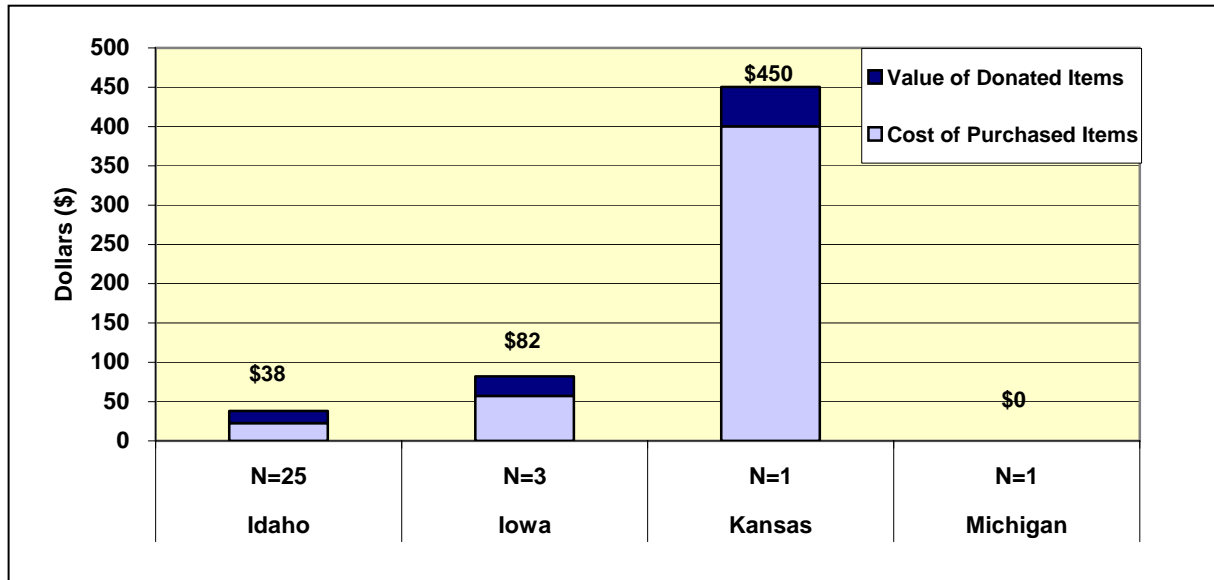
The community events were covered most frequently (50 to 75% of those were covered by the media as shown in Table E-1.5.2 in the Appendices pages E-23), while the least frequently covered channel was home (zero to 27% were covered by the media in the four States as shown in Table E-1.5.2 in the Appendix). Cafeteria events had the greatest variability in media coverage across the four States (14 to 55%, Table E-1.1.2 in the Appendices page E-3). This pattern was logical since community events were of interest to a broader audience, while home events would be less accessible, possibly of less interest to a more general audience and were not likely to be unique. A lesson learned was that the school and community link was interesting enough to capture media attention.

Media Events

Following are two examples of events in which media was chosen as the primary channel. The first example was specifically staged for the media, while the second example was actually a school-wide event that included media coverage, but was labeled with media as the primary channel. Clearly, this event could have been labeled a school-wide event with media coverage. Therefore, this example suggested the blurred lines between events, and in some cases, the arbitrary designation of a media event in a category.

1. TNDP schools conducted activities with teachers and students providing radio, television, and newspaper interviews that presented the TN messages to the public. For example, a FCS teacher, who was also the TNDP site coordinator/leader in her school, completed one radio interview each semester. She discussed monitoring physical activity, eating a variety of foods and food lower in fat, and including more fruits, vegetables and grains in the diet. This was parallel to the activity students were doing in her class and in physical education class where students were comparing calories consumed to calories expended.
2. A Kansas event was titled “Chuck Wagon/Kansas Day” and was a step-back to the past. Students were able to compare and contrast what it was like living in earlier times versus the present day. They learned about preparing and consuming foods, preserving and processing foods, and differences in sanitary standards. They were able to sample dried fruits, nuts, meats, and grains, and ate a chuck wagon meal with buffalo chili. The event addressed all four of the TN messages, and the event linked with all other TN channels. Materials and supplies used included art supplies; food; handouts, brochures, and other printed materials; posters and banners; food preparation equipment; and computer/Internet. The cost of the event was \$450, the majority of which came from TN grant funds. The community donated \$50 to the event. Costs for the Kansas media channel event and those for other States, in which media was considered the primary channel, are presented in Figure 9-2.

Figure 9-2. Average Cost of Conducting Media Channel Events



***Refer to page E-26 of the Appendix (Table E-1.5.8) for data related to this figure.**

The **steps, time, and resources** were embedded in the other channels where media event was considered as the secondary channel and there was no way to extricate those data. There were three points learned from this:

- The media was willing to cover TN events, especially community events.
- This channel did not require a great deal of steps, time, or resources beyond those necessary for the primary channels.
- While working with the media was challenging for schools due to limited resources, they were effective in using the media to present TN messages to a broader audience.

Schools indicated a lack of media resources as a barrier to linking the media to other TN channels. In 2004, FNS will publish and disseminate to all TN schools a publication entitled “Working with the Media.”

CHAPTER XI: COMBINED DATA FOR ALL CHANNELS*

- A. Steps to Implementing TN for All Channels
- B. Time Spent for All Channels
- C. Resources and Cost for All Channels
- D. Summary of All Channels

***THIS CHAPTER PROVIDES FIGURES THAT ARE BASED ON COMBINING THE DATA FOR ALL CHANNELS FOR WHICH CHANNEL LOGS WERE COMPLETED: CAFETERIA, SCHOOL-WIDE, HOME, COMMUNITY, AND MEDIA. CLASSROOM DATA IS PROVIDED IN CHAPTER V.**

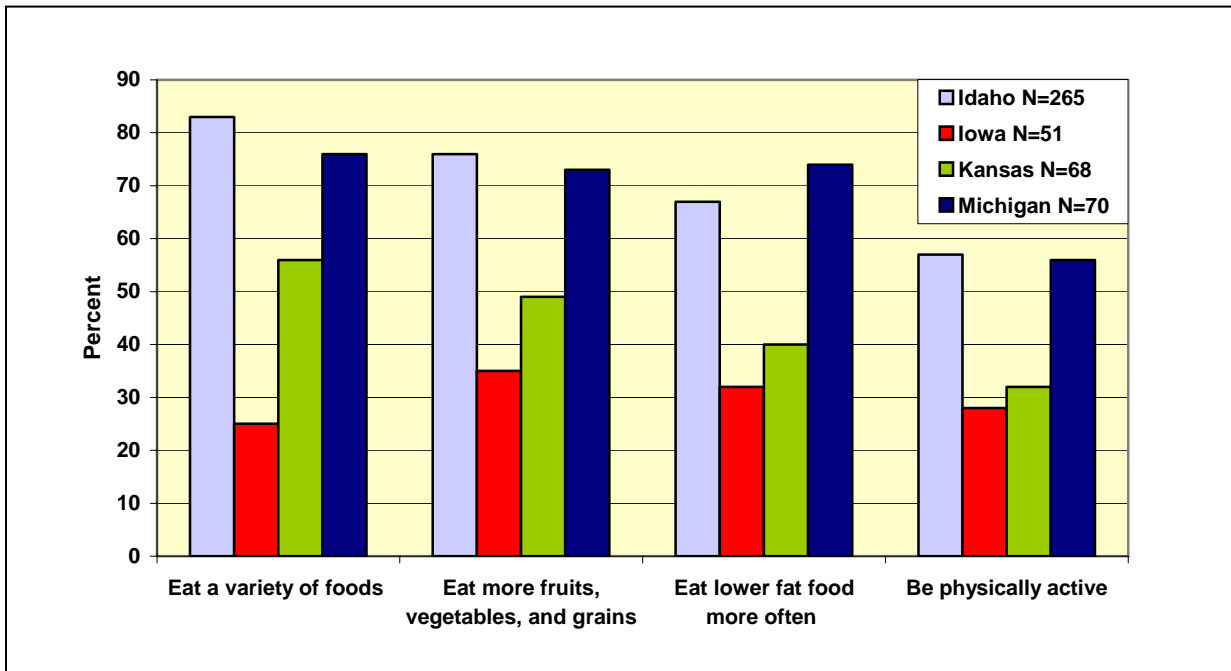
A. STEPS TO IMPLEMENTING TN THROUGH ALL CHANNELS

Findings were presented earlier in this report for each of the six Team Nutrition channels (Chapters V-X). Channel logs were completed for five of the six channels (cafeteria, school-wide, home, community, and media). In this chapter, data from those five channels combined are presented with key findings highlighted at the end. The total number of activities/events conducted during Year 2 of the TNDP implementation was 454 with 265 (58%) conducted in Idaho, 51 (11%) in Iowa, 68 (15%) in Kansas, and 70 (16%) in Michigan. The distribution of events across the five channels was as follows: Ninety-nine (22%) cafeteria events were conducted, 163 (36%) school-wide events, 90 (20%) home activities, 72 (16%) community events and 30 (6%) media events.

One question on the channel log asked event coordinators to indicate which of the four TN messages were communicated by the event. Figure 11-1 indicates “*Eat a variety of foods*” was the message communicated most often for events in Idaho, Kansas, and Michigan, whereas “*Eat more fruits, vegetables and grains*” was the message communicated more frequently in Iowa.

Events in Idaho and Michigan communicated a higher percentage of each message across the five channels than events in Iowa and Kansas. Perhaps the types of events selected in Idaho and Michigan were more appropriate for communicating multiple messages, rather than focusing on one or two. The messages were not exclusive and so events that addressed more than one were expected. For example, an event that helped students to prepare healthy snacks that included fruits and vegetables also related to the other two TN messages about variety and eating lower fat food more often.

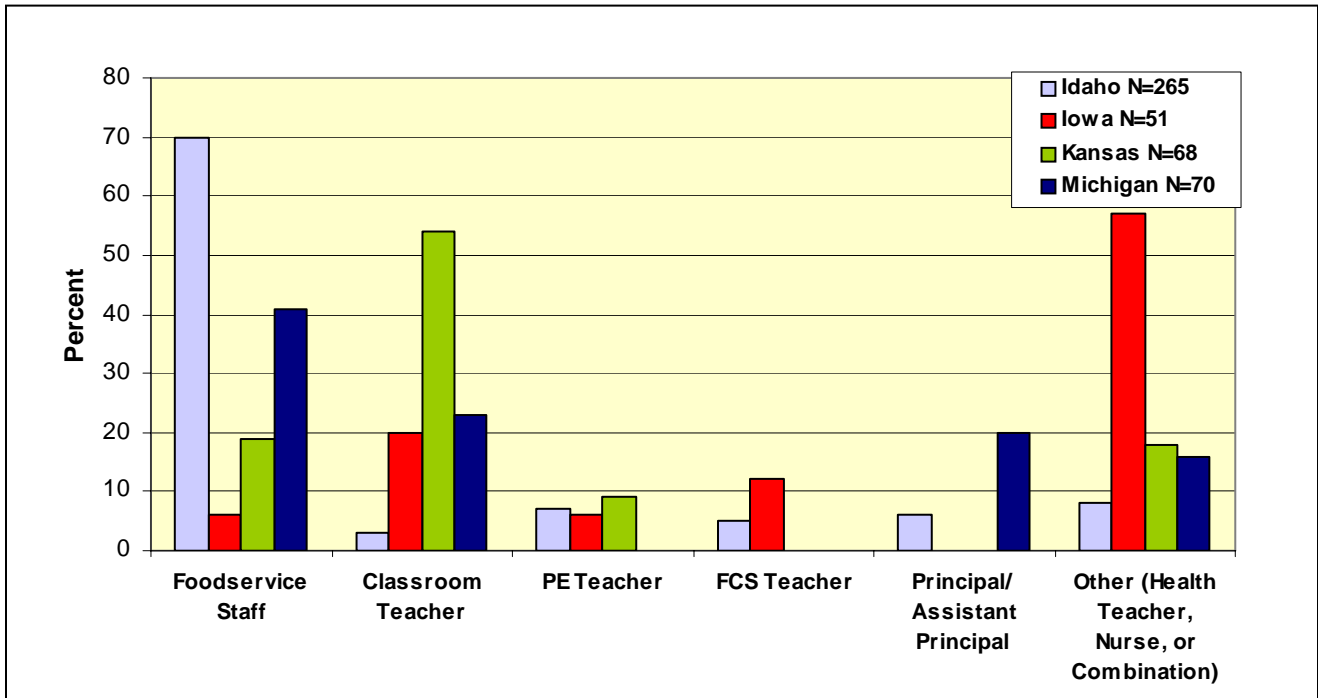
Figure 11-1. Team Nutrition Messages Communicated by Events in All Channels Combined (%)*



*Refer to Appendices page E-28 for data related to this figure.

Figure 11-2 indicates that event coordinators tended to be school foodservice staff in Idaho and Michigan, school nurses (“other”) in Iowa, and classroom teachers in Kansas.

Figure 11-2. Job Titles of Event Coordinators for All TN Channels Combined (%)*

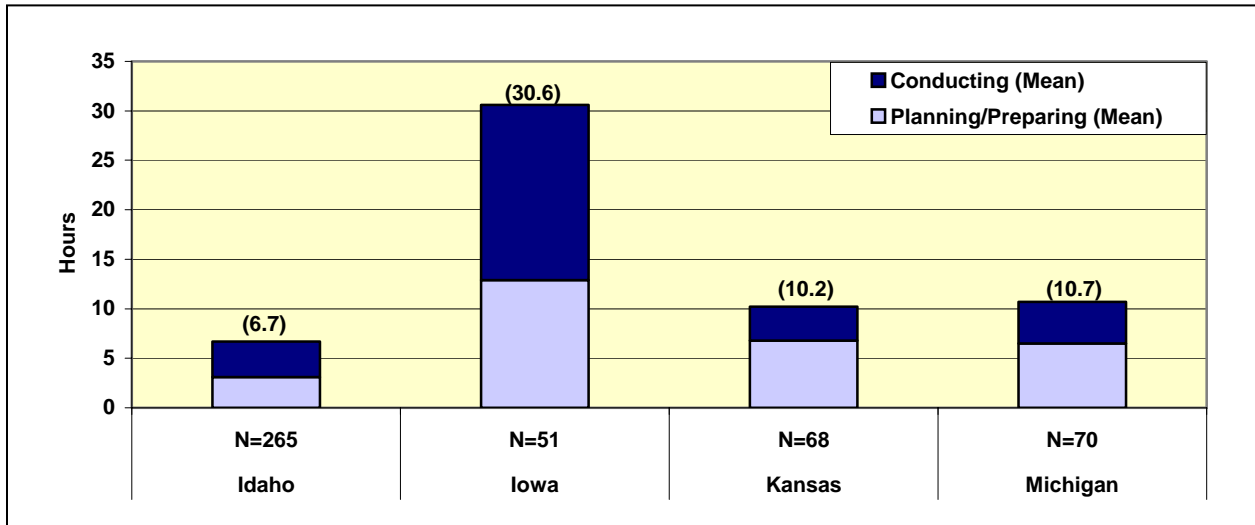


*Refer to Appendices page E-28 for data related to this figure.

B. TIME SPENT FOR ALL CHANNELS

Figure 11-3 indicates that about 7 to 31 hours were spent planning and conducting each event. Planning time was greater than time spent conducting events in Kansas and Michigan, whereas planning time was less than conducting time in Idaho and Iowa. Time to plan and conduct events in Iowa was longer than in other States because events were provided multiple times throughout the year, e.g., a writing activity conducted weekly or a school menu activity that occurred daily. Based on these averages, it can be estimated that a channel event that does not occur multiple times takes from three to seven hours to plan and from three to four hours to conduct.

Figure 11-3. Time Spent by Coordinators to Plan/Prepare and Conduct Events in All Channels*

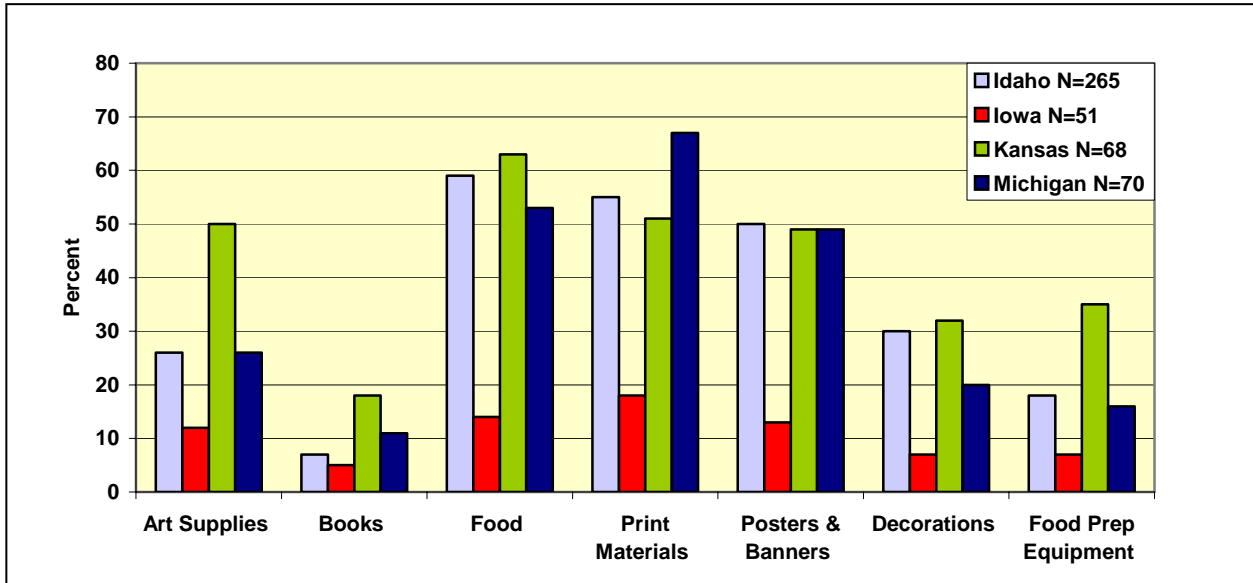


*Refer to Appendices page E-28 for data related to this figure.

C. RESOURCES AND COST FOR ALL CHANNELS

Figure 11-4 indicates that a variety of supplies and materials were used for channel events. Printed materials such as handouts and brochures, food, poster/banners, and art supplies were used more frequently for events than were other types of supplies. The higher use of food preparation equipment in Kansas than other States was due to the fact that participating schools were provided “food carts” that contained equipment for them to use with the activities that involved food preparation. Iowa schools had the lowest usage of materials and supplies and it was attributed to their usage of State-supplied *Pick a Better Snack* materials and supplies.

Figure 11-4. Materials and Supplies Used for TN Events in All Channels (%)*

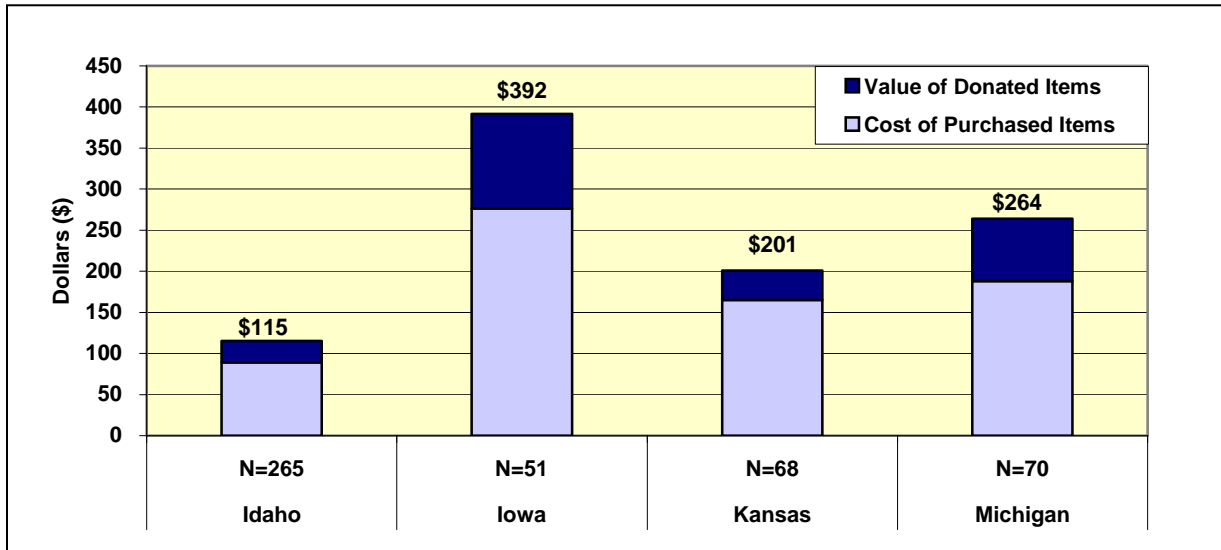


***Refer to Appendices page E-30 for data related to this figure.**

**Printed materials included handouts, brochures, and other printed materials.*

Figure 11-5 shows the average cost of an event across States for activities in the five channels ranged from \$115 to \$392 and the average was \$243 (per event). Of course, the costs varied with the type of activity and the frequency it was offered. The higher cost per event for Iowa might be explained by the frequency of implementation; events for some channels were held daily or weekly. Donations were obtained for channel events by all States, especially in Iowa, but the majority of the expenses were paid by the TNDP grant award to the school. In all States, the value of items purchased was higher than the value of donated items.

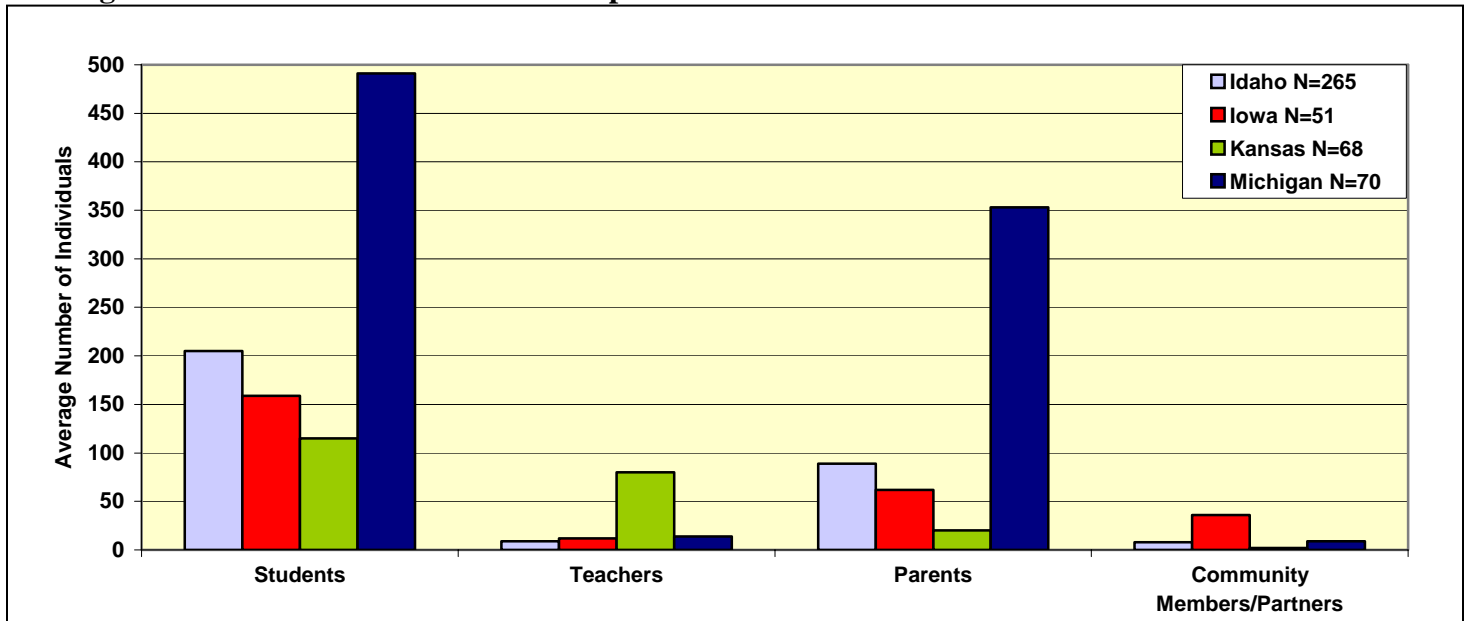
Figure 11-5. Average Cost of TN Events in All Channels*



*Refer to Appendices page E-31 for data related to this figure.

Figure 11-6 indicates that when participants/attendees for all channel events were combined, students were the primary participants. Community partners were more likely to attend events in Iowa. Teachers in Kansas were more likely to attend TN events. Channel events in Michigan reached a higher number of students and parents, on average, than other States.

Figure 11-6. TN Channel Event Participation/Attendance in All Channels*



*Refer to Appendices page E-32 for data related to this figure.

D. SUMMARY OF ALL CHANNELS

- Activities provided more than one message per event, especially in Idaho and Michigan. “*Eat a variety of foods*” was the message communicated most often for events in Idaho, Kansas, and Michigan whereas “Eat more fruits, vegetables and grains” was the message communicated most frequently in Iowa.
- School foodservice staff members were the group most likely to coordinate events across the channels. Classroom teachers were the next most likely to act as coordinators; to a lesser extent, PE teachers, FCS teachers and principals were coordinators.
- Time to plan and conduct events depended on how it was implemented. For activities that were implemented on a daily or weekly basis (like those in Iowa in some channels), the time was much longer. It took about 7 to 31 hours to plan and conduct each event; planning time was greater than time spent conducting events in Kansas and Michigan, whereas planning time was less than conducting time in Idaho and Iowa.
- The type of supplies and materials used depended on the activity or event. Overall, printed materials (brochures, handouts), food, posters or banners, and art supplies, were the most frequently used supplies.
- The cost to plan, prepare and conduct a channel event ranged from \$115 in Idaho to \$392 in Iowa with an average of \$243. The value of purchased items was greater than the value of donated items in all four States.
- Students, parents and teachers were the three groups most likely to participate in channel events.

CHAPTER XII: ADDITIONAL TNDP ACTIVITIES

- A. Development of the Team Nutrition Technical Assistance/Implementation Guide
- B. Routine Reporting of Team Nutrition Activities
- C. End-of-the-Project Questions for Site Coordinators

A. DEVELOPMENT OF THE TEAM NUTRITION TECHNICAL ASSISTANCE GUIDE

As part of the TNDP, a Team Nutrition Technical Assistance/Implementation Guide was developed. According to the RFA, the purpose of this guide was to assist non- TNDP States in moving toward the goal of implementing a comprehensive, firmly established TN initiative. In order to inform development of the guide, the TNDP was to document the steps, time, and resources needed to implement and institutionalize a comprehensive Team Nutrition initiative.

As called for by the RFA, a draft technical assistance/implementation guide was prepared and distributed to the four TNDP States for use in training their TN school teams during the School Year 1999-2000, and prior to the TNDP implementation during the next two school years. The draft guide was based on the “lessons learned” from the TN Implementation Pilot Project conducted in 1996. It was expected that feedback from the TNDP participating States and schools on the use of the draft implementation guide would be used as the foundation for the development of the Team Nutrition Technical Assistance/Implementation Guide.

Members of the FNS Project staff attended initial State-sponsored training for TNDP school leaders, teachers, and other members in Idaho, Kansas, and Michigan. FNS staff also visited TNDP schools in Iowa, Kansas, and Michigan to observe the comprehensive implementation of TN. The purpose of participating in these State-sponsored trainings and school visits was to enable FNS staff to evaluate first-hand the effectiveness of the initial draft implementation guide and to make necessary changes and improvements in the draft guide. The TNDP project directors, Social Scientists, and other project staff (known hereafter as the “Grantee Committee”) was actively involved during the process of making changes to the initial draft copy. The Grantee Committee used their own expertise and personal interaction with the schools participating in the TNDP to provide valuable feedback to FNS.

After much interactive consultation, recommendations for the TN Technical Assistance/Implementation Guide were made to:

1. Tailor the guide to local TN school leaders, as opposed to State leaders as described in the RFA. This decision was reached so that the guide could be disseminated and utilized by any enrolled TN school leader, regardless of State support, training and guidance. In States with an active TN infrastructure, the guide could be used with existing training and technical assistance provided to TN school leaders;
2. Clearly identify and include TN resources in the guide to assist local TN leaders to implement comprehensive TN using existing resources rather than having to develop new ones;
3. Make the content of the document concise and user-friendly—emphasizing the guiding principles of the six communication channels in delivering TN messages. This decision supported the results of the 1996 TN pilot studies, which clearly demonstrated a relationship between the numbers of channels included in TN implementation to the degree of positive behavior change; and
4. Share TNDP tips and strategies with other schools.

The draft technical assistance/implementation guide was revised according to these recommendations. A mock-up of the TN Technical Assistance Guide was developed for review by TNDP site coordinators in spring 2002. The mock-up guide included a TN Leader's Guide, resource folders tailored for each communication channel, and a reviewer evaluation form to obtain feedback. The mock-up guide was also shared with seven other State agency TN reviewers (States that were not involved in the TNDP) for external input. A slightly modified feedback form was used for these other State TN reviewers. Five of the seven selected State TN reviewers responded to the request for feedback. Additionally, one FNS regional nutritionist provided further feedback.

Based on the compilation of feedback obtained from the Grantee Committee, the TNDP schools, other State reviewers, and the regional reviewer, FNS made final decisions about the content, layout, and packaging of the guide. It was decided that the TN Technical Assistance Guide, as a final product, would be targeted primarily to TN school leaders, with a secondary target of State agency staff who could utilize the guide for training and technical assistance to local TN leaders to assist them with comprehensive implementation of Team Nutrition.

The final product was entitled *Team Nutrition: Getting It Started and Keeping It Going—A Guide for Team Nutrition Leaders*. This guide introduced the TN leader to many of the TN resources that are now available to get TN started and provides new ideas for seasoned TN leaders to expand the TN initiative. The section, "Team Nutrition—Getting It Started" focused on identifying a leader, building a team, getting buy-in, assessing the school's needs, finding resources, and developing plans to implement TN. The section, "Team Nutrition—Keeping It Going," emphasizes delivering the TN messages through the six TN communication channels for a comprehensive approach. In both sections, challenges and solutions, tips and ideas, and activities and events from participating TNDP States and schools were identified and shared.

In order to take advantage of a National Nutrition Education Conference held in February 2003 in Washington, DC for nutrition educators across all FNS nutrition assistance programs (Team Nutrition, Food Stamp nutrition education, and WIC nutrition education), a decision was made to have a final draft copy of the guide ready for the conference. *Team Nutrition: Getting It Started and Keeping It Going—A Guide for TN Leaders* was introduced at a post-conference workshop for Team Nutrition leaders at the regional, State, and local levels in February 2003. A reviewer form was enclosed in the guide to allow all regional, State, and local participants the opportunity for further feedback. The final product will be printed for national distribution in Fiscal Year 2004.

B. ROUTINE REPORTING OF TEAM NUTRITION ACTIVITIES

Another component of the TNDP RFA was to examine the feasibility of developing and operating a routine reporting system that captured the scope and value of State TN initiatives. FNS and the Grantee Committee worked cooperatively to develop and test the pilot reporting system. Participating State agencies were given the opportunity to influence decisions on what data is reasonable to collect through the pilot reporting system, and how often that data should be collected.

In the first year of the TNDP (1999-2000 School Year), the Grantee Committee explored options for establishing a routine reporting system. Staff from FNS took the lead on developing a form for routine reporting. During State training with TN site coordinators, State staff received

feedback from site coordinators on the proposed routine reporting form. Feedback from State TN staff and site coordinators indicated:

- Information must come directly from the schools to a USDA TN database so as to not unduly burden States with information gathering.
- The reporting must be voluntary, i.e., no regulatory requirement.
- The form must be short; one page and preferably limited to 10 or less questions.
- A majority of schools preferred that the reporting form be Internet-based for electronic submission and consolidation of data.
- The information should be collected no more than once per year, preferably at the end of the school year.
- States must communicate the importance of routine reporting to their TN schools.

During School Year 2000-2001, the Grantee Committee refined the reporting form and explored options for web-based reporting. The reporting form was named the “TN End-of-Year Reporting Form.” By the spring of 2001, FNS had entered into an agreement with the National Food Service Management Institute (NFSMI) to transform the paper and pencil version of the End-of-Year Reporting Form into a web-based reporting form. FNS also entered into an agreement with the National Agricultural Library (NAL) to house the web-based form, e-mail a link to the TN school leader at a designated time of year, and consolidate the responses. FNS and NFSMI presented the concept behind routine reporting along with a copy of the form to the Education Information Advisory Committee (EIAC) in May 2001.

During the development of the reporting form, it became apparent that the success of gathering individual school TN information through a web-based reporting system would depend on an accurate and up-to-date TN school leader database, including e-mail addresses. FNS entered into an agreement with the NFSMI to update the TN database for schools in the four TNDP States for the pilot testing and then to update the TN database for all enrolled TN schools nationally.

The following sections provide details on the pilot testing conducted by NFSMI as well as additional expert review of the reporting form that FNS requested from non-TNDP States.

Pilot-Testing in the Demonstration States (with Non-Demonstration Grant Schools)

- In March 2002, the web-based form was tested in 110 randomly selected non-demonstration grant schools within the four-State TNDP. This was done in an effort to see if schools that were not directly involved in the Demonstration Project would have difficulty gathering and reporting the data.
- These 110 schools were sent an electronic copy of the form and asked to provide feedback on the form and process by use of an expert review form.
- 25 responses were received and indicated:

The current routine reporting form took about 30 minutes to complete, including time to gather information and fill out the form.

- Most respondents were willing to spend 30 to 45 minutes without compensation.
- Most respondents preferred receiving the form electronically; however, nearly one-third preferred paper.

- Several respondents suggested they would be more willing to complete the survey if a small incentive was offered.

Pilot-Testing in Non-Demonstration States

- In May-June 2002, 75 randomly-selected schools from the USDA TN School Database were selected for pilot testing of the web-based form. Schools from TNDP States were not included for the pilot testing.
- Only one school responded to the request to complete the form and provide information about that process.

Expert Review Feedback from Additional State Agencies

- Six State agency TN coordinators (external to the TNDP) agreed to provide feedback on the routine reporting, however only four provided written feedback on the routine reporting component.
- The State agencies agreed that web-based collection was the best way to gather the information, although they questioned whether schools would be willing to complete a survey of this length for USDA on an annual basis.
- Several suggestions were offered by the State agencies for promoting school reporting:
 - Encourage States to announce the web-based survey and collection of data via State website, newsletters, and workshops.
 - For schools that report, USDA could generate a letter to the superintendents congratulating the schools' participation in TN events.
 - Generate summaries of the reporting to share with States and school districts that reported.
 - Provide an incentive (e.g., coupon for materials from NFSMI) if schools reported by the deadline.
 - Provide a State incentive for the State with the most schools responding.

As a result of the pilot-testing and expert review, FNS identified a variety of challenges and issues involved in implementing a nationwide TN routine reporting system. One of the primary challenges is identifying the appropriate respondent(s) in each school. One person is unlikely to know everything that goes on in the school regarding TN; therefore, many items may be left blank, or "guessed at" on the reporting form. Furthermore, school leaders are not likely to take the time to ask others in the school for information to help them complete the TN reporting form. Additional issues and challenges that were identified include the following:

- The reporting form needs to be Internet-based for electronic consolidation of data. This limits the potential reach of the reporting form since not all school leaders have regular e-mail access and, for those who do, addresses change often.
- Information needs to come directly from schools to the TN database so as not to unduly burden States; however, some schools may not be comfortable reporting directly to FNS.
- It is critical to keep the TN database of school leaders up to date. The use/effectiveness of the reporting system relates directly to the accuracy of the database. TN database

maintenance must be a priority; however, even with an updated database, e-mail messages are not received, some school leaders don't check their e-mail regularly, and others have difficulty accessing the website with the reporting form.

- Reporting needs to occur at the end of the school year in order to capture the range and scope of TN activities at the school; however, this is a busy time for school personnel and many may not fill out the form due to competing activities.
- There is no incentive at the local level to report data accurately and verifying the accuracy of the data would impose a major burden on FNS and/or State agencies.
- The current NAL hardware and software does not have the capacity to maintain a database of the 28,000 schools enrolled in TN. FNS would need to fund a major capital investment to upgrade the NAL database or look to an alternative approach.

These challenges and issues have resulted in USDA re-evaluating the routine reporting concept and considering other means of collecting data on TN implementation, such as requiring reporting of TN activities with TN funded State grants.

C. END-OF-THE-PROJECT QUESTIONS FOR SITE COORDINATORS (SUMMARY OF RESPONSES)

At the end of the two-year implementation, States asked the coordinators to respond to some questions that would provide information for inclusion in the TN Technical Assistance/Implementation Guide that was a product of the TNDP. The questions were:

1. What did it really take to make the TNDP work?
2. What were the major obstacles?
3. What were the major successes and benefits of TN?
4. What advice would you give to others to get them interested, motivated and committed to nutrition education in the schools?
5. What would you do again?
6. What would you not do again?

Each State collected responses to these questions from site coordinators at the end of the two-year implementation. Some States (Idaho and Michigan) also asked additional questions. The responses were compiled and provided in Appendices pages G-8 to G-16 of this report. Highlights of those responses follow:

What did it really take to make the TNDP work?

- A committed leader who is energetic, enthusiastic, and can devote time to TN.
- Commitment from teachers (classroom, FCS, PE), school foodservice staff, and administrators, including formation of a team that includes one person from each of those areas and perhaps a school board member, or someone from the PTO, a parent and students.
- Funds for resources, food for activities, and field trips.

- A common calendar for the team.
- Enough people involved so that turnover doesn't affect continuity/momentum.
- Consistent nutrition messages. Availability of unhealthy foods and beverages in vending machines; and other school venues; and soft drink consumption by staff conflicts with TN messages.

What were the major obstacles?

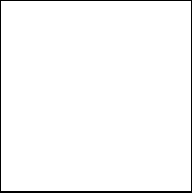
- Get buy-in from all involved. Time was an issue related to planning, gathering and distributing resources and meeting. Release time from job responsibilities for the leader was crucial.
- Money/funding was needed at the school level (for resources, release time, food).
- The State agency needed to provide school leaders with encouragement, continual updates about TN, ideas from others about what works, help with the media to promote TN and healthy school environments, and information/training about the fit between nutrition lessons and State standards/benchmarks.

What were the major successes/benefits of the TNDP?

- Great public relations for the school (related to parents and the community); school projects a "caring" attitude about student/family health.
- Students try new foods, eat healthier snacks, and have fun learning about nutrition.
- School menus improve; students involved in suggestions for school meals.
- School staff learns more about nutrition, recipes, and interacts with school foodservice staff.
- Enhanced curriculum; nutrition taught in a new way (using food).
- Partnerships between teachers and school foodservice staff; recognition/credit for foodservice employees.
- Satisfaction from making a difference in your school and community.
- Nutrition messages come from multiple sources—students' classroom teachers, other teachers, hallways (displays), nutritious school meals, information sent home to parents, school newsletters, community members who are involved.
- Teachers learn about nutrition by teaching it.
- TN information that reaches parents, promotes school meals, and showcases the work of school foodservice staff.

What advise would you give to others to get them interested, motivated and committed to nutrition education in the school?

- Don't go it alone; form a team including community members with resources and willingness to help, and take leadership. Delegate. Communicate with team members.
- Use ideas from other schools.
- Use rewards/incentives, if possible.

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- Provide ideas that have worked.
 - Most importantly, be enthusiastic.

What would you do again?

- Work with Nutrition Advisory committee.
- Utilize high school students to teach elementary students.
- Collaborate with others and provide school-wide events more often.
- Integrate nutrition across curriculum.

What would you not do again?

- Do not take on too many tasks/projects at once.
- Come on in the middle of a school year without training.
- If no funds, avoid doing field trips.