

DOCUMENT RESUME

ED 354 107

PS 021 190

AUTHOR Ahmad, Mahassen  
 TITLE Texas Nutrition Education and Training Program for Federal Fiscal Year 1992. Final Evaluation Report.  
 INSTITUTION Texas State Dept. of Human Services, Austin.  
 PUB DATE 92  
 NOTE 163p.; For earlier evaluation reports, see ED 285 897, ED 328 352, and ED 343 698.  
 PUB TYPE Reports - Evaluative/Feasibility (142) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC07 Plus Postage.  
 DESCRIPTORS Adult Education; Child Caregivers; Coordination; Elementary Education; Elementary School Students; Food Service; \*Instructional Materials; Library Services; \*Nutrition Instruction; \*Outreach Programs; Parent Education; \*Program Evaluation; Resource Materials; State Federal Aid; \*State Programs; Teacher Education; Workshops  
 IDENTIFIERS Minigrants; \*Nutrition Education and Training Program; Public Service Advertising; \*Texas

ABSTRACT

The U.S. Department of Agriculture's Nutrition Education and Training Program (NET) provides nutrition information and instructional resources for children, parents, educators, and food service personnel. This report describes the evaluation methods of the NET Program in Texas in fiscal year 1992, describes evaluation results, and offers recommendations. Section I of the report provides an executive summary of the evaluation activities. Section II describes the NET Program's outreach activities, including nutrition workshops, a lending library, distribution of instructional materials, and public presentations. Section III reports on the evaluation of the contracts awarded to promote the School Breakfast Program. The development and evaluation of the "Earl E. Bird" Public Services Announcement are reported in Section IV. Section V provides a general evaluation of the NET Program. Appendices include copies of the evaluation instruments used in the NET Program, the results of a survey conducted by NET at the 82d Annual Convention of the Texas Parent Teacher Association (PTA), and the correspondence and questionnaire used in evaluating the "Earl E. Bird" Public Service Announcement. (ME)

\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*

ED354107

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it

Minor changes have been made to improve reproduction quality

Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

**FINAL EVALUATION REPORT**  
**OF**  
**TEXAS NUTRITION EDUCATION AND TRAINING PROGRAM**  
**FOR**  
**FEDERAL FISCAL YEAR 1992**

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

MAHASSEN AHMAD, TEXAS  
DEPARTMENT OF HUMAN SERVICES

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

**TEXAS**



**NUTRITION EDUCATION & TRAINING**

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Mahassen  
Ahmad

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

**Prepared By**

**Mahassen Ahmad, Ph.D.**  
**NET Program Evaluator**  
**Special Nutrition Programs, Client Self-Support Division**  
**Texas Department of Human Services**  
**P.O. Box 149030**  
**Austin, Texas 78714-9030**

PS 021190

## TABLE OF CONTENTS

	Page
<b>I. Executive Summary . . . . .</b>	<b>1</b>
<b>II. Outreach of the NET Program . . . . .</b>	<b>11</b>
<b>Introduction . . . . .</b>	<b>11</b>
<b>Workshops . . . . .</b>	<b>14</b>
<b>NET Lending Library . . . . .</b>	<b>25</b>
<b>Development and Distribution of Instructional Material . . . . .</b>	<b>37</b>
<b>Presentations, Exhibits, and Publications . . . . .</b>	<b>44</b>
<b>Coordination with Related Publicly Supported Programs . . . . .</b>	<b>49</b>
<b>Summary . . . . .</b>	<b>52</b>
<b>Recommendations . . . . .</b>	<b>53</b>
<b>III. Evaluation of Mini-Contracts Awarded to Promote the School Breakfast Program . . . . .</b>	<b>55</b>
<b>Introduction . . . . .</b>	<b>55</b>
<b>Purpose of Evaluation . . . . .</b>	<b>66</b>
<b>Method . . . . .</b>	<b>66</b>
<b>Results and Discussion . . . . .</b>	<b>67</b>
<b>Evaluation of the Mini-Contract Project . . . . .</b>	<b>85</b>
<b>Recommendations . . . . .</b>	<b>91</b>
<b>IV. Evaluation of the "Earl E. Bird" Public Service Announcement . . . . .</b>	<b>93</b>
<b>Introduction . . . . .</b>	<b>93</b>
<b>Method . . . . .</b>	<b>95</b>
<b>Results and Discussion . . . . .</b>	<b>99</b>
<b>Recommendations . . . . .</b>	<b>118</b>

<b>V. General Evaluation of the NET Program</b> . . . . .	<b>120</b>
<b>Introduction</b> . . . . .	<b>120</b>
<b>Program Resources</b> . . . . .	<b>121</b>
<b>Program Activities</b> . . . . .	<b>123</b>
<b>Meta-Analysis of Program Outcomes</b> . . . . .	<b>124</b>
<b>Results and Discussion</b> . . . . .	<b>125</b>
<b>Recommendations</b> . . . . .	<b>128</b>
<b>Appendices</b> . . . . .	<b>131</b>
<b>Appendix A: Evaluation Instruments Used in NET Program Outreach</b> . . . . .	<b>132</b>
<b>Appendix B: Results of NET's Survey Conducted at the 82nd Annual Convention of Texas PTA</b> . . . . .	<b>149</b>
<b>Appendix C: Correspondence and Questionnaire Used in Evaluating the "Earl E. Bird" PSA</b> . . . . .	<b>157</b>

## LIST OF TABLES

<u>Table</u>	<u>Page</u>
1 Number and Percent of Participants in NET Workshops Conducted in 1992 . . . . .	16
2 Workshop Participant Food Programs . . . . .	23
3 Themes of Materials Circulated in FFY 1992 . . . . .	29
4 Type of Library Materials Circulated in FFY 1992 . . . . .	30
5 Materials Distributed to Workshop Participants in 1992 . . . . .	42
6 NET Presentations During FFY 1992 . . . . .	44
7 NET Exhibits and Fairs During FFY 1992 . . . . .	47
8 NET Publications and News Releases During 1992 . . . . .	48
9 Participation in NET From FFY 1985-1992 . . . . .	52
10 Problems Contractors Encountered in Implementing the Projects . . . . .	86
11 Number and Percent of Projects Achieving NET Program Goals . . .	88
12 Contractors' Suggestions for Improving Mini-Contract Projects' Goals . . . . .	90
13 Grade and Sex of Students . . . . .	104
14 Number and Percent of Students Who Recognized the Earl E. Bird Poster . . . . .	105
15 Number and Percent of Students Who Watched the PSA on Television . . . . .	106
16 Student Reasons for Liking or Not Liking the PSA . . . . .	111

<u>Table</u>		<u>Page</u>
17	<b>Student Reasons for Eating Breakfast . . . . .</b>	<b>113</b>
18	<b>Student Reasons for Not Eating Breakfast . . . . .</b>	<b>114</b>
19	<b>Matrix of Correlations Between District Characteristics and Student Responses . . . . .</b>	<b>117</b>
20	<b>Texas NET Program Resources for the Past Eight Years . . . . .</b>	<b>122</b>
21	<b>Texas NET Program Activities for the Past Eight Years . . . . .</b>	<b>123</b>
22	<b>Results of Meta-Analysis of Program Outcomes . . . . .</b>	<b>126</b>

## LIST OF FIGURES

<b>Figure</b>		<b>Page</b>
1	Facilities of Workshop Participants in the Past Three Years . . . . .	18
2	Function of Workshop Participants in the Past Three Years . . . . .	20
3	Training Hours Delivered to Educators and Food Service Personnel in 1992 . . . . .	21
4	Number of Children Reached by Workshop Participants . . . . .	24
5	Monthly and Total Circulation of Library Materials in FFYs 1991 and 1992 . . . . .	28
6	Viewers/Users of Circulated Library Materials . . . . .	31
7	Function of Library Borrowers in 1992 . . . . .	32
8	Facilities of Library Borrowers in FFY 1992 . . . . .	33
9	Borrower Evaluation of Library Materials in 1992 . . . . .	34
10	Sources of Information About the NET Library in FFYs 1990 and 1992 . . . . .	36
11	Type of District Represented in the Sample . . . . .	100
12	Minority Representation in the Sample ISDs . . . . .	101
13	Income Representation in the Sample ISDs . . . . .	103
14	Number of Times Students Watched the PSA . . . . .	107
15	Frequency of Watching the PSA on Each Weekday . . . . .	108

<b>Figure</b>		<b>Page</b>
<b>16</b>	<b>Time of Day During Which Students Watched the PSA . . . . .</b>	<b>109</b>
<b>17</b>	<b>Student Reactions to the PSA . . . . .</b>	<b>110</b>
<b>18</b>	<b>Student Understanding of the PSA Message . . . . .</b>	<b>112</b>
<b>19</b>	<b>Percent of Students From Each Grade Who Watched the PSA on Television . . . . .</b>	<b>115</b>
<b>20</b>	<b>Percent of Students Who Ate Breakfast Before the PSA . . . . .</b>	<b>116</b>



## I. EXECUTIVE SUMMARY

The Nutrition Education and Training (NET) program is one of the Child Nutrition Programs (CNP) of the United States Department of Agriculture (USDA). The program was established in 1977 in an amendment to the Child Nutrition Act (Public Law 95-166). States granted NET program funds are required to submit an annual performance report on the numbers of children, educators, and food service personnel receiving nutrition education and training by NET during the FFY. In addition, the states are required to conduct formal evaluations and needs assessments of program activities and use the results as bases for program improvement and planning. This report includes the evaluations and needs assessments conducted during FFY 1992.

### **Outreach of the NET Program**

NET's outreach to its target populations is achieved through: (a) workshops developed by NET and delivered by contract trainers; (b) circulation of a NET library collection; (c) development of instructional and promotional materials on nutrition and food service management; (d) presentations, exhibits, and publications on nutrition education, food service management, and program evaluation; (e) coordination with related publicly supported programs within the state.

### **Findings**

#### **Workshops**

In FFY 1992, NET delivered 225 workshops to 4,642 participants. The number of times each workshop was conducted varied from once to 48 times. The total number of participants in the workshops ranged from 23 to 1,254. Relatively more school food service personnel than child care educators and caregivers participated in the workshops. There was a 37.2% increase in the number of workshops over FFY 1991. Participation in the workshops was more than double the participation goal. The increase in the number of public school teachers was not proportional to increases in other target populations. The total hours of training delivered was over one and one-half times that of 1991.

## **NET Lending Library**

In 1992 the NET lending library circulated 3,665 items, an 11.4% increase over 1991. The library continued to circulate considerably more audiovisual than printed materials. The dominant themes of circulated materials were food service management, child health education, and child care health and nutrition. General themes such as children's books and general cookery were the least circulated items. The majority of the items were used in group educational and training settings. The most frequent borrowers of library materials were public school educators. Only 14.6% of the items were used in child care facilities. Information about the library reached participants mostly through meetings and conferences or friends and co-workers, while mailed or published information slipped from second to fifth place. Library participation was over six times the goal set for public school populations and two and one-half times the goal set for child care facilities.

## **Development and Distribution of Instructional Materials**

Two workshops were developed in FFY 1992: "Guidelines for Selecting Creditable Foods and Beverages," and "Puppetry in Nutrition Education." An "Orientation to NET" unit was developed for the NET contract trainers. A two-hour presentation titled "Project 2001: Nutrition For a New Century" was developed to inform school food service personnel, educators, and administrators about the benefits of this project. A videotape titled "Breakfast Advantage" and two menu-backs were developed as part of NET coordination with TEA to promote school breakfast. Two costumes were designed after the "Earl E. Bird" cartoon character appeared in a 1991 public service announcement (PSA) promoting breakfast to elementary school students.

The materials distributed to workshop participants, in addition to material packages specific to each workshop, totaled 16,296, a 12.3% increase over 1991. Promotional posters, PSAs, and brochures were distributed, bringing the total number of distributed materials to about 30% over 1991.

## **Presentations, Exhibits, and Publications**

In addition to 31 presentations delivered by the NET staff, NET contract trainers delivered 51 presentations. Forty-two of the presentations delivered by the contract trainers were classroom presentations, a new activity that is boosting the number of children reached directly. Thus, a total of 82 presentations were delivered in 1992 compared to 9 in 1991. Only one presentation, however, was directed to parents.

In 1992, NET sponsored 7 exhibits compared to 4 in 1991. Thirteen articles and news releases were published compared to 8 in 1991. Six of these publications were technical articles. The 1990 final evaluation report was published by the U. S. Department of Education, Office of Educational Research and Improvement.

### **Coordination With Related Publicly Supported Programs**

NET expanded coordination efforts that started in previous years with the Texas Interagency Council on Nutrition, American Cancer Society, American Heart Association, Texas School Food Service Association, Texas Education Agency, Texas Department of Agriculture, and other sections of the Texas Department of Human Services. Coordination efforts were initiated with the Dietary Guidelines Coalition, the Texas Department of Health, The University of Texas at Austin, and Pan American.

### **Recommendations**

- NET workshops continued to vary considerably in the number of times conducted and number of participants. Unique workshops were conducted more frequently and attracted larger numbers of participants. It is recommended that NET eliminate or reduce the overlap in workshop content to increase workshop efficiency and cost effectiveness.
- Two workshops were scheduled statewide during FFY 1992. These workshops surpassed the rest in frequency and participation. It is recommended that NET strive to achieve a balance between state and local needs by increasing the number of workshops scheduled statewide since statewide scheduling results in sizeable increases in workshop participation.
- Since participation of public school teachers in NET workshops was not commensurate with participation of other target populations, more efforts should be directed toward assessing the training needs of public school teachers. At present, NET is undertaking a two-year comprehensive assessment of the nutrition education and training needs of public school populations. Until the results of this assessment are available, NET could coordinate efforts with TEA and other organizations involved in teacher training. NET should also promote the workshops to school districts and in teacher associations, meetings, and periodicals.

- Since library items circulated to day care centers and family day homes were relatively few, more library outreach efforts should be directed to these facilities. Promoting nutrition and health to facilities that care for children at an early age is crucial to the realization of NET's goals. Movable exhibits of samples of suitable audiovisuals and mailed bibliographies may be effective means of promoting the library collection to these facilities.
- NET needs to maintain mailed and published information about the library collection as an important source of library outreach. Distributing library catalogs and bibliographies to schools and child care facilities and publishing articles and announcements in magazines and newsletters was an effective means of library outreach in the past and should continue and expand.
- Since very few parents were reached through NET's interventions in FFY 1992 and in previous years, it is recommended that NET develop and deliver presentations and handouts for parents. Parents could be reached in PTA meetings and through their children in schools and child care facilities.
- NET's diligent coordination with related publicly-supported programs resulted in measurable increases in participation and in contributions state and nationwide. This coordination should continue and should be extended to related non-profit community organizations as much as possible.

### **Evaluation of Mini-Contracts Awarded to Promote the School Breakfast Program**

NET developed and implemented a mini-contract project during FFYs 1991 and 1992. The purpose of the project was to encourage school personnel to develop and implement model nutrition education projects related to School Breakfast Program (SBP) participation and expansion. A Request For Proposal (RFP) was developed and announced to school food service managers. Nine proposals were received and funded. Project activities included: (a) development or purchase of nutrition education materials on breakfast; and (b) creating methods and techniques for using educational materials in classrooms, school cafeterias, and the community as a whole.

The projects were evaluated individually and as a whole. Data collected on a monitoring form completed by NET contract trainers and an end-of-project report completed by the contractors were used for evaluation. Evaluation criteria were (a) the extent of adhering to the provisions of the contract, and (b) effectiveness of the projects in achieving NET program goals.

### **Findings**

Most of the activities suggested in the projects' plans were implemented. However, lack of interest of some school administrators, busy school schedules, difficulty in coordinating several sequential activities, and tardiness in awarding grant monies resulted in implementing some of the activities at a smaller scale and delay in the activities of four out of the nine projects.

Budgets of all nine projects were expended in allowable fund expenditures. Two projects exceeded their allowable funds and received extra funds from their school districts. Records were kept and updated by all except two contractors. Most of the projects' efforts were directed toward the provision of information and materials on breakfast. Three projects resulted in creating innovative methods and techniques for teaching nutrition education. The majority of the projects reported an increase in student participation in the SBP. Six contractors became aware of problems hindering the nutrition education and training efforts in their districts. Only two were actively involved in finding solutions to these problems. Five contractors planned to continue efforts they had started, in the following years.

### **Recommendations**

- Since the mini-contract projects helped NET achieve several goals and had direct impact on children and their parents, it is recommended that NET include this type of intervention as a regular activity of the program.
- In administering future mini-contract projects, more time should be allowed for careful planning and implementation and the amount of grant money increased to fund meaningful and creative efforts. This may entail awarding fewer grants to develop exemplary programs, methods, and/or materials.

- Data indicated a need for closer and more frequent monitoring of the contracted projects throughout the process of their implementation. Guidance was specifically needed in curriculum development and project evaluation. Early monitoring could have avoided or solved funding and scheduling problems. Contracted projects could have benefitted from each other's efforts and some duplication of effort could have been avoided.
- Data revealed the importance of securing approval and support of school superintendents and principals for the success of contracted projects conducted in public school systems. Food service staff were able to achieve success by involving the superintendents and/or the principals in catalyzing efforts and announcing events.
- Contractors expressed interest in sharing information on similar programs and experiences, common problems, and possible solutions. It is recommended that NET expand its activities and work as an information clearinghouse on innovative practices and ideas in nutrition education and training for schools and child care facilities in Texas.
- To maximize NET's return on money and efforts invested in the mini-contract project, it is recommended that a follow-up to the project be considered part of the project administration. NET should share the results, products, and experiences gained from each project with other contractors and with interested school districts. A package of developed curricula and materials should be available in the NET library for reference.
- Contractors expressed a need for more instructional materials on breakfast. NET could satisfy this need by compiling a bibliography of resources in this area as part of NET's effort to promote breakfast. The NET lending library could include selected resources on breakfast in the library collection.
- Since the number of project proposals was even less than the available grants, it is recommended that NET improve the planning and advertising procedures of contracted projects. More time is needed for planning and large-scale advertising. Contractors should be allowed more time to prepare their proposals. The amount of the grant should be enough to fund exemplary projects. This requires flexibility in committing NET's fund to FFY activities.

## **Evaluation of the "Earl E. Bird" Public Service Announcement**

In 1991, NET, with the help of TDHS Media Services, contracted with a private business firm to produce a public service announcement (PSA) named "Earl E. Bird" after the cartoon character in the PSA. The 30-second PSA targets elementary school students. A formative evaluation was conducted during the process of the PSA development. A poster that illustrated the Earl E. Bird cartoon character was developed and distributed to all the elementary school districts in Texas.

A stratified sample of elementary school students, males and females, enrolled in grades three, four, five and six was drawn at random from the 254 Texas geographical counties. Independent school districts and schools where the sample of the students were enrolled were drawn at random from the TEA database. A questionnaire was developed to collect the needed data from the student sample. Teachers of the students conducted the survey and mailed the questionnaires back to NET.

### **Findings**

The number of students responding to the questionnaire was 930. They were enrolled in schools spread over 158 out of the 254 Texas counties. The student sample was homogeneous with respect to grade level and sex. The sample was representative of geographical region, ethnicity, and income level.

About 35% of the students recognized the Earl E. Bird poster in their school cafeterias and about 18% watched the PSA on television. The majority of the students who watched the PSA (71.8%) watched it between once and four times. Significantly more students watched the PSA on Saturdays, during the daytime. The majority of the students who watched the PSA liked the PSA and understood its message. The majority of the responding students ate breakfast before, as well as after, the time of the questionnaire.

### **Recommendations**

- Since less than one-fifth of the student sample watched the PSA on television, there is a need to follow-up with the broadcasting television stations so as to broadcast the PSA more often throughout Texas geographical regions.

- Prime time for watching the PSA was Saturdays during the daytime. It is recommended that NET recruit sponsors willing to purchase television time to broadcast the PSA during this time.
- To boost the number of elementary school students who watch the PSA, copies of the PSA on video may be integrated with other audiovisual materials to form complete presentations. These presentations could be delivered in elementary school cafeterias and in vending machine areas during meal times and breaks.
- Since a little over one-third of the student sample recognized the poster developed based on the PSA character, it is recommended that NET follow-up massive distributions of materials by arranging visits or phone calls to samples of the receiving facilities to see if the distributed materials were received and used for the intended purpose. Instructions on how to use the distributed materials may accompany their distribution.
- None of the efforts promoting breakfast to elementary school students were directed to students' parents. Since parents play a major role in their children's behaviors at this age, it is recommended that NET involve parents in the breakfast campaign.

### **General Evaluation of the NET Program**

The purpose of this study was to assess the overall program performance in FFY 1992. The results of the evaluations conducted during the year were combined to produce an index of the program effectiveness.

### **Findings**

The NET program budget increased 37.0% over 1991's budget. This increase reflects an increase in the NET program budget nationwide, an increase in the number of children in Texas, and expansion in NET program activities. About 17% of the budget was invested in research. A temporary full-time NET assistant was hired and the number of NET contract trainers rose from 18 in 1991 to 25 in 1992.



The vote counting method of meta-analysis was applied to integrate results of the evaluation of program activities in 1992. Results of the analysis revealed an overall positive impact of the NET program in Texas. Twenty-eight out of 37 evaluations were positive, four were nonsignificant, and five outcomes were negative. Some of the negative or nonsignificant results were due to a need to improve specific services and procedures; others were due to the nature of the activity, namely, developing and broadcasting a PSA.

### **Recommendations**

- Since priorities are set for reaching different target populations in the NET State Plan, it is recommended that an action plan be developed for each of the program units which specifies suitable strategies for implementation. The program staff must assess the effectiveness of these strategies systematically and adjust NET activities accordingly.
- Since NET is expanding its efforts commensurate to higher budget and staffing levels, it is recommended that nutrition education and training services target parents of small children, due to the important role they play in their children's knowledge, attitudes, and behaviors.
- Related to the previous recommendation, NET should assume the function of a clearinghouse and a consultant to organizations, facilities, groups, and individuals in nutrition education and training in general, and on best practices in the field.
- Since NET is highly successful in coordinating with related publicly supported programs, it is recommended that NET coordinate with food distribution programs by providing information on how to use distributed foods for optimal nutrition and health.
- Since NET is expanding its interventions and strategies, there is an emerging need for measuring the relative cost-effectiveness of various interventions and alternative strategies. Emphasis should be placed on more successful and cost-effective interventions and strategies.

- There is a need to follow-up on the results of NET program evaluations and the results of sponsored research projects. Continuous improvement in services is a significant indicator of successful programs and a major reason for conducting research and evaluation. Results of the evaluations conducted in 1992 point to several areas that need improvement in procedures, materials, and/or methods.

## II. OUTREACH OF THE NET PROGRAM

### **Introduction**

### **Background**

The Nutrition Education and Training (NET) program is one of the Child Nutrition Programs (CNP) of the United States Department of Agriculture (USDA). The program was established in 1977 in an amendment to the Child Nutrition Act (public law 95-166). The USDA administers the program through grants to state agencies.

The NET program supports the other USDA child nutrition programs; namely, the National School Lunch Program (NSLP), the School Breakfast Program (SBP), the Special Milk Program (SMP), the Child and Adult Care Food Program (CACFP), and the Summer Food Service Program (SFSP). With the exception of the National School Lunch and School Breakfast Program for public schools, in Texas, the rest of these programs, including NET, are under the jurisdiction of the Texas Department of Human Services (TDHS). They are administered by the Special Nutrition Programs Section of the Client Self-Support Services division.

States granted NET program funds are required to submit an annual report--the FNS 42--reporting the number of children, educators, and food service personnel receiving nutrition education and training during the fiscal year. The report must be completed within a specified interval after the close of the Federal Fiscal Year in order for the state to receive the program grant for the succeeding year. In addition, states are required to conduct formal evaluations and needs assessments of program activities and use them as bases for program improvement and development. This report includes the evaluations and needs assessments of program activities implemented during FFY 1992.

### **Goal**

The goal of the NET program is to promote optimal health and well-being of the nation's children through improved nutrition. To achieve its goal, the NET program provides nutrition education and instructional resources for children and for key individuals in the learning environments of children. Parents or guardians, caregivers and teachers, as well as food service personnel who prepare meals for the children, are considered individuals who affect the nutritional status of Texas children.

Four goal areas were identified in NET's State Plan Update For 1992. They are:

1. Assure that children have opportunities to learn about and to practice good eating habits in schools and child care facilities participating in USDA's Child Nutrition Programs. This goal area is achieved by providing education and instructional materials for children, teachers, and food service personnel.
2. Facilitate integration of effective nutrition learning activities--including use of the cafeteria as a learning laboratory--into instruction at all grade levels from preschool through high school. This goal area is achieved by providing information and instruction to help teachers improve their child nutrition related knowledge, attitudes, and behaviors.
3. Assure that nutritious, appealing, and safe meals and snacks are served in schools and child care facilities. This goal area is achieved by providing information and training to help food service personnel improve their child nutrition related knowledge, attitudes, and behaviors.
4. Provide support for nutrition education and food service management practices in schools and child care facilities participating in the reimbursement programs. This goal area is achieved by developing educational materials, keeping the lending library collection current, acquiring and distributing materials, and coordinating services with other public-sector agencies interested in promoting children's health and well-being through improved nutritional status.

In order to assure that the Texas NET program reaches as much of the target population as possible, annual participation goals are set for each of the program's major activities and for each of its target populations. Goals are based on current priorities, current staffing, and prior participation figures. Actual participation is monitored and compared against the goal for the year. Information about goal attainment then is used in establishing objectives and making plans for the following year.

### Goals for NET's Outreach

Data about staffing levels and participation in fiscal year 1985 were used as a baseline in setting goals for 1992. Using 1985 as the baseline is appropriate because all of the designated NET staff positions were filled during 1985 and evaluation studies demonstrated that the program was both challenging and successful that year.

During 1985, there were approximately 6 full-time equivalent NET staff positions that supported NET workshops and 2.5 positions that supported the NET lending library. The staff-to-participant ratios were 1:400 for NET workshops and 1:1500 for the NET lending library.

FFY 1992 witnessed a relative stability in program staffing. The staff consisted of Program Coordinator, a Program Evaluator, a Workshop Coordinator, a Project Coordinator, a Librarian, a Workshop Assistant, an Administrative Assistant, and a Secretary. A temporary NET Assistant was hired during the first half of the year. In addition to the NET staff, 25 Trainers were contracted to deliver NET workshops throughout Texas and to evaluate instructional materials. Following is an estimate of NET's workshop and library full-time equivalent positions in 1992.

Workshops:

1.00	Workshop Coordinator
3.00	Contract Trainers
1.00	Workshop Assistant
<u>0.25</u>	Clerk
5.25	Total

Library:

0.50	Project Coordinator
1.00	Librarian
1.00	Material Evaluator (Workshop Instructors)
<u>0.50</u>	Library Assistant
3.00	Total

Thus, there were approximately 5.25 full time equivalent staff positions in support of the workshops and 3.00 staff positions in support of the library. By substituting these figures in the staff-to-participant ratio, overall goals were set for FFY 1992 at 2,100 individuals participating in NET workshops and 4,500 individuals for the library.

Information about program priorities was used in adjusting the goals for different target groups. The 1990-1991 State Plan indicated that approximately 40% of NET's efforts would be directed at public school populations and 60% at other target populations. A 1992 amendment of this State Plan did not change NET priorities. Accordingly, the goal for workshop participants was set at 840 for public school populations and 1,260 for other populations. The goal for library circulation was set at 1,800 individuals for public school populations and 2,700 individuals for other populations.

## **NET's Outreach Interventions**

NET's outreach to its target populations is achieved through multiple interventions which include:

- Workshops developed by NET staff and delivered by contract trainers
- Circulation of the NET library collection
- Development, revision, and circulation of curricula and instructional materials on nutrition education and food service management
- Presentations, exhibits, and publications on nutrition education, food service management, and the NET program in general
- Coordination with related publicly supported nutrition programs being carried out within the state

Following are NET's efforts to reach Texas children through each intervention and the outcomes of these efforts.

### **Workshops**

#### **Introduction**

Conducting nutrition education workshops to prevent disease and enhance the well-being of the state's children is a major activity of the NET program. The NET program provides information and resources to instruct teachers, child care providers, and food service personnel on the fundamentals of nutrition and how to convey this information to motivate children to make healthy food choices. The expected outcomes are improved nutritional status for children and reduced food waste in schools and child care facilities.

NET has developed a total of 25 workshops since 1985. Workshop topics include nutrition education, physical fitness, food service management, menu planning, and sanitation. Contract trainers conduct the workshops throughout Texas and provide free materials to eligible participants. Participants receive certificates verifying hours of attendance.

In 1986, interagency agreements and curriculum modifications were negotiated to obtain the approval of the Texas Education Agency (TEA) for two NET workshops to be made available to public school teachers for advanced academic training (AAT). Two additional workshops were approved by TEA for AAT credit in 1988. In 1992, further negotiations with TEA resulted in a general agreement that all NET six-hour workshops are automatically approved for AAT credit. These agreements are positive steps toward increasing workshop participation.

### **Method of Evaluating the Workshops**

Continuous evaluation of NET workshops resulted in revisions and improvements of the content of these workshops, as well as in the methods and materials used in their delivery. The performance of the workshop participants is evaluated using knowledge tests and attitude scales. In some instances, the behavior of the participants is evaluated as well. For example, the menus planned by food service personnel were evaluated before and after their participation in the Menu Planning and Kitchen Economy workshop to find out if their compliance with the CACFP regulations increased as a result of their participation.

Data on the effectiveness of a workshop as a whole are collected from the workshop participants using a standard workshop evaluation form. In addition, the performance of the contract trainers is observed and evaluated periodically by NET staff using a workshop instructor evaluation form. Copies of the workshop evaluation form and the instructor evaluation form are included in Appendix A of this report.

Data on the number of workshop participants and their functions, work facilities, ethnic backgrounds, and the number of children they reach, are collected on each workshop for administrative purposes and to evaluate workshop participation. A registration form is used to collect these data. A copy of the registration form is included in Appendix A.

### **Workshop Participation**

#### **Workshops Conducted**

A total of 225 workshops were conducted in FFY 1992, compared to 164 workshops in FFY 1991. Thus, the number of workshops conducted in 1992 increased 37.2% over the

previous year. Table 1 contains the titles and durations of the workshops conducted during FFY 1992, as well as the number and percent of the workshop participants.

**TABLE 1**

**Number and Percent of Participants in NET Workshops Conducted in 1992**

Workshop	Workshop Duration in Hours	Number of Times Conducted	Number of Participants	Percent of Participants
1. Introduction to NET	1.0	3	99	2.1
2. Sanitation and Health	4.5	48	1,254	27.0
3. Puppets Use Forks, Too: Puppetry in Nutrition Education	3.0	3	106	2.3
4. Advanced Menu Planning	6.0	10	142	3.1
5. Key Factors in Menu Planning	1.0	5	77	1.7
6. Kitchen Math and Food Purchasing	6.0	11	242	5.2
7. Menu Planning and Kitchen Economy	4.0	13	245	5.3
8. Menu Planning System/Recipe Ideas	2.0	6	142	3.1
9. Planning Nutritious Snacks	3.0	15	268	5.8
10. Food Service Workshop for Private Schools/RCCI's	5.0	2	35	0.8
11. Leader Nutrients/NET Lending Library Guide for Day Homes	3.0	1	25	0.5
12. Off to a Good Start for Family Day Care	6.0	12	132	2.8
13. Understanding the USDA Child Nutrition Meal Pattern: Guide for Day Home Sponsors	5.5	2	23	0.5
14. Guidelines for Selecting Creditable Foods and Beverages	4.0	1	53	1.1
15. Nutrition and the Preschool Child	6.0	25	472	10.2
16. Food Early Choices	2.0	12	270	5.8
17. Nutrition for Children	6.0	7	108	2.3
18. Nutrition and Life Sciences	6.0	3	53	1.1
19. Dietary Guidelines for Americans	4.0	7	154	3.3
20. Health Habits	1.5	18	315	6.8
21. Get Fit: Nutrition and Fitness	1.0	4	45	1.0
22. Nutrition and Physical Fitness	6.0	7	146	3.1
23. Eating Disorders	1.0	2	74	1.6
24. Know Your Cholesterol	1.0	6	125	2.6
25. Train the Trainer	8.0	2	39	0.8
<b>TOTAL</b>	<b>96.5</b>	<b>225</b>	<b>4,642</b>	<b>100.0</b>



Table 1 shows that the duration of the workshops ranged from one hour to 8 hours. The Train the Trainer workshop delivered to enhance knowledge and skills of NET contract trainers was the only workshop that lasted eight hours. The number of times each workshop was conducted varied also from once to 48 times, which indicates that some workshops were more in demand than others. These workshops were Sanitation and Health--conducted 48 times, followed by Nutrition and the Preschool Child--conducted 25 times.

Over one-quarter of the workshop participants (27.0%) attended the Sanitation and Health workshop, while 10.2% of the participants attended the Nutrition and the Preschool Child workshop. Participation in the rest of the workshops ranged from 5.8% to 0.5%. Few workshops were delivered to less than 15 participants, the minimum number of participants required to conduct a workshop. The Sanitation and Health and Nutrition and the Preschool Child workshops were the only NET workshops scheduled statewide. The rest of the workshops were scheduled by the contract trainers. Thus, it seems reasonable to assume that statewide scheduling results in a boost in the number of times a workshop is conducted and the number of workshop participants. The reason the Sanitation and Health workshop surpassed the Nutrition and the Preschool Child workshop may be due to the uniqueness of the workshop; for while the content of other workshops overlapped, the Sanitation and Health workshop is the only workshop that deals with this subject.

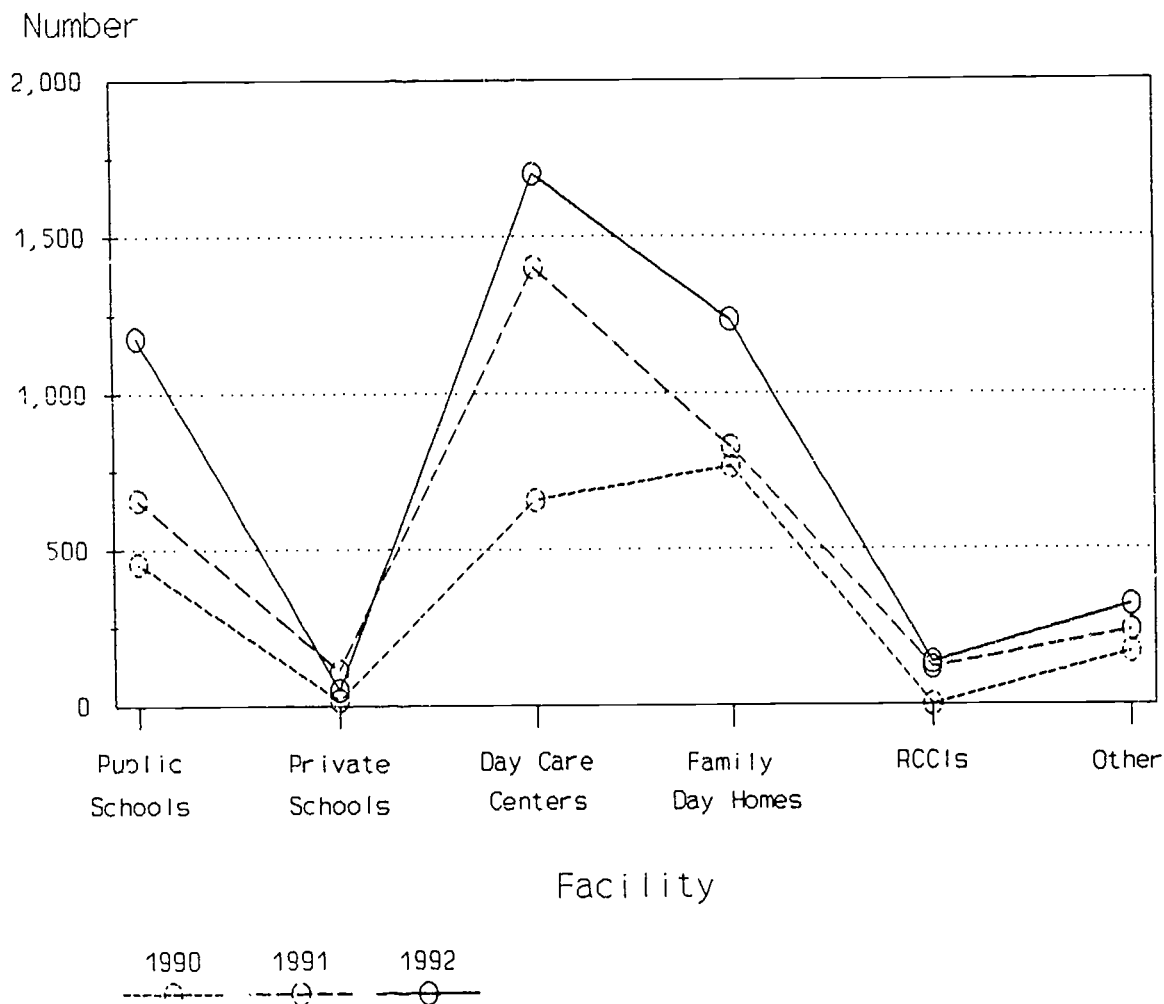
### Workshop Participants

In 1991 the number of workshops conducted (164) was about one and one-half times the number of workshops conducted in 1990. The number of workshop participants rose from 2,091 in 1990 to 3,375 in 1991; an increase proportional to the increase in the number of workshops. In 1992 however, the number of workshop participants (4,642) was more than double their number in 1991, while the number of workshops was about one and one-third. The increase in workshop participants exceeding the increase in the number of workshops indicates higher efficiency in workshop administration.

As stated previously, the workshop participation goal for 1992 was set at 2,100 participants. Thus, actual participation in NET workshops more than doubled the expected participation.

## Participants' Facilities

Since NET's goal was to direct 40% of its efforts to public school populations and 60% to other targeted populations, the work facilities and the functions of the workshop participants were studied. Figure 1 represents the different facilities of the workshop participants in 1990, 1991, and 1992.



**Figure 1. Facilities of Workshop Participants in the Past Three Years**

Figure 1 indicates that the 1990 general participation trend prevailed through 1991. Participants from day care centers and registered family homes were reached more than participants from public or private schools. This trend, however, started to shift in 1992

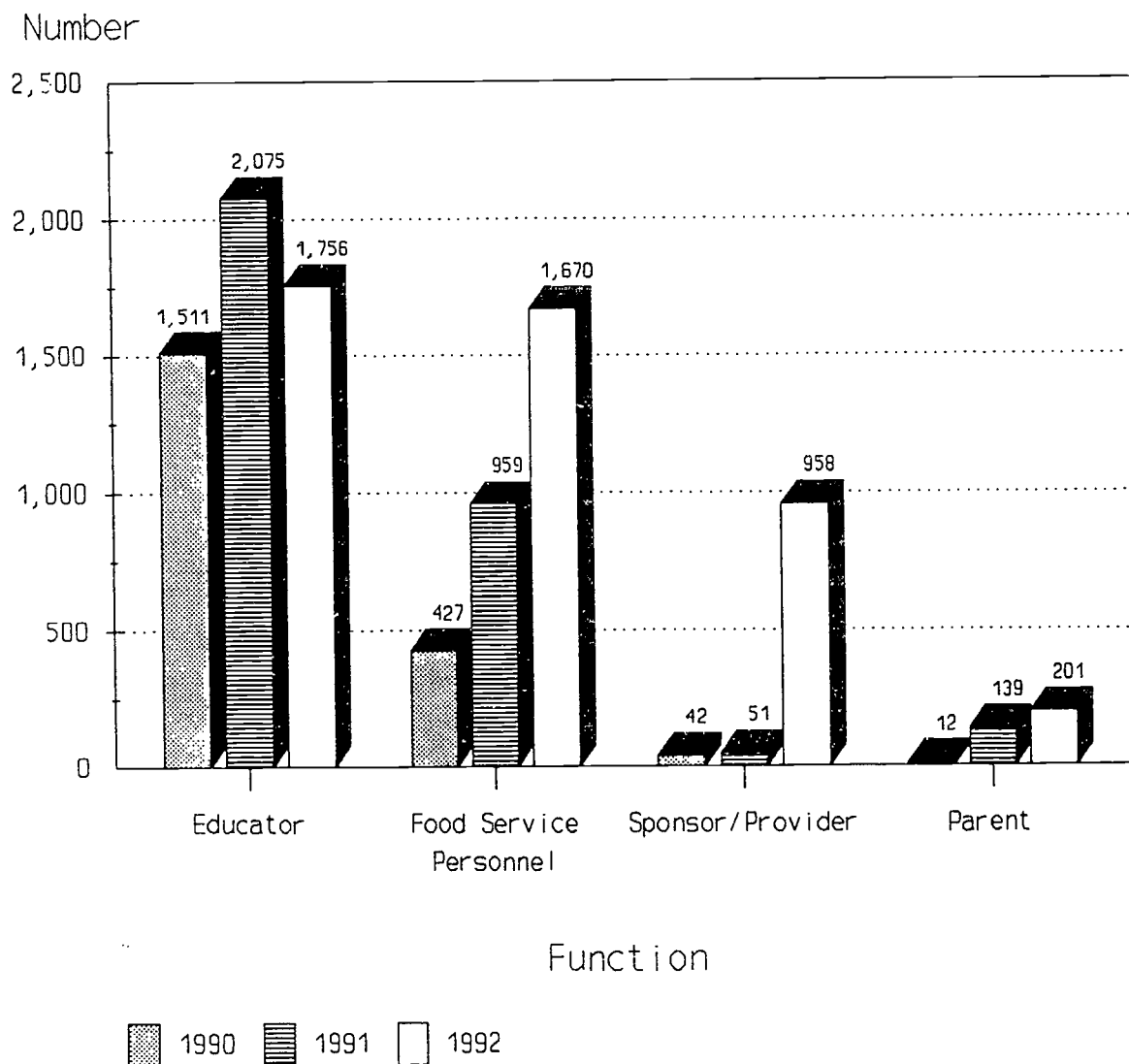
in favor of public school participation. The increase in the number of participants who worked in public schools was greater than the increase in participants from day care centers or family day homes. This shift in trend is in the desired direction.

Shortage in teacher training funds for travel and substitute teaching may have discouraged public school teachers from participating in the NET workshops in 1991 and 1992; yet participation of food service personnel, as indicated in the number of participants in the Sanitation and Health workshop (27% of total workshop participation), seems to have offset the decrease in teacher participation.

There were 1,177 participants from public schools in 1992 compared to an anticipated goal of 840 participants. Thus, NET exceeded the anticipated goal. NET efforts toward attracting workshop participants from public schools should continue, however, since the increase in the number of public school participants (1.4 times the anticipated goal) was not commensurate with the increase in other participants (2.8 times the anticipated goal).

## Participants' Functions

Figure 2 shows the different functions the participants performed in their work facilities.



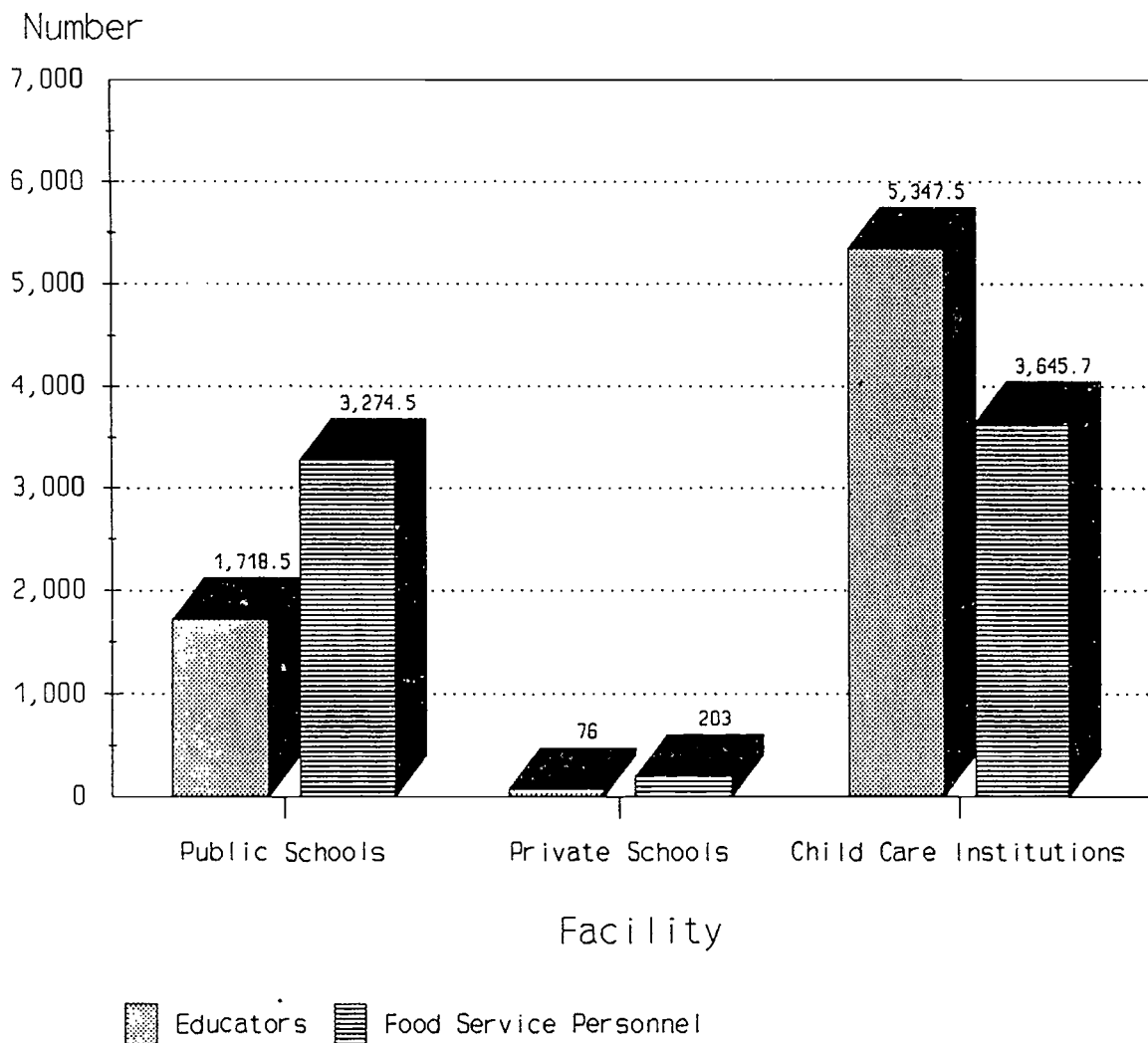
**Figure 2. Function of Workshop Participants in the Past Three Years**

Data in Figure 2 reflects the overall increase in workshop participation in 1991. In 1992 the number of educators decreased 15.4% from their number in 1991, while the number of food service personnel continued to increase. Food service personnel participating in NET workshops were 1,670, reflecting a 74.1% increase over 1991. As mentioned

above, participation in the Sanitation and Health workshop targeting food service personnel was over a quarter of the total NET workshop participation, even though 24 other workshops were delivered during this year. The number of day home sponsors and providers, as well as the number of parents participating in the workshops, increased considerably.

### Hours of Training

Figure 3 illustrates the number of hours of training delivered to educators and food service personnel in schools and child care facilities in 1992.



**Figure 3. Training Hours Delivered to Educators and Food Service Personnel in 1992**

Figure 3 shows a difference in the number of training hours delivered to educators and to food service personnel. The direction of the difference depended on the type of facility. Food service personnel in public and private schools received considerably more training hours than educators in these schools. The number of training hours delivered to child care educators, on the other hand, was more than three times the hours delivered to public school educators and about one and one-half times the training hours delivered to food service personnel in these facilities.

Two reasons may have caused the increase in school food service training. The American School Food Service Association (ASFSA), the Texas School Food Service Association (TSFSA), and TEA encourage continued education and certification of food service personnel. On the other hand, NET is actively coordinating efforts with these organizations and participating in their meetings and conferences. Thus, NET is reaching school food service personnel directly and indirectly. NET needs to direct similar efforts to reach school teachers.

The total hours of training delivered in 1992 (19,637.2) was over one and one-half times that of 1991 (12,781.5). This increase reflects the overall increase in the number of workshops conducted and the increase in workshop participation in 1992.

### **Participation in Food Programs**

The NET program was designated to support the USDA reimbursement food programs. Information on the food programs in which the facilities of workshop participants participated is a measure of NET's effect on these programs. Table 2 lists the number and percent of workshop participants who indicated participation in the different food programs.

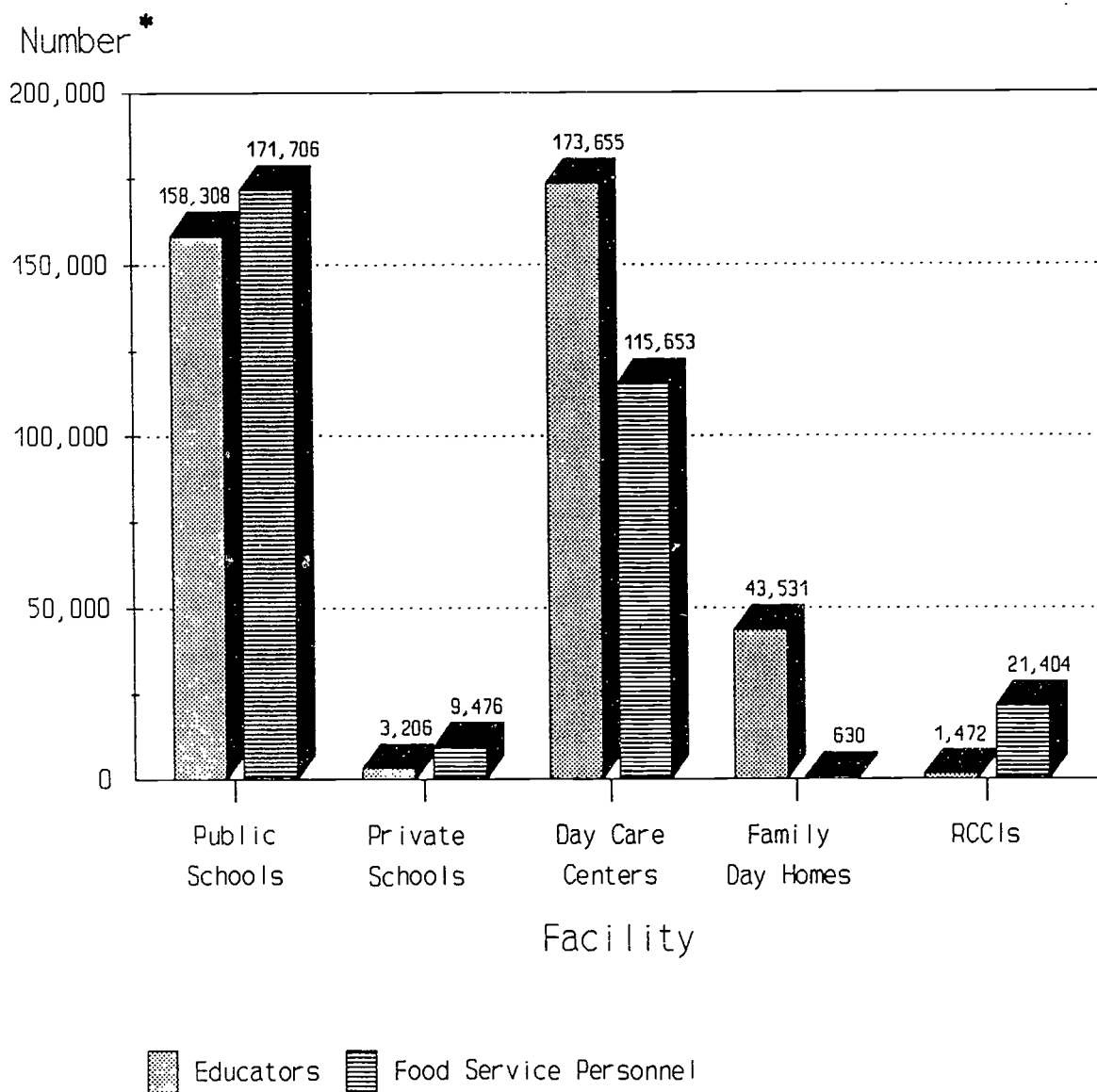
**Table 2****Workshop Participant Food Programs**

Food Program	Number of Participants	Percent
CACFP	2,873	61.9
NSLP	220	4.7
SBP	15	0.3
SMP	3	0.1
SFSP	15	0.3
NSLP/SBP	820	17.7
More than 2 food programs	350	7.5
None	190	4.1
Missing Data	156	3.4
<b>TOTAL</b>	<b>4,642</b>	<b>100.0</b>

It is apparent from Table 2 that the facilities of the majority of workshop participants (61.9%) participated in the CACFP. This is because the majority of workshop participants worked in child care facilities. Only 4.1% of the workshop participants indicated that their facilities did not participate in any food program.

**Children Reached Through Workshop Participants**

Figure 4 shows the number of children reached through educators and food service personnel in 1992.



**\*Note.** The same children may be reached by more than one participant.

**Figure 4. Number of Children Reached by Workshop Participants**

Figure 4 shows that the number of children reached by school food service personnel exceeded the number of children reached by school educators due to the difference in workshop participation between these two groups. More school food service personnel participated in NET workshops. On the other hand, the number of children reached by



educators in child care facilities was more than the number of children reached by food service personnel, as more educators than food service personnel from these facilities participated in NET workshops. Thus, it seems reasonable to assume that workshops are a viable means of reaching children, and that increasing workshop participation has a direct effect on the number of children reached.

## **Net Lending Library**

### **Introduction**

The NET lending library is one of the key elements in the Texas State Plan for promoting children's health and well-being through improved nutrition. The library collection includes over 4000 up-to-date printed and audiovisual materials on nutrition, nutrition education, and food service management. Circulation of this collection provides educators, food service personnel, parents, and others who are interested in child nutrition with ready access to materials to teach children about nutrition and to plan and prepare nutritious meals for the children.

In addition, use of the lending library by other state agencies and public programs has at least two more advantages: 1) it increases the NET program's outreach, and 2) it reduces the probability of duplicate development or acquisition of materials on nutrition education. Thus, improved coordination of the NET library services assures more efficient use of federal and state resources allocated to support child nutrition and health.

Circulation of the NET library collection is managed by a full-time NET program librarian. Requests to borrow items from the collection are made by mailing an order form, by calling the librarian, or by using an 800 telephone number dedicated to the NET program. Materials are delivered and returned by post or parcel service for borrowers who are located outside Austin, while those who are located in Austin have the option to check-out and return materials in person. Borrowers are strongly urged to insure items at full value when returning them to the library so that the risk of loss in transit is minimized. However, other than the cost of return postage and insurance, use of the lending library is free of charge.

## **Method of Evaluating the Lending Library Participation**

Data on library performance and circulation are accumulated using a library feedback form. The form consists of items that are intended to collect information on the borrower's function and work facility, how the borrowed item was used by the borrower, and the borrower's evaluation of the item. The form is revised periodically to improve the accuracy of collected data. A copy of the form is included in Appendix A of this report.

The library feedback form is provided to borrowers with each circulated item. Borrowers are urged to fill-out the form and return it with the borrowed item. Since the library feedback forms are filled out and sent after using the borrowed items, only about 50% of the forms were returned with the borrowed items in the past years, which resulted in underestimating the circulation of the library collection. In addition, the circulation procedures that were followed were such that circulation forms were destroyed after the return of the borrowed item, which made it difficult to follow-up on unreturned feedback forms.

In 1991, a follow-up procedure was developed to remind the library borrowers to return the feedback forms. Item circulation is entered in a data base and is tracked to allow for the follow-up procedure. These procedures resulted in a 99.4% return of the feedback forms and, consequently, in collecting more accurate data on material circulation.

Due to the nature of library services and the way the borrowed library items were used in 1992 and the previous years, participants who attended presentations that were based on materials borrowed from the library were considered participants in the NET program.

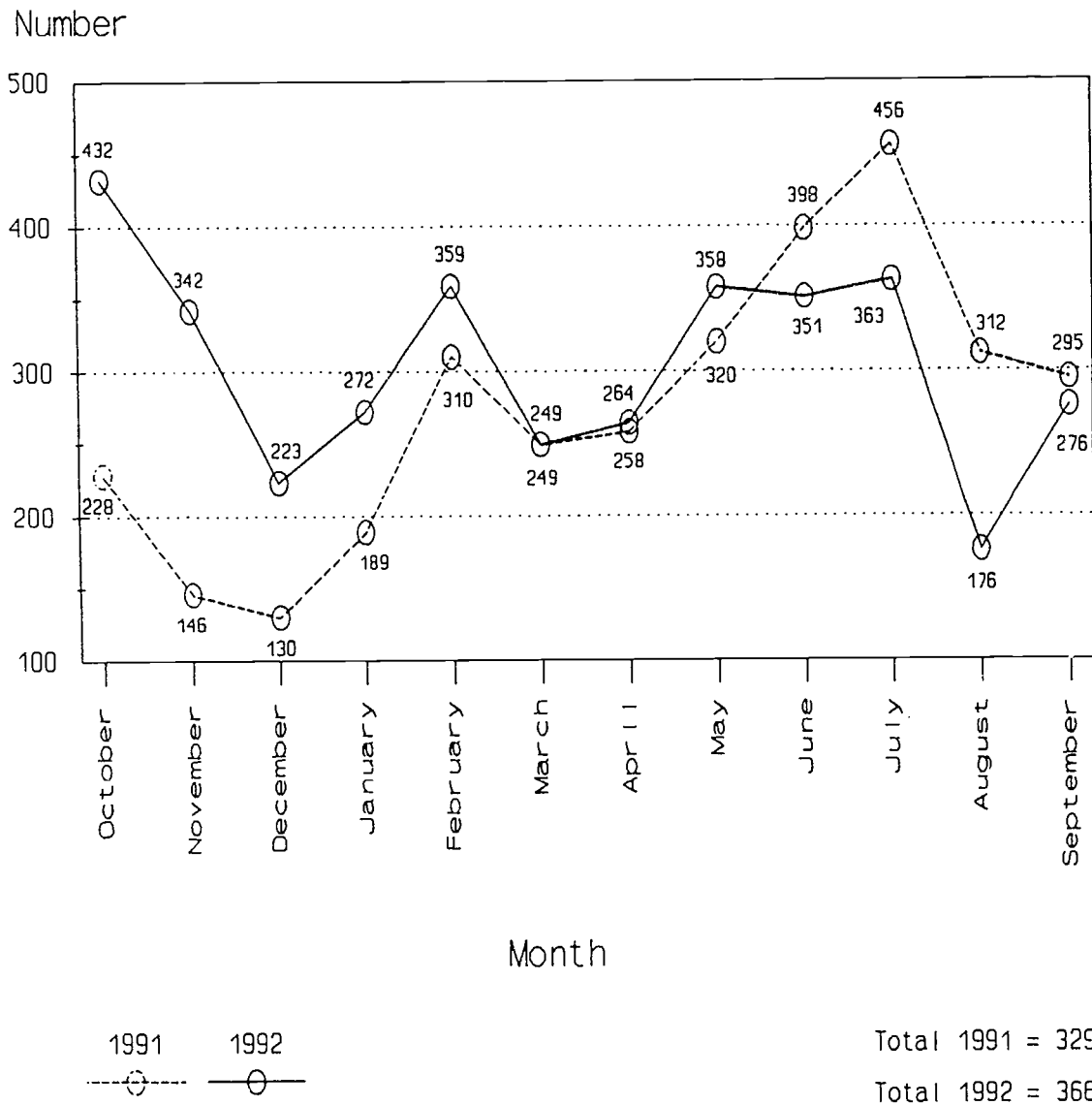
According to NET policies and regulations, participation in the various NET units should be reported non-duplicated on the FNS-42 form. To avoid duplication between participation in NET workshops and the NET library, data on workshop participants and the library borrowers were entered on mainframe files and sorted by the social security numbers of the participants and the borrowers. This was done for the purpose of reporting program performance data to USDA. The LAG function of the SPSS-X statistical package was used to eliminate duplications between and within the files. However, in evaluating the activities of the two program units in this evaluation report, participation in these units is reported as it occurred, without eliminating duplication in cases between or within the separate units. Thus, in this report, participants who attended more than one workshop and/or borrowed from the library as well, were reported more than once, since NET provided additional services to these participants.

## Lending Library Participation

### Material Circulation

In 1992 a total of 108 data base searches were conducted by the NET librarian for the NET library users compared to 180 searches in 1991. Vacancy in the librarian position, which lasted for two months, resulted in the drop in library searches. Three hundred fifty-seven patrons used the library in 1992 compared to 329 in 1991.

Figure 5 illustrates monthly circulation of the library collection during 1991 and 1992.



**Figure 5. Monthly and Total Circulation of Library Materials in FFYs 1991 and 1992**

Figure 5 shows a decrease in library circulation during the months of July, August, and September of 1992 relative to the same months in 1991. Library services were disrupted during these months because the librarian position was vacant. Figure 5 also indicates that a flux in circulation occurred in October, possibly the result of coordinating the library services with the in-service training provided by TEA and TSFSA to food service

personnel. The NET library served as a clearinghouse for training courses delivered by these two organizations. The total library circulation increased from 3,291 items in 1991 to 3,665 items in 1992--an 11.4% increase over 1991.

### **Themes of Circulated Materials**

Table 3 lists themes of circulated library materials in 1992.

**TABLE 3**

#### **Themes of Materials Circulated in FFY 1992**

Theme	Frequency	Percent
Food Service Management/Training	1,204	56.4
Child Health Education	214	10.0
Child Care Health and Nutrition	205	9.6
Preschool/Elementary Nutrition Education	166	7.8
General Nutrition	146	6.8
Adult Health Education	124	5.8
Physical Fitness/Sports Nutrition	50	2.3
Children's Materials	17	0.8
General Cookery	6	0.3
<b>TOTAL</b>	<b>2,132*</b>	<b>100.0</b>

**\*Note.** Total number of completed feedback forms.

It is apparent from Table 3 that the main theme of the circulated library materials in 1992 was food service management/training. The increase in the circulation of this theme reflects the effect of the coordination between the NET program and the TSFSA.

Following circulation of food service management/training items were child health education items (214), child care health and nutrition (205), preschool/ elementary nutrition education (166), general nutrition (146), and adult health education (124). More specialized themes such as general cookery, children's books, and physical fitness/sports were the least borrowed materials. This trend indicates that most of the borrowed materials were used to educate children and adults in group settings, and thus extend the effect of the library collection to more adults and to children within their reach.

### Types of Circulated Materials

Table 4 lists types of circulated materials in the order of their circulation in 1992.

**TABLE 4**

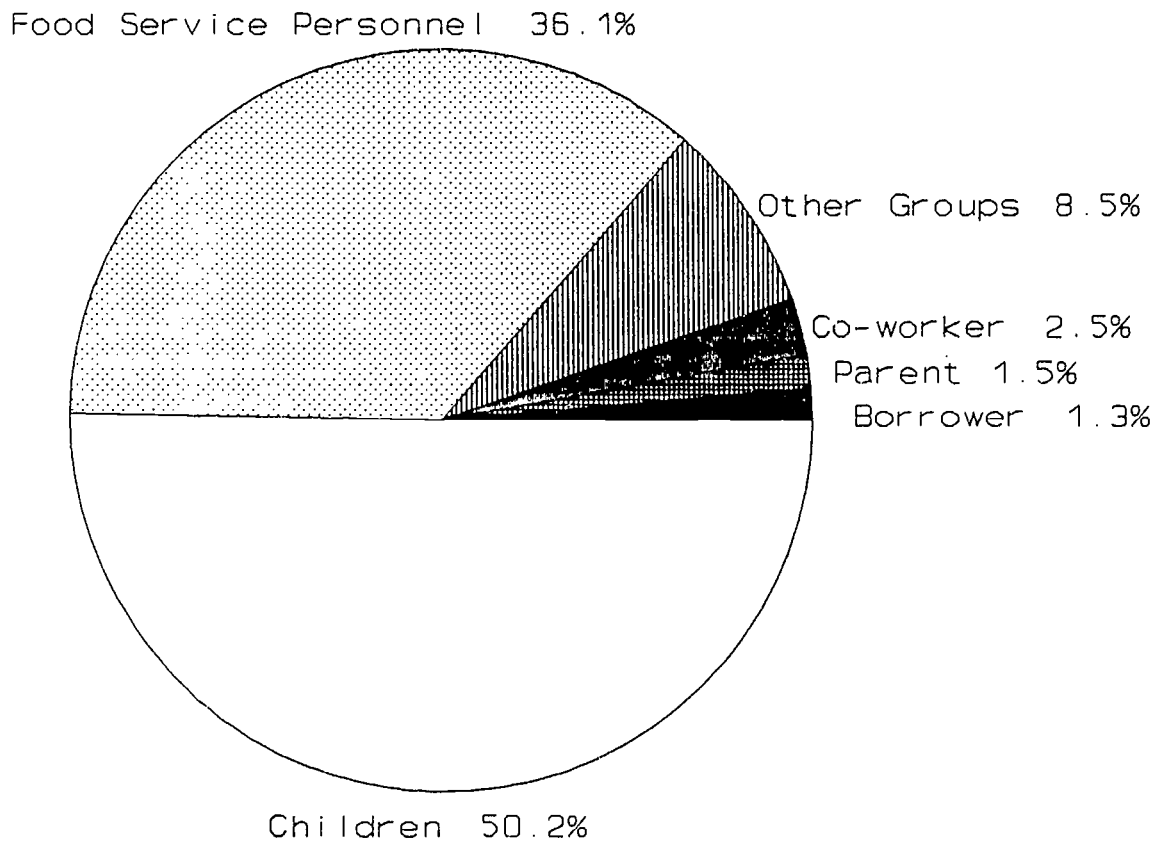
**Type of Library Materials Circulated in FFY 1992**

Type of Material	Frequency of Circulation	Percent
Videotape	1,861	87.3
Film	157	7.4
Filmstrip	45	2.1
Book	27	1.3
Slides	24	1.1
Curriculum Guide	11	0.5
Teaching Aid	4	0.2
Audiotape	3	0.1
<b>TOTAL</b>	<b>2,132</b>	<b>100.0</b>

Table 4 indicates that audiovisual materials topped the list of circulated materials in 1992. This same trend was dominant in previous years. Using the NET library as a clearinghouse for relatively expensive and rare audiovisual materials, rather than printed materials, emphasizes the important role the NET library plays in this field.

### Use of Circulated Materials

Figure 6 shows how the borrowed library items were used in 1992.



**Figure 6. Viewers/Users of Circulated Library Materials**

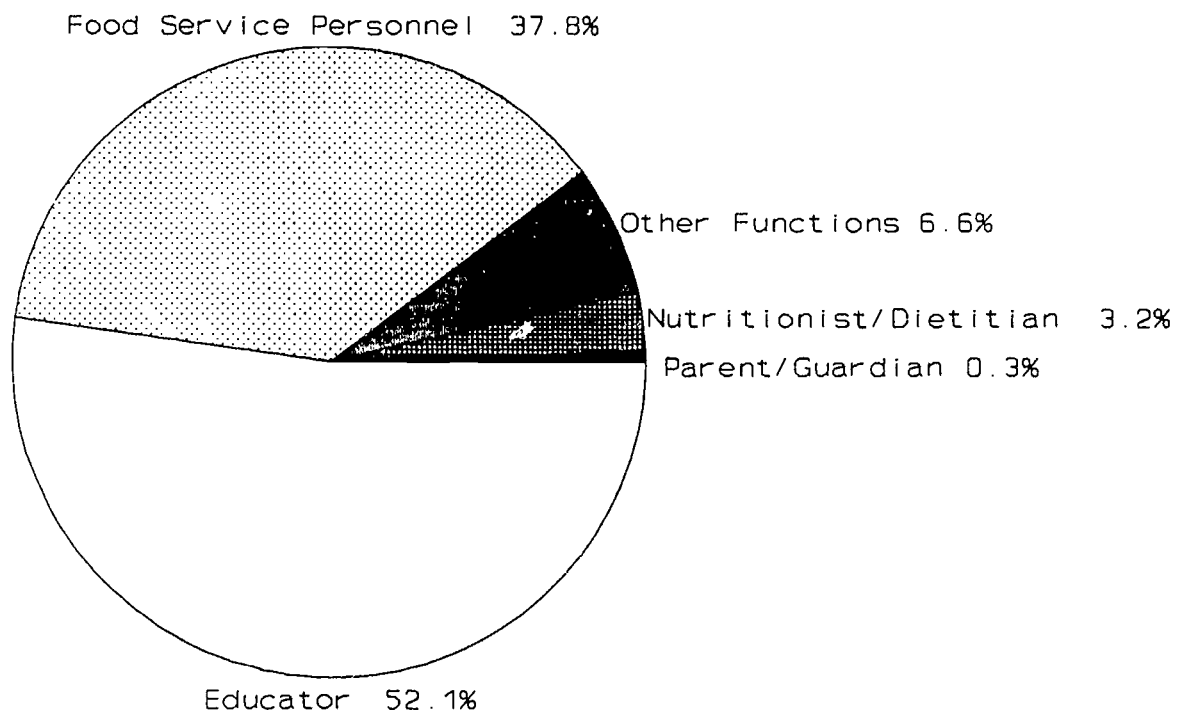
The information in Figure 6 supports the assumption that NET library resources were used in group educational and training settings more than as a resource for individual information. Over 50.2% of those who viewed the materials were children and 36.1% were food service personnel. The borrowers used the materials individually in only 1.3%

of the cases. Using borrowed library materials in group settings considerably increases NET outreach and the efficiency of NET library services.

Other groups who benefitted from the NET library collection were students, day home sponsors, patients, nurses, and health specialists.

### Functions of Library Borrowers

Figure 7 shows the main functions of the library borrowers.



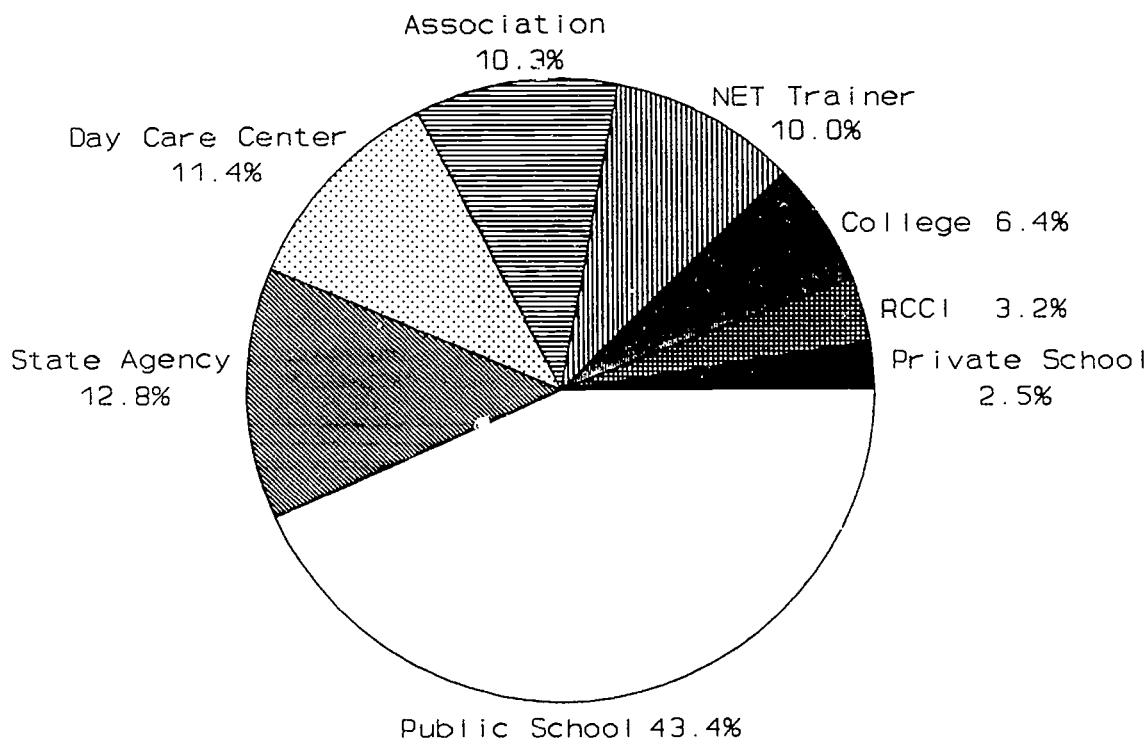
**Figure 7. Function of Library Borrowers in 1992**

It is apparent from Figure 7 that educators topped the list of borrowers of materials from the NET library, comprising 52.1%. Educators were followed by food service personnel (37.8%). Other library users were students, day home sponsors, and administrators who supervised educators and food service personnel. Thus, it is plausible to assume that the library collection was used in its intended purpose; namely, to educate children and adults who influence children's eating habits, in nutrition and health.



## Work Facilities of Library Borrowers

Information on the work facilities of library borrowers may be used in planning library outreach. This information points to the facilities that have already been reached and need continuous follow-up and updates, and the facilities that were not reached and are not aware of library services that may be important to their function. Figure 8 represents work facilities of the library borrower in 1992.



**Figure 8. Facilities of Library Borrowers in FFY 1992**

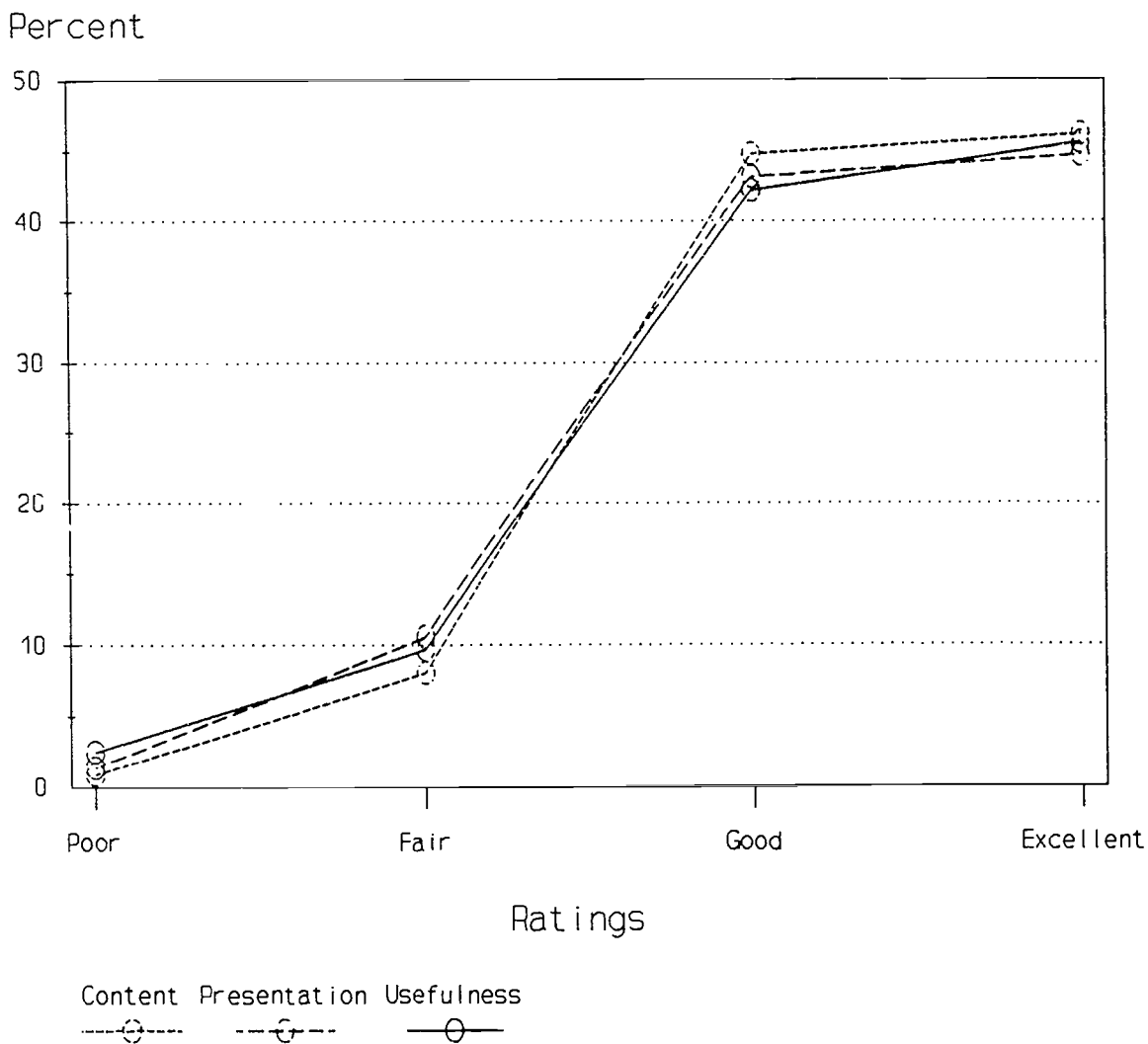
Figure 8 shows that the most frequent borrowers (43.4%) worked in public schools. Only 14.6% of the borrowed materials were used in child care facilities, indicating a need to direct more outreach efforts to these facilities. The rest of the circulated materials were used by individuals who worked in state agencies, colleges, and associations.

The 1992 goal for library participation was set at 4,500; 1,800 for public school populations, and 2,700 for other populations. The number of children reached by educators and food service personnel in public schools was 11,510, over six times the goal set for public school populations. The number of children reached through other

target populations was 6,745, which was two and one-half times the anticipated goal. Thus, the library outreach far exceeded the goals set for 1992 for both schools and other child care facilities, even though it was not proportional for these two types of organizations.

### Evaluation of Borrowed Library Materials

The library feedback form included items that asked the library borrowers to rate the content of the materials they borrowed, the way the content was presented, and how useful the materials were to those who saw it. Figure 9 shows these ratings.



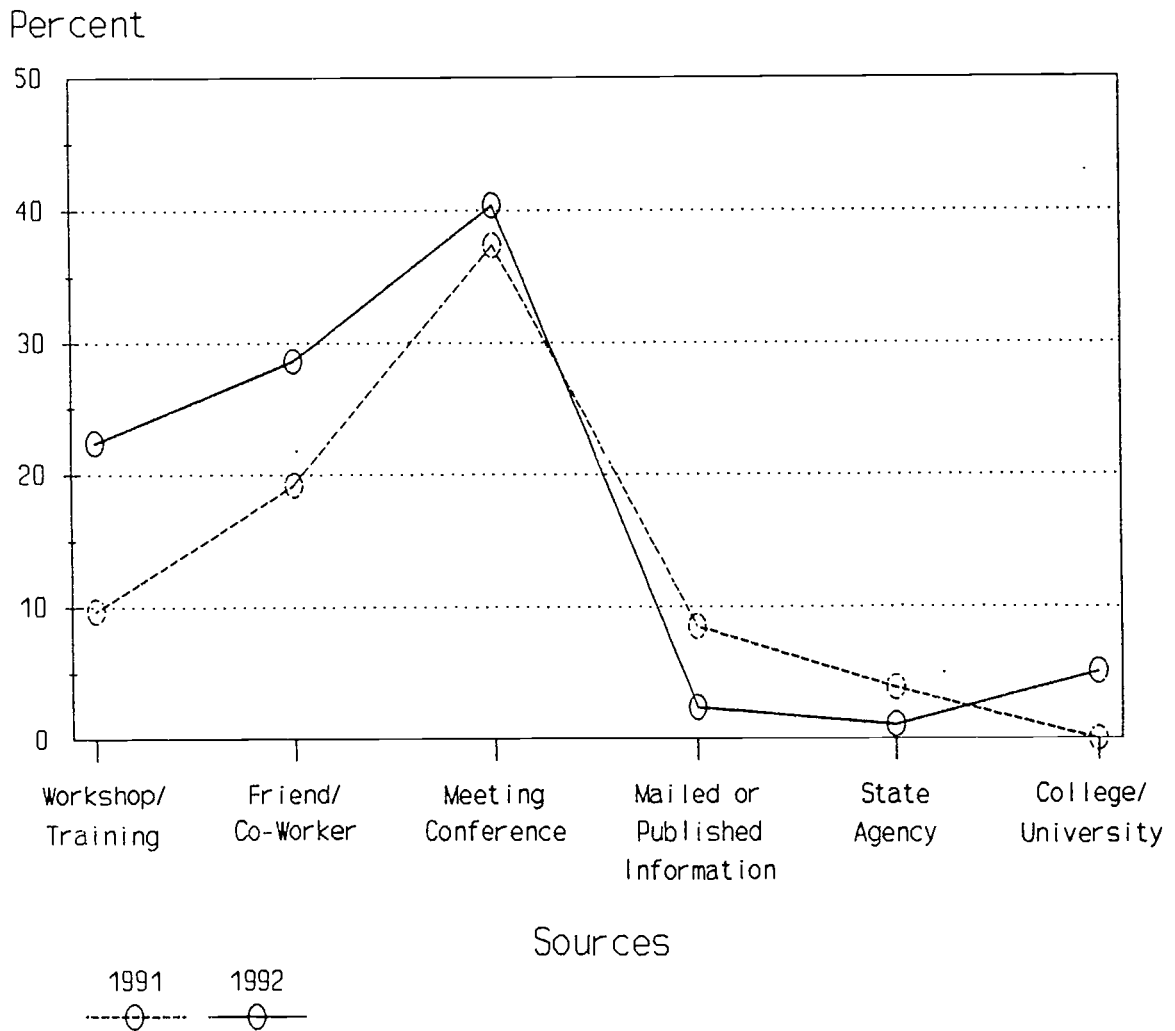
**Figure 9. Borrower Evaluation of Library Materials in 1991**

Figure 9 illustrates that between 46.2% and 44.7% (about one-half) of the circulated library collection was rated as excellent in content, presentation, and usefulness. Less than 2.5% of the circulated materials were rated as poor in either content, presentation, or usefulness. The reason for this relatively high rating may be due to the process followed in evaluating library acquisitions. NET contract trainers review each item and evaluate it before adding it to the collection, using an evaluation form that consists of both open ended and scaled items. Appendix A of this report contains a copy of the NET Lending Library Collection Material Evaluation Form. In addition, the entire collection is evaluated periodically, and outdated items are purged. Thus, the quality of the borrowed items should encourage the library borrowers to continue using the library, and the themes of the library collection seem to suit children and other target populations in schools and child care facilities.

### Sources of Information About the NET Library

To encourage use of the collection, a catalog of printed materials and another catalog for audiovisual materials were compiled in 1984. Since the collection is in constant updating and growth, a new audiovisual catalog was compiled and produced in 1990 and a new catalog of printed materials was compiled and produced in 1992. In 1992, 383 copies of the catalogs were distributed to schools and child care facilities compared to 2,489 catalogs distributed in 1991. Catalog distribution decreased in 1992 after a surge in distributing the audiovisual catalog in 1991. There were 238 library acquisitions in 1992, compared to 304 acquisitions in 1991, a drop of 21.7%.

Figure 10 shows how library borrowers knew about the NET library and its services in 1992.



**Figure 10. Sources of Information About the NET Library in FFYs 1990-1992**

It is apparent from Figure 10 that professional meetings were the most frequent source of information about services of the NET library, followed by borrower's friend or co-worker, followed by mailed or published information about the library, followed by information the borrowers received in workshops and other forms of training. Professional meetings and conferences were the primary sources of information about the NET library in previous years. Mailed or published information continued to slip from being the second source of information in 1990 to constituting only 2.4% of the total sources.

To continue to enhance library outreach to target groups in schools and child care facilities, NET should continue to publicize its library services in professional meetings. More efforts should be directed to mailed or published information by distributing library catalogs and writing articles and announcements about the library in periodicals and newspapers. Presentations on the library services and reviews of new or basic library items that are available for specific groups or organizations, especially to day care centers and family day homes, may also be considered as avenues to extend the library services to these groups.

### **The Effect of Coordination With TSFSA On Library Circulation**

Early in 1990, NET and the TSFSA agreed to use the NET library as a major clearinghouse for all training certification courses delivered statewide to members of TSFSA during the months of July and August. The NET library, in return, received a stipend to purchase new videotapes and add them to its collection. This coordination of efforts resulted in an increase in NET library circulation of food management/training materials in FFY 1990.

As a result of the successful coordination between NET and TSFSA in 1990 and 1991, a similar agreement occurred between these two agencies in FFY 1992. The NET library provided TSFSA with a list of materials on food management/training and helped clarify the content and use of these materials by providing appropriate annotations. TSFSA reviewed these materials and identified the items that would be useful in their summer certification training. TSFSA also provided the NET library with a list of additional material to be purchased with library funds, to support the TSFSA training.

The total number of feedback forms returned by users of the NET lending library in FFY 1992 was 2,132. Over one-third of these forms (38.3%) were completed by participants in food service training, indicating a substantial increase in the library circulation as a result of this coordination.

## **Development and Distribution of Instructional Materials**

### **Introduction**

As a relatively small program, NET relies heavily on ready-made instructional materials in nutrition education and food service management. However, NET's efforts in

education and training are not limited to information dissemination. Thus, curricula for the 25 NET workshops conducted by NET were developed and revised regularly to meet the recent advances in knowledge as well as in methods and techniques of instruction, and to increase content congruence with federal and state policies and regulations.

In addition to workshop curricula, regular evaluations of NET activities may point to a need to develop certain instructional materials such as recipes, cycle menus, brochures, and handouts. Several materials, such as instructional kits and food recipes, were translated into Spanish to meet the needs of the large Hispanic population in Texas. Coordination with other nutrition and public health programs may also result in identifying a need to develop instructional materials.

When ready-made instructional materials are not available to realize NET's goals and objectives, the NET staff develops needed instructional materials or revises and adapts available materials. Sometimes, NET's contract trainers participate in material development. When development efforts require skills, equipment, and/or time that is beyond what is available to the NET staff, NET contracts with other public or private institutions for development of the desired material.

### **Material Development**

#### **Workshops**

Two workshops were developed in FFY 1992: "Guidelines for Selecting Creditable Foods and Beverages," and "Puppetry in Nutrition Education."

The "Guidelines for Selecting Creditable Foods and Beverages" workshop targets contractors and program monitors of child care facilities participating in one of the USDA Child Nutrition Programs . It provides participants with information about the USDA meal patterns, creditable foods, and "USDA Food Buying Guide for Child Nutrition Programs." The workshop lasts 4 hours. The main topics of the workshop are: (a) how to plan nutritious meals which meet the meal pattern requirements of the USDA Child Nutrition Program, (b) nutrition labeling, (c) the "USDA Food Buying Guide for Child Nutrition Programs," and (d) creditable foods and beverages.

The need for the "Puppetry in Nutrition Education" workshop came as a result of evaluating the "Nutrition for Children" workshop developed and delivered by the Texas NET program. Participants in that last workshop expressed a need for developing their puppetry knowledge and skills. The workshop targets child care staff and food service

personnel in schools and day care centers. It provides participants with concepts, procedures, and basic skills for using puppets in nutrition education. The workshop lasts for three hours. Its main topics are: (a) how to prepare and conduct appropriate nutrition education activities for children using puppets as the delivery tool, (b) how to incorporate basic puppetry techniques into effective nutrition education activities, and (c) how to identify appropriate puppet(s) for an activity.

Three workshops were updated and revised. These are: "Sanitation and Health," "Off to a Good Start for Family Day Homes," and "Nutrition and the Preschool Child."

The "Sanitation and Health" workshop is one of the Texas NET program workshops that is highly in demand. The workshop provides food service personnel with guidelines to ensure that safe food is prepared and served properly. The workshop duration is 4.5 hours.

"Off to a Good Start for Family Day Homes" is another popular workshop. The workshop provides day home sponsors and monitors with tools, concepts, and procedures necessary to plan economical and nutritious menus. The workshop duration is 6 hours.

"Nutrition and the Preschool Child" is one of the first workshops to be approved by TEA for AAT. The workshop attracts a relatively high number of participants. It provides curriculum developers and preschool educators with basic nutrition concepts to enable them to plan and prepare cooking activities and nutrition education lesson plans. The workshop duration is 6 hours.

### Instructional Materials

A self-paced unit titled "Orientation to NET" was developed for the NET program contract trainers. The unit provides the new contract trainers with an overview of the NET program background, goals and policies, and the procedures to schedule and conduct workshops.

In 1992, a two-hour presentation titled "Project 2001: Nutrition for a New Century" was developed. The purpose of the presentation is to inform school food service personnel, educators, and administrators about the benefits of this project. Project 2001 is developed and is being implemented by the Southwest Region Food and Nutrition Service to promote implementation of the new "Dietary Guidelines for Americans" in the schools of the Southwest Region. The presentation includes transparencies and a set of slides that was developed by the Missouri NET program. Participants receive a copy of the U.S.

Dietary Guidelines brochure, a copy of the USDA's Food Guide Pyramid, and a handout which provides basic information about the project.

### **Public Service Announcements**

In 1991, coordination with TEA identified the SBP and breakfast in general as a priority area in need of development and promotion in Texas. The NET program agreed to participate in efforts to develop and distribute materials to promote breakfast to children of all ages. NET, with the help of the TDHS media services, developed two public service announcements (PSAs) during 1991. One of the PSAs was directed to elementary school students and the other was directed to teenagers. A poster and two menu-backs were developed to support the PSA, targeting elementary school students.

In 1992, a videotape titled "Breakfast Advantage" was developed as a continuation of these efforts. The videotape targets school administrators and food service personnel. It lasts for 6 minutes and presents information on the importance of breakfast and the SBP.

Two additional menu-backs and two costumes were developed to support the PSA developed for elementary school students. The costume were designed after the "Earl E. Bird" cartoon character in the PSA. A two-minute audiotape titled "Breakfast Jingle" was also developed to promote breakfast to elementary school students.

### **Material Distribution**

#### **Workshop Materials**

Each workshop participant received a material package that included the workshop workbook and the handouts that were used during the workshop. Thus, 4,642 material packages were distributed to the workshop participants in 1992.

In addition to the workbook and handouts, workshop participants received selected audiovisual materials such as posters, brochures, recipe books, and laminated thermometer charts. The purpose of distributing these materials was to provide workshop participants with needed materials to apply the knowledge and skills they gained in the workshops in actual life and classroom settings.



In previous years, the NET program distributed the instructional materials to workshop participants by mailing them to their work facilities. Evaluation of this procedure indicated that most of the mailed materials were not received by the workshop participants. Materials ended up in administrative offices or libraries and the workshop participants were not notified. Thus, it was decided to distribute all instructional materials, except instructional kits, to workshop participants during their participation in the workshops. Because the instructional kits are bulky and difficult to ship in large numbers to workshop sites, it was decided to continue to mail the individual kits to the work facilities of the workshop participants.

Table 5 lists material distributed to the workshop participants during FY 1992.

**Table 5****Materials Distributed to Workshop Participants in 1992**

Material	Number Distributed
Dietary Guidelines for Americans	1,046
Fiber Poster	245
CN Labeling Basic	111
Food Buying Guide	725
Commodity Recipes $\frac{1}{2}$ Fact Sheets	406
Dietary Guidelines for Infants	544
Dietary Guidelines Posters	131
Shopping For Food & Making Meals In Minutes	131
Making Bag Lunches	131
Preparing Foods & Planning Menus	131
Day Care Nutrition In A Nutshell	423
Chef Combo Kit (E)	250
Chef Combo Kit(S)	125
Guide To Good Eating	1,575
Recommended Dietary Allowances Sheets	169
Ethnic Recipes	300
Cycle Menus	300
Sports Sense	148
Food Power	148
Athletes Kitchen	148
Economy in the Kitchen	390
Snacks for Children	229
Florida Parent Letters	420
Florida Curriculum	420
Florida Teacher Guide	420
Very Hungry Caterpillar	420
More Than Graham Crackers	892
Super Kids Poster	109
Laminated Thermometer Chart	1,167
<b>TOTAL</b>	<b>11,654</b>

Over 80.9% of the materials listed in Table 5 were instructional materials designed to directly instruct children in nutrition education. In addition, recipe cards, menus, and food regulations were distributed to help food service personnel plan nutritious meals. Both types of materials are important in realizing NET's goals.

In 1992 the materials distributed to workshop participants, in addition to the material packages specific to each workshop, totaled 16,296. This number reflects a 12.3% increase over 1991 (14,505). This increase is due to the considerable increase in the number of workshops conducted in 1992 and in the number of workshop participants.

### **Promotional Materials**

The Breakfast Advantage video developed by NET was copied and distributed to 125 schools and school districts. Three thousand copies of the Earl E. Bird poster and sticker were distributed to schools and Head Start facilities.

NET developed three brochures in 1990 to promote NET, the library collection, and the workshops. These brochures were translated into Spanish in 1992 and were distributed along with the English version. Five thousand NET program brochures and 1,800 of the brochure's Spanish version were distributed in meetings and exhibits attended by the NET program staff and contract trainers. Two thousand eight-hundred library brochures and 1,000 of the brochure's Spanish version, as well as 2,000 of the workshop brochure, were distributed to participants in NET workshops and presentations. In addition, NET copied and distributed 20,500 copies of the "10 Tips To Healthy Eating For Kids" brochure, 300 copies of "The Food Guide Pyramid," and 500 copies of the "Breakfast--Maximum Nutrition, Maximum Performance" brochure.

The total number of promotional materials developed and distributed by NET in 1992 was 15,725. This, in addition to the number of workshop materials distributed in the same year, brings the total number of distributed materials to 32,021. Thus, the number of distributed materials in 1992 increased about 30% over 1991.

## Presentations, Exhibits, and Publications

### Introduction

A major task of NET is to publicize the services it provides for the different target populations in order to increase NET' outreach and to manage program services efficiently. Moreover, it is good public relations to inform the public about how their share of federal taxes is spent in educating the nations's children in eating economically and for good health. Presentations, exhibits, and publications are important sources of information in a modern society.

### Presentations

Table 6 lists titles of presentations that were given by the NET staff in 1992, their locations, dates, and the groups that attended these presentations.

**Table 6**

**NET Presentations During FFY 1992**

Presentation	Duration	Location	Date	Audience
NET Program Overview/Project 2001	1 hr	North Central Texas Food Service Directors Association, Glenrose, TX	October 2, 1991	Food Service Directors
NET Program Overview/Project 2001	1hr	Gulf Coast Food Service Directors Association, West Columbia, TX	October 22, 1991	Food Service Directors
An Evaluation Model For the Quality Assurance of Nutrition Education and Training Workshops	1 hr, 30 min	The American Dietetic Association, Dallas, TX	October 30, 1991	Dietitians, Food Service Managers, and Program Administrators
A Nutrition Education and Training Program Model for Evaluation and Planning	19 min	The American Evaluation Association, Chicago, ILL	October 31, 1991	Program Evaluators and Professors of Research and Evaluation
The Inside Story: Digestive System	1 hr, 30 min	Our Savior Luther School, Austin, TX	February 10, 1992	First and Second Graders
NET Program Overview/Project 2001	1 hr	TEA, Austin, TX	February 25, 1992	TEA Nutrition Consultants and Child Nutrition Staff

Presentation	Duration	Location	Date	Audience
Nutrition and Physical Fitness	30 min	Travis High School, Austin, TX	February 27, 1992	High School Students
NET Program Overview/Project 2001	1 hr	Texas All Well Conference	June 9, 1992	Food Service Personnel, School Administrators and Teachers, Education Service Center Staff
NET Program Activities	30 min	TEA Administrators and Food Service Directors Conference, Pasadena, TX	June 11, 1992	Food Service Personnel
Project 2001	30 min	Annual TSFSA Convention, Fort Worth, TX	June 17, 1992	Food Service Workers
NET Program Overview/Project 2001	1 hr	Central Texas Food Service Directors Association, San Marcos, TX	November 13, 1991	Food Service Directors
Food, Nutrition, and Health	Five, 45 min presentations	Youth Opportunities Unlimited (Y.O.U.), The University of Texas at Austin	June 17-18, 1992	High School Students
The Texas NET Program Evaluation Model	45 min	National Association of State NET Coordinators, Washington, DC	July 13, 1992	NET Coordinators
The Texas NET Program Model for Evaluation and Planning	20 min	National Association of Welfare Research and Statistics, Columbus, OH	August 3, 1992	Program Evaluators and Administrators
NET and Project 2001	90 min	Region XIII Education Service Center, Austin, TX	August 18, 1992	Teachers and Food Service Directors
NET Program Overview/Project 2001	1 hr	TDHS, Austin, TX	September 21, 1992	Special Nutrition Program Contract Managers and Staff
Fat, Fast Food, and You	Nine, 1 hr presentations	Lamar Middle School, Austin, TX	September 22-25, 1992	Sixth Grade Students
Basic Nutrition--Basic 4	45 min	Our Savior Lutheran School, Austin, TX	October 25, 1992	First Graders
The NET Program - Practical Possibilities for Instituting Dietary Changes in Publicly Funded Food Services	40 min	Department of Health, Austin, TX	October 31, 1992	Committee on Public Health, Subcommittee on Nutrition

Data in Table 6 indicate that a total of 31 presentations were given to different target groups, about three and one-half times the number of presentations in 1991. The same

presentation was given more than once in some instances. Sometimes it was not possible to know the number of presentation participants, especially when the presentation was delivered in a national conference. When it was possible to know the number of participants, the total number was approximately 105 food service personnel, 45 teachers, 20 contract managers, and 30 nutrition consultants. A total of 398 children were reached as a result of these presentations.

In addition to presentations delivered by the NET staff, 51 presentations were delivered by the NET program contract trainers. A total of 103 educators, 55 food service personnel, 45 day home providers, and 101 parents participated in these presentations. The number of children reached either in classroom presentations (42 presentations) or indirectly through educators, food service personnel, and parents was 53,953 children.

In 1991 the NET staff delivered nine presentations while the NET contract trainers did not actively participate in presentation delivery. Thus, 1992 witnessed a considerable surge in the number of NET presentations. Only one presentation, however, was directed to parents.

### Exhibits

Table 7 includes a list of exhibits and fairs that NET held during FFY 1992.

**Table 7**

**NET Exhibits and Fairs During FFY 1992**

Place of Exhibit	Date
DHS Health Fair, Austin, Texas	October 7, 1991
82nd Annual Convention of Texas Congress of Parents and Teachers, Dallas, Texas	November 15-17, 1991
Travis High School Health Fair, Austin, Texas	February 6, 1992
NETWORK 92	March 30, 1992
SBISB Area Council PTA, Houston, Texas	May 2, 1992
Corpus Christi Council of PTA, Corpus Christi, Texas	May 16, 1992
Regional Headstart Coordinators Conference, Dallas, Texas	July 8-10, 1992

Table 7 indicates that NET participated in 7 exhibits and fairs, compared to 4 that were conducted in 1991. Three of the exhibits were held in statewide meetings, and two were held at state agencies that perform functions similar to the NET program. During the 82nd Annual Convention of Texas Congress of Parents and Teachers, NET surveyed the nutrition education and training needs of visitors of the NET program booth. Results of the survey are included in Appendix B. The Texas State Plan set the goal for the number of fairs held by NET in 1991 at five. The updated 1992 State Plan did not change this number. Thus, NET exceeded the goal set for exhibits and fairs.

## Publications

Table 8 includes a list of NET's publications and news releases during FFY 1992.

**Table 8**

### **NET Publications and News Releases During 1992**

Article/Announcement	Periodical	Date
Building a Better Diet for Better Health	Lunch Bell, Journal of Texas Food Service Association	Fall, 1991
Texas NET Launches "Early Bird" Breakfast Campaign	ASFSA Journal	Fall/Winter, 1991
Districts, Dietitians Stress Importance of Breakfast for Children	Amarillo Globe News	October, 1991
30-Minute TV Interviews	Extension Today, Austin Access, Channel 38	10 Showings, October, 1991
Final Evaluation Report of Texas Nutrition Education and Training Program for Federal Fiscal Year 1990	ERIC Clearinghouse on Elementary and Early Childhood Education, Report No. ED 328352	December, 1991
The Availability of Marketing Resources	Department of Human Services	Spring, 1992
Review of Materials for Nutrition Education	Lunch Bell, Journal of Texas Food Service Association	Summer, 1992
How Was Your Texas School Breakfast/Lunch Week	Lunch Bell, Journal of Texas Food Service Association	Summer, 1992
Nutrition During Pregnancy	Building Blocks	Summer, 1992
Nutrition and Your Baby	Building Blocks	Summer, 1992
Nutrition and the Preschool Child	Building Blocks	Summer, 1992
Fiber For Breakfast . . . and Lunch	Texas Child Care Quarterly, Journal for Caregivers	September, 1992
Food Frontiers	We Magazine, Journal of Texas Department of Human Services	September, 1992



Data in Table 8 reveals that 13 articles and news releases were published during 1992. Six of these publications were technical articles and the rest were news releases on program activities and services. The 1990 final evaluation report was published by the U. S. Department of Education, Office of Educational Research and Improvement (OERI), Education Resources Information Center (ERIC).

## **Coordination With Related Publicly Supported Programs**

### **Introduction**

Coordinating efforts of the NET program with those of other publicly supported programs with similar functions is based on NET program regulations and is a program goal. This coordination is expected to promote outreach of the NET program and to reduce duplication of efforts and resources.

Coordination efforts take different forms. NET continues to attend and present program outcomes at state and national professional meetings. This interaction allows communication and exchange of information relating to NET's planned activities and possible avenues of cooperation with other programs. Another direct approach to coordination is submitting proposals for cooperative efforts and offering consultations that are in the realm of NET's expertise. Exhibits, fairs and publications publicize NET's activities and expertise and open doors for cooperation and coordination.

### **Coordination Efforts**

#### **Texas Interagency Council on Nutrition**

The Texas Interagency Council on Nutrition (ICON), formerly the Nutrition Resource Council, was established as a major statewide cooperative linkage between food and nutrition policy stakeholders as a result of NET's efforts in 1990. ICON members meet quarterly. The NET Coordinator chaired the Council in 1992 and worked with other ICON members to develop a Memorandum of Understanding between the agencies represented in the Council. The Memorandum will be effective January 1, 1993.

### **Dietary Guidelines Coalition**

In 1992, the NET Coordinator served as a member of the Dietary Guidelines Coalition. The coalition includes representatives from various agencies who are involved in activities that help implement the Dietary Guidelines for Americans in schools throughout Texas. NET promotes Project 2001, which is designed to encourage implementation of the Dietary Guidelines in schools. NET also provides the Associated Milk Producers, Inc. with Project 2001 participation data in order for them to offer the "Trimming the Fat" training to participating schools.

### **The American Cancer Society**

NET staff were invited by the American Cancer Society's Public Education Committee to help plan nutrition education activities statewide for preschool through high school age children. The NET Project Coordinator was a member of the Texas Cancer Council Task Force curriculum development project "Planning the Seed to Good Health." The NET Coordinator was an active member of the American Cancer Society's Nutrition Task Force.

### **The American Heart Association**

NET expertise was sought by the Texas affiliate of the American Heart Association (AHA) school site subcommittee, of which the NET Coordinator is an active member. The subcommittee was tasked to review and make recommendations regarding the "Getting to Know Your Heart" curriculum designed for elementary school students in grades 1-3. The AHA donated copies of their curricula and training packages to the NET library. NET purchased additional copies for the NET contract trainers to be used in the NET workshops. The NET trainers were trained on the "Getting to Know Your Heart" curriculum as a step toward offering statewide workshops on using the curriculum.

### **Texas School Food Service Association**

A TSFSA initiative was established early in 1990 with the NET library collection designated as a major clearinghouse for all certification courses delivered to members of this association. This coordination was renewed in 1991, and NET agreed to purchase audiovisual materials to support the certification training statewide. Coordination efforts continued with TSFSA in 1992 and NET participated in the School Breakfast Week activities of this organization.

## **Texas Education Agency**

In 1990, coordination with TEA resulted in NET's review of the Texas Essential Elements of the high school Health Education curricula which dealt specifically with the nutrition component for grades 9-12. In 1991 and 1992, the NET Coordinator represented NET on a writing committee to develop a comprehensive curriculum for grades K-12. NET purchased copies of the completed curriculum models and trained its contract trainers on their use.

Another aspect of the coordination between NET and TEA is participation in a breakfast promotion campaign. As mentioned previously, NET developed two PSAs, one targeting elementary school students and another targeting teenagers. A poster, two costumes, and two menu-backs were developed to support the PSAs. As part of this campaign, NET produced the "Breakfast Jingle" audiotape and the "Breakfast Advantage" videotape in cooperation with TEA and Associated Milk Producers, Inc.

In addition, NET and TEA made recommendations concerning the development of the "Best Practices Awards" and presented the recommendations to the USDA.

## **Texas Department of Health**

NET collaborated with the WIC program, administered by TDH, to produce the puppet video "Chuckles and the Happy Teeth." The video is produced in English and Spanish. It targets both Head Start children and participants in the WIC program.

## **Texas Department of Agriculture**

In 1991 NET awarded a grant to TDA to develop materials that promote Texas agricultural products to children in grades K-3. The grant funded production of educational materials to support Project TEACH (Texas Education and Agriculture Cooperating for Health). This cooperation continued in 1992 as NET provided expertise in the development of additional materials.

## **The University of Texas at Austin**

NET awarded the Department of Human Ecology, at The University of Texas at Austin, a grant to study menu planning practices of child care centers in Texas. Research results were included in a written report and will be shared with the NET staff and contract

trainers during FFY 1993. Recommendations resulting from the study will be used to improve NET training efforts directed to these centers.

### Texas Department of Human Services

A NET staff member reviewed and revised the nutrition component of the TDHS manual titled "24 Hour Day Care and Licensing." The manual was developed by the licensing division.

### Summary

Table 9 summarizes the various target group participation in the NET program as a result of NET's outreach efforts in 1992, and compares it with NET's participation in the past seven years. It may be noted that improvements in procedures of data collection and analyses provided more accurate data during the past three years. The data in Table 7 represents the non-duplicated figures reported on form FNS-42.

**Table 9**

### **Participation in NET From FFY 1985-1992**

Target Group	1985	1986	1987	1988	1989	1990	1991	1992
Children	2,518	7,020	6,800	5,580	16,315	23,877	618,638	950,693
Educators	1,765	1,880	1,910	1,117	3,440	693	2,417	2,185
Food Service Personnel	935	780	1,870	2,550	3,417	478	1,155	1,821
Parents or Guardians	175	40	40	30	171	14	145	175
Others	820	408	310	1,040	-----	698	221	1,017
<b>Total</b>	<b>6,213</b>	<b>10,128</b>	<b>10,930</b>	<b>10,317</b>	<b>23,343</b>	<b>25,760</b>	<b>622,576</b>	<b>955,891</b>

## **Recommendations**

- NET workshops continued to vary considerably in the number of times conducted and number of participants. Unique workshops were conducted more frequently and attracted larger numbers of participants. It is recommended that NET eliminate or reduce the overlap in workshop content to increase workshop efficiency and cost effectiveness.
- Two workshops were scheduled statewide during FFY 1992. These workshops surpassed the rest in frequency and participation. It is recommended that NET strive to achieve a balance between state and local needs by increasing the number of workshops scheduled statewide since statewide scheduling results in sizeable increases in workshop participation.
- Since participation of public school teachers in NET workshops was not commensurate with participation of other target populations, more efforts should be directed toward assessing the training needs of public school teachers. At present, NET is undertaking a two-year comprehensive assessment of the nutrition education and training needs of public school populations. Until the results of this assessment are available, NET could coordinate efforts with TEA and other organizations involved in teacher training. NET should also promote the workshops to school districts and in teacher associations, meetings, and periodicals.
- Since library items circulated to day care centers and family day homes were relatively few, more library outreach efforts should be directed to these facilities. Promoting nutrition and health to facilities that care for children at an early age is crucial to the realization of NET's goals. Movable exhibits of samples of suitable audiovisuals and mailed bibliographies may be effective means of promoting the library collection to these facilities.
- NET needs to maintain mailed and published information about the library collection as an important source of library outreach. Distributing library catalogs and bibliographies to schools and child care facilities and publishing articles and announcements in magazines and newsletters was an effective means of library outreach in the past and should continue and expand.
- Since very few parents were reached through NET's interventions in FFY 1992 and in previous years, it is recommended that NET develop and deliver presentations and handouts for parents. Parents could be reached in PTA meetings and through their children in schools and child care facilities.

- NET's diligent coordination with related publicly-supported programs resulted in measurable increases in participation and in contributions state and nationwide. This coordination should continue and should be extended to related non-profit community organizations.

### **III. EVALUATION OF MINI-CONTRACTS AWARDED TO PROMOTE THE SCHOOL BREAKFAST PROGRAM**

#### **Introduction**

The Texas NET program developed and implemented a mini-contract project during FFYs 1991 and 1992. The purpose of the project was to encourage school personnel to develop and implement model nutrition education projects/programs related to SBP participation and expansion. The focus on promoting the SBP came as a result of coordinating the NET program efforts with TEA. Meetings between the NET Program Coordinator and the State Director of School Lunch & Child Nutrition Programs at TEA pointed to the need to promote the SBP in Texas.

It was anticipated that the mini-contract project would be instrumental in realizing several of the NET program goals. Providing model breakfast program promotions within the school districts was expected to increase awareness of the SBP among school children, parents, teachers, food service personnel, and school administrators. It would provide these target populations with information on the importance of breakfast to students' health and scholastic achievement. The end result of the contracted projects would be an increase in student participation in the SBP and an increase in breakfast intake in general.

Activities sponsored by the mini-contract project were development or purchase of nutrition education materials on breakfast, and creating methods and techniques for using these materials in classrooms, school cafeterias, and the community as a whole. These materials and methods would be tailored to school needs and would be available for school districts to use year after year.

Implementing nutrition education and training projects in the school districts would result in awareness of problems hindering the nutrition education efforts in these districts and encourage the districts to find solutions to these problems. It was hoped that the initiated projects would continue, at least partially, to provide school districts with information and support for the SBP and the importance of breakfast.

#### **Request for Proposal**

A NET Program Specialist was responsible for developing and implementing the mini-contract project. She reviewed mini-contract projects that were developed and conducted

by the NET programs in other states, specifically the Mini-Grant Program conducted by the Tennessee NET program during 1984-85, and the Nutrition Education Mini-Grant Projects conducted by the Louisiana NET program during 1987-88 and 1989-90.

The Program Specialist then developed a request for proposal (RFP) that announced the availability of grants of up to \$1,000 each, to fund innovative projects/programs designed to promote the SBP in Texas. The RFP stated that one-half of the grant would be awarded by September 15, 1991, based upon a completed and approved application and plan of work. The remaining funds were to be awarded in six months or when the previous amount had been expended, whichever came first.

Implementation activities were expected to occur during the 1991-92 academic year. All projects were expected to be completed by May 15, 1992, with all supporting documentation submitted to the state office by May 30, 1992.

### Content of the RFP

The RFP consisted of three main parts as follows:

1. Application Form:

A six-page application form requesting:

- Name, function, and address of the applicant and other individuals who would be involved in the project
- Description of the project
- Purpose and objectives of the project
- Project's target population
- Listing of the project's activities and their time frames
- Resources and materials to be used in the project
- Resource persons to be involved in the project
- Methods of evaluating the accomplishment of project objectives



## 2. Supporting Information:

Guidelines were provided on:

- Allowable and unallowable fund expenditures

The allowable expenditures were purchasing of nutrition-related materials and supplies, printing of handouts, and paying substitute teachers to enable participating teachers to attend training sessions. The unallowable expenditures were indirect costs, purchase of equipment, and salaries.

- Suggested topics for proposals

The topics revolved around the SBP, such as training teachers and/or food service personnel on how to develop and implement a SBP, educating students and/or their parents on the value of breakfast, and investigating barriers to participating in the SBP and methods of alleviating these barriers.

- Sources of nutrition education materials

The NET lending library was identified as a source of print and audiovisual materials available for use in the project. The prospective contractors were provided with information on the procedures followed in borrowing from the library.

- Summary of the time frame set for the project

The summary listed the dates for submitting the proposal, announcing the contract recipients, awarding the grants, and completing the project.

- Checklist of items to be submitted before evaluating the proposal

These items consisted of letters of commitment specifying duties to be performed by the project leader and other persons involved in project implementation, and three copies of the application form and other forms provided and listed below.

- The Application Evaluation Form that would be used by the state office to evaluate the submitted proposals

This form was given to prospective applicants as a guide to proposal development. The form listed the criteria for evaluating the different parts of the proposal and the maximum points allotted for each part.

3. End-of-project Report Forms:

Forms were provided for:

- Project Participation Data

Participation data included the numbers, sex, and ethnic backgrounds of children, teachers, food service personnel and/or other target groups such as parents and guardians who would benefit from the project.

- Budget Expenditure Form

The contractor was to submit planned and actual expenditures on printed materials, audiovisual materials, miscellaneous supplies, travel, consultation fees and/or other expenditures necessary for the project.

- Nutrition Education Mini-contract Project Planning Worksheet

The contractor was required to list each objective, activities conducted to realize it, the person(s) responsible for realizing it, the time frame for accomplishing it, and methods for evaluating it.

The RFP was mailed to School District Food Service Directors on April 1, 1991. Availability of funds for the mini-contracts was announced in the 1991 summer edition of the Lunch Bell, Journal of Texas Food Service Association.

### Submitted Proposals

Nine applications were received, suggesting the following projects:

### Aldine ISD Food Service Project (Houston)

The purpose of the project was to increase parents' involvement in the school breakfast and lunch programs and provide nutrition education to students and parents. The target groups were elementary school students, their teachers, and their parents or guardians.

The project objectives were to: (a) provide breakfast club mornings that encourage parents to eat breakfast with their children; (b) develop nutrition education materials for teachers, students, and parents; and (c) evaluate student performance--with teacher assistance--on the effect of nutritious breakfast on student scholastic achievement.

Suggested activities to realize these objectives were to: (a) specify dates for parent-student breakfast at school, (b) encourage students to evaluate breakfast menus, and (c) show videos on breakfast in PTA meetings along with an invitation to breakfast.

Suggested methods to evaluate these activities were: (a) a participation report on breakfast, (b) a report on the number of adults who participate in the SBP each month, and (c) teacher assessment of student scholastic performance.

### Arlington ISD Food Service Project (Arlington)

The purpose of the project was to provide high quality nutrition education audiovisuals for use by the classroom teacher and the nutrition educator. The target group was K-12 students.

The project objectives were to: (a) increase the frequency that nutrition education is provided in the classroom, and (b) provide a resource on nutrition education to the classroom teacher upon request.

Suggested activities to realize these objectives were to: (a) purchase audiovisual materials on nutrition education and announce it to lead teachers, and (b) plan mini-projects utilizing these materials and announce them to lead teachers.

Suggested methods of evaluating these activities were: (a) circulation data on purchased materials, and (b) record of classroom presentations given by food service staff using purchased materials.

### **Hico ISD Food Service Project (Stephenville)**

The purpose of the project was to increase the number of students who eat breakfast, and to show parents and students how eating breakfast improves health, attendance, and academic performance. The target group was two second grade classes and one fourth grade class.

The project objectives were to: (a) improve student knowledge of a nutritious breakfast and their attitude toward eating it, (b) increase the number of students who eat breakfast, (c) improve student attendance record, (d) improve student academic record, and (e) encourage parents' support of the SBP.

Suggested activities to accomplish these objectives were to: (a) recruit parent participation in the SBP, (b) show audiovisual materials and give handouts on nutrition to students and parents, (c) invite guest speakers to give presentations on the importance of breakfast, and (d) give certificates of award to students participating in the SBP.

Suggested methods of evaluating these activities were: (a) pre-test/post-test of student knowledge and measurement of student attitudes, (b) breakfast survey at the beginning and end of the year, (c) record of student attendance, (d) student report cards, and (e) parents' verbal and written support of the SBP.

### **Midland ISD Food Service Project (Midland)**

The purpose of this project was to promote the SBP to two types of students: (a) students who take the school bus to school, and (b) students who qualify for free or reduced-price meals.

The project objectives were to: (a) identify the students who are not able to participate in the SBP because of the school bus schedule, (b) inform the students who qualify for free or reduced-price meals of the availability of school breakfast, and (c) encourage these two groups of students to participate in the SBP.

Suggested activities to realize these objectives were to: (a) review the busing schedule to determine which routes do not allow adequate time for students to eat breakfast at their schools, (b) distribute literature to targeted students notifying them of the availability of breakfast at the school where they ride their buses, and (c) sponsor a "Bring a Friend to Breakfast" week during which prizes are offered to participating students.

Suggested method of evaluating the project was before and after records of student participation in the SBP.

### **Mumford ISD Food Service Project (Mumford)**

Mumford ISD called its project "Project B.I.G.," which stands for "Breakfast Is Great." The purpose of the project was to increase parent, teacher, student, and cafeteria staff awareness of the importance of breakfast and to improve the student academic performance as a result of eating a nutritious breakfast. The target groups were pre-kindergarten through eighth grade students, their parents, their teachers, and staff of their school cafeterias.

The project objectives were to: (a) increase teacher awareness of the importance of breakfast and their confidence in presenting a unit on nutritious breakfast, (b) increase knowledge of the cafeteria personnel of the importance of breakfast and improved methods of food preparation for maximum nutritional value, (c) develop a program for students on nutrition education pertaining to breakfast, and (d) increase parent awareness of the importance of sound nutritional practices in the home and the importance of good breakfast.

Suggested activities to realize these objectives were to: (a) give teachers in-service training after school, (b) instruct the cafeteria personnel on food preparation and the nutritional value of breakfast, (c) present a unit to the students on the nutritional value of breakfast and awards to the class with the highest participation in the SBP, and (d) invite parents to have breakfast with their children at school and give them a presentation on the importance of good breakfast.

Suggested methods of project evaluation were: (a) teacher and cafeteria personnel completion of the in-service training, (b) student passing the nutrition unit test, (c) increased student participation in the SBP, (d) improvement in the student academic records, and (e) parent attendance for the breakfast and presentation.

### **Pasadena ISD Food Service Project (Pasadena)**

The purpose of the project was to increase student participation in the SBP and, consequently, their academic performance. The target group was elementary school students.

The project objectives were developing and presenting various nutrition education activities for students and involve parents, nurses, teachers, and food service personnel in these activities.

Suggested activities to realize these objectives were to: (a) provide workshops for parents, nurses, teachers, students, and cafeteria personnel, (b) send flyers on breakfast menu to parents, (c) publish nutrition newsletter on the SBP, (d) promote the various aspects of the SBP to students using audiovisual materials, and (e) conduct a poster contest among students on the subject of school breakfast.

Suggested methods of project evaluations were comparisons between participating and non-participating students in terms of sex, age, ethnic background, and academic performance. Student performance and their overall learning behavior were to be assessed by student academic records and teacher classroom observation.

### **Plano ISD Food Service Project (Plano)**

The purpose of this project was to improve the eating habits of students. The target groups were elementary students in two schools and their parents.

The project objectives were to: (a) offer nutrition education opportunities to instructors and health professionals, (b) form a Parent Advisory Committee under the direction of the Plano ISD NET Coordinator to promote the SBP and the NSLP to parents and serve as a communication bridge between Plano Food and Nutritional Services Department (PFNSD) and the community, and (c) conduct presentations during PTA meetings that would encourage parent support of classroom nutrition education efforts.

Suggested activities to realize these objectives were to: (a) conduct demonstrations and classroom education for students, (b) provide in-service training to teachers, and (c) provide nutrition education materials to health professionals, teachers, students and parents.

Suggested methods of project evaluation were measuring: (a) decrease in dessert items on school menus and increase in fruits and vegetables, (b) parent involvement in the Parent Advisory Committee, (c) development and use of newsletters and nutrition education materials, (d) requests of nurses and teachers in other schools for food and nutrition service managers' participation in classroom activities, and (f) student performance in test of nutrition knowledge.

### **Spring Branch ISD Food Service Project (Houston)**

The purpose of this project was to form a breakfast club (BC) to help make elementary school students aware of the benefits of a healthy breakfast in a group situation and encourage individual healthy eating behaviors at school and at home. The target group was all elementary school students in the district.

The project objectives were to: (a) develop a comprehensive nutrition education program that would involve food service and health/fitness personnel, teachers, and parents; (b) train all health/fitness instructors in the school district on the formation of the breakfast club at their location; (c) train all cafeteria managers on coordinating their efforts with the health/fitness instructors on the breakfast club; and (d) establish a breakfast club at each elementary school in the school district.

Suggested activities to realize these objectives were to: (a) discuss the importance of eating nutritious breakfast with students participating in the BC, (b) instruct students to list the foods they have eaten in a food diary, (c) instruct students to bring or buy breakfast on specified days to eat and discuss during the first period, (d) instruct students to sign contracts with their parents to eat a nutritious breakfast every morning, (e) involve students in writing and circulating a breakfast newsletter for their school, (e) train the health/fitness instructors on forming and conducting the BC, and (g) provide the health/fitness instructors and the cafeteria managers with information packets on how to implement the BC.

Suggested methods of evaluating the project were to: (a) analyze and evaluate one week student menu recalls before, during, and one month after project implementation; (b) assess success of the BC at each location as measured by the number of active club members; and (c) assess participation in the SBP before, during, and after project implementation as determined by the cafeteria managers.

### **St. Philip's School and Community Center Project (Dallas)**

The purpose of this project was to encourage all students to eat a well-balanced breakfast daily. The target groups were three-year-old through fourth grade students, their parents, and their school staff. The project objectives were to educate children, parents, and staff on the importance of eating a nutritious breakfast.

Suggested activities to realize project objectives were to: (a) train school faculty and staff on breakfast education activities; (b) set a breakfast songbook time for preschoolers during routine morning song time, show them a video on the importance of breakfast, and

let them glue appropriate breakfast food choices onto paper plates; (b) help first through fourth graders do the exercises in the "Eat to Live" workbook, show them a video on breakfast, and make them select models of foods for a balanced breakfast; and (c) provide parents with handouts, show them videos, and conduct seminars in PTA meetings.

Suggested methods of evaluating the project were to: (a) verbally test the 3-4 year old children, (b) give K-4th graders verbal and written tests, (c) observe the eating patterns of the children for up to three months after the activities to see if they were eating a balanced breakfast, and (d) assess students who require health services for complaints of headache and stomachache to determine if they were eating a well-balanced breakfast daily.

### Proposal Evaluation and Selection

The Program Specialist in charge of the project, together with the NET Program Coordinator, reviewed the submitted proposals using the Application Evaluation Form. They decided to accept all submitted proposals since the number of submitted proposals was less than the available grants.

A uniform two-page contract was developed by the Legal Services department of the Texas Department of Human Services, and signed by the Deputy Commissioner of the Client Self-Support Division and the contractor. The RFP, as well as the contractor's submitted proposal, were attached and incorporated into the contract.

### Monitoring the Implementation of the Contracted Projects

The NET contract trainers were assigned the task of monitoring the implementation of the mini-contracts that fell within their geographical areas. The instructors were provided with the following two instruments to help them perform their task:

1. General Guidelines for Monitoring the Contracted Projects:

Guidelines for monitoring the mini-contracts were developed as part of the mini-contract project to make sure that the contractors carried out the contract provisions and implemented all activities listed in their proposals as appended in their contracts.



The guidelines included the purpose of monitoring the mini-contracts, which was to ensure appropriate implementation of project activities. Indicators of appropriate implementation were stated as: (a) budget expenditures being within allowable categories, (b) maintaining appropriate project documentation, and (c) reporting "significant" issues to the NET Program Coordinator.

The guidelines also included suggested monitoring techniques such as telephone calls, site visits, and technical assistance. The contract manager and the NET trainers answered contractors' questions, clarified issues concerning contract implementation, and suggested appropriate nutrition education resources.

## 2. The Monitoring (Follow-up) Form:

A form was developed for the NET trainers to use during the process of monitoring the contracted projects. The form included two main parts in addition to a general information section and a section for the trainer's comments and recommendations. The first part consisted of three five-point scales on: (a) whether the activities were implemented as planned and submitted in the proposal, (b) whether the activities were implemented in a timely manner, and (c) whether the budget expenditures coincided with the allowable categories stated in the RFP.

The second part of the form asked whether or not the implementing institution was keeping records of: (a) project objectives, (b) materials used or developed, (c) methods used for instruction, (d) instruments used for evaluation, (e) number and function of participants, and (f) participant affiliation, sex, and ethnic background.

The trainers were asked to follow the General Guidelines for Monitoring the Mini-contracts and to use the Mini-contract Follow-up Form at least quarterly to monitor and guide the contractors.

### End-of-Project Report

The end-of-project report forms were given to the contractors to complete and submit at the end of the project. The forms included the same Time Frame form, Project Participation Data form, and Budget Report form that were attached to the RFP. In addition, the contractors were asked to: (a) list the achievements accomplished and the

impact of the project upon their agencies, (b) state problems encountered during the project implementation, how they were handled and how they affected the project, (c) describe or attach samples of basic materials disseminated during the project, (d) describe how the project was evaluated and report the evaluation results, and (e) indicate plans for continued activities stemming from the project.

### **Purpose of Evaluation**

The present evaluation was conducted to assess the effectiveness of awarding mini-contracts to public school districts to develop and implement projects that are beneficial to their districts. The evaluation answers the following questions:

- To what extent did the contractors adhere to the provisions of their contracts?
- To what extent were the projects' plans of work implemented as proposed?
- What problems did the contractors encounter in implementing the contracts?
- What problems did the NET staff encounter in developing the RFP and administering the contracts?
- How effective were the mini-contracts in achieving NET's objectives?
- What suggestions and recommendations did the contractors and/or the NET trainers have to improve contracting procedures and outcomes?

### **Method**

All nine projects were evaluated using the Mini-contract Follow-up Form and the End-of-Project Report. The projects were evaluated individually in light of the specific objectives of each project, and as a whole in light of NET's specified purpose of the project.

Number and percentage goal attainment were the main statistical analyses used in the evaluation. The evaluation methods and statistical analyses employed by each project director, as well as the results of directors' evaluations, were also reported.

## **Results and Discussion**

### **Evaluation of Individual Projects**

#### **Aldine Project**

##### **Results of Monitoring the Project**

Unlike the other eight projects, the Aldine project was not monitored during the process of its implementation. The reason for failing to monitor the project was a temporary vacancy in the position of the NET trainer responsible for monitoring the project.

##### **End of Project Report**

**Activities and Accomplishments.** Activities performed to present nutrition information were: (a) designing a manager-made costume to wear when presenting nutrition information; (b) purchasing stuffed fruits, vegetables, and meats to use in illustrating the food groups; (c) presenting nutrition information to all first graders, followed by distribution of pencils and raisins; (d) offering nutrition trays for the first graders with cheese, vegetables, fruits, and nuts; (e) student drawing nutritious food posters showing examples of school breakfast and lunch, giving kitchen tours to parents, and showing the "Healthy Edge" video in an open house night; (f) inviting parents to breakfast, showing them videos, and handing them pencils and stickers; and (g) inviting teachers to breakfast and providing them with information about the importance of the school breakfast/lunch program.

Some handout materials disseminated during the project were the Earl E. Bird poster developed by the Texas NET program, stickers, and menu-backs.

Publicity for the project was achieved by a news release in the Houston Chronicle. The newspaper published information and pictures of one of Terry Tomato's nutrition presentations given to first graders.

**Participation Data.** Participation data indicated that the project was implemented in one school. The number of children who received nutrition education in this school rose from 316 to 475, more than a 50% increase. The number of teachers receiving training in nutrition education rose from five to 35. One hundred twenty food service managers and kitchen personnel received nutrition education compared to seven participants in the previous year. Three hundred parents participated in the open house event and 50 parents participated in the school breakfast event. Participation in the SBP in the entire district increased 14.7%.

Equity data indicated that participants were 50% males and 50% females. Data also indicated that approximate numbers of Whites (30%), Blacks (32%), and Hispanics (32%) benefitted from the project.

Positive comments were received from parents and teachers on the importance of the information they received on breakfast and the quality of the school breakfast.

**Budget Expenditure.** Budget expenditures totaled \$1,209.68, which is equal to the approved grant. The bulk of the money (\$826.95) was spent on purchase of audiovisual materials. All expenditures coincided with allowable categories stated in the RFP and the contract.

**Plans for Continued Activities.** To extend the benefits of the project, the ISD planned to: (a) invite parents and teachers to eat a breakfast early in the school year, (b) use the school menu as a platform to provide nutrition information, and (c) use bell ringers and special breakfast days in all schools. Aldine School Food Service Association is one of the sources to fund these activities.

**Major Problems.** The major problem encountered when implementing the project was a school calendar too full with academic and fine arts activities to allow for timely scheduling of a parent breakfast. As a result, parent breakfast was delayed three times and took place only once, late in the school year.

**Suggested Improvements.** When asked about ways that the NET staff could improve their assistance to NET mini-contract recipients, the contractor stated that the mini-contract provided an opportunity to try new ideas. She noted that the NET contact person changed several times and the information required to document progress was unclear. She suggested that completion of the project's final report be required in June or July, instead of May, after the end of the school year.

## Arlington Project

### **Results of Monitoring the Project**

The trainer who monitored the project gave it ratings of 5 out of 5 points on whether the activities were implemented as planned, whether they were implemented in a timely manner, and whether budget expenditures coincided with allowable categories stated in the RFP and the contract.

Data on the Follow-up Form indicated that there were no available records of the project's objectives, materials, methods of instruction, evaluation instruments, number and function of participants, as well as participants' affiliation, sex, and ethnic background. The district was purchasing materials with the grant monies but was not developing instructional materials to use with the purchased materials. The trainer monitoring the project and the school district were alerted to the need to develop instructional materials based on the purchased materials, as stated in the contract.

The trainer identified additional educational materials to be purchased by the grant monies and expressed the district's interest in NET-provided training on the Dairy Council "Food . . . Healthy Choices" nutrition curriculum.

### **End-of-Project Report**

Activities and Accomplishments. The main purpose of the project was to provide nutrition education and training materials to the school district. Four curriculum packages, two videos, three filmstrips, and other audiovisual materials such as food replicas, games, puppets, and charts were purchased for use by classroom teachers.

One of the purchased curriculums, Food Power, A Coach's Guide to Improving Performance, a National Dairy Council publication (Chicago: National Dairy Council, 1991) was used in a one hour classroom presentation. The package includes seven chapters and twelve handouts on topics related to nutrition and sports. The presentation was delivered by the NET trainer to seventh and eighth grade female students during the eighth period physical education class period.

Gain in students' knowledge as a result of the presentation was measured by a pre/post-test developed by the NET trainer. The test consisted of 12 multiple choice items, three true/false items, and one item that asked students to rate their food habits on a four-point scale ranging from bad to excellent. The items on the pre-test and the post-test were identical but their sequence was different. The

pre-test and the post-test were administered on two different days by the students' coach and instructor and scored by the NET trainer.

Test results indicated low gains in knowledge as measured by the number and percent of gain scores in the post-test. The total gain in the 15 multiple choice and true/false items was 224 scores, with an average gain of 3.3 scores per student. Only six out of the 67 students rated their food habits higher after the presentation, which is understandable since the presentation was not expected to change students' food habits but make them aware of how good or bad these habits were. The low gain in knowledge indicated that a one hour presentation was not enough to provide the students with the information necessary to perform better on the post-test.

Eight handouts were given to participating students. The handouts were copies of fact papers included in the curriculum on how to select a diet, how to lose weight, how to gain weight, how to measure body fat, fluid intake, and some nutrition myths.

**Participation Data.** Participants were 67 female students enrolled in the seventh and eighth grades. Observation and personal judgement indicated that 62 of the students were White, six were Black, and one was Hispanic.

**Budget Expenditure.** The total grant (\$100,000) was spent on purchase of instructional materials. All purchased materials were approved by NET as part of the project proposal.

**Major Problems.** Funds were delayed and, consequently, purchase and receipt of materials. As a result, the ISD was only able to use and evaluate one out of the four curriculum packages.

## **Hico Project**

### **Results of Monitoring the Project**

The NET trainer gave the project ratings of 4 out of 5 points on whether the activities were implemented as planned, whether they were implemented in a timely manner, and whether budget expenditures coincided with allowable categories stated in the RFP and the contract.

Data on the Follow-up Form indicated that the district was keeping records of the project's objectives, materials, methods of instruction, evaluation instruments, number and function of participants, as well as participants' affiliation, sex, and ethnic background.

By January 20, date of the first follow-up, a new school superintendent was appointed and was expected to support the project through renewed interest. By November 15, date of the second follow-up, the project was being implemented at a higher rate. The "Eat Breakfast" campaign was launched and the contractor was working with teachers and school food service personnel to maximize project effectiveness. She had ordered and was using nutrition analysis software, conducting pre/post nutrition tests in the second and fourth grade classes, and starting a project on the foods grown in Texas.

The NET trainer advised the contractor to keep her message consistent in the classrooms, the cafeteria, and with parents in order to reinforce the message.

### **End-of-Project Report**

**Activities and Accomplishments.** The importance of breakfast and characteristics of a healthy nourishing breakfast were presented to parents and students of an elementary school on a regular basis. A variety of approaches were used to present this information such as: (a) showing a video on the importance of breakfast; (b) hanging breakfast charts and posters in the school cafeteria; (c) forming a breakfast club and presenting the goal of the club in the school cafeteria; (d) student planning of breakfast menus for the school cafeteria; (e) awarding "I Love Breakfast" stickers and breakfast pins to students who ate breakfast; (f) having the food manager, wearing a "Miss Moo" outfit, visit the school and give a presentation on good nutritional choices; (g) introducing and trying new foods; (h) asking fourth graders to write a breakfast motto; and (i) assigning a two-week nutritional program that included presentations on nutrition and breakfast reminders.

Six handouts were distributed to students and their parents to disseminate information on the importance of breakfast and on how to plan a healthy breakfast. One of the handouts was a November school breakfast menu.

A news announcement appeared in the Hico News Review to publicize the Hico ISD breakfast project and the different activities carried out as a result of receiving the NET grant.

A breakfast survey conducted to find out the number of second and fourth graders who ate breakfast in September 1991 indicated that 46 students ate breakfast compared to 11 who did not. Another survey, conducted in May 1992, showed a 16% reduction in non-breakfast eaters. Menu analysis indicated an improvement in the school menus at the end of the school year compared to beginning of the year menus. Menus were better balanced with respect to the four food groups and more foods were included on the menus. No improvement was noticed, however, in absenteeism.

**Participation Data.** Sixty-seven second and fourth grade students of one public school participated in the project. Fifty-five of the students were White, 11 Hispanics, and one Asian/Pacific Islander. There were 39 male students and 28 female students. Sixty parents and six food service personnel participated in the project.

**Budget Expenditure.** All project expenditures fell within approved categories. The amount of the grant was \$973.00 and the amount spent was \$946.90. The grant was spent on story kit and nutrition lesson plans, buttons and stickers, nutrition analysis software, and fees for counseling 40 students.

**Plans for Continued Activities.** In spite of successful implementation of the project and effectiveness of certain activities, there were no plans for continued activities due to lack of funds.

**Major Problems.** Numerous highly processed and sweetened foods were served for breakfast in the school cafeteria. The problem was resolved by presenting the Breakfast Club goals to the cafeteria personnel. The goals included reduction of the amount of sweetened food choices and encouraging students to choose other alternatives.

**Suggested Improvements.** The contractor indicated that the technical assistance she received from the NET staff was more than adequate.

## **Midland ISD Project**

### **Results of Monitoring the Project**

The NET trainer gave the project ratings of 4 out of 5 points on whether the activities were implemented as planned, whether they were implemented in a timely manner, and whether budget expenditures coincided with allowable categories stated in the RFP and the contract.



Data on the Follow-up Form indicated that the Midland ISD was keeping records of the project's objectives, materials, methods of instruction, evaluation instruments, number and function of participants, as well as participants' affiliation, sex, and ethnic background.

The trainer found that both the "I Love School Breakfast Week" and "Bring a Friend to Breakfast Week" increased participation in the SBP, in spite of problems in synchronizing the school bus schedule with the times of serving school breakfast. She recommended observing the effect of the project on SBP participation for an extended period of time (e.g., one year).

### **End-of-Project Report**

**Activities and Accomplishments.** The End-of-Project Report indicated that the project activities suggested in the mini-contract were implemented on time. Project achievements were: (a) timely implementation of the "I Love School Breakfast Week" on the first week of school which allowed the increase in SBP participation to continue all year, (b) a 10% net increase in Paid Breakfast participation during the first week of school over Paid Breakfast participation during the same period of previous year, (c) an 8.5% increase in SBP participation in general (Paid, Reduced-price and Free Breakfast) for the month of September over participation during the same period of the previous year, and (d) the participation of 82 new students during the "Bring a Friend to Breakfast Week," conducted October 7-11, 1991.

Comparison of breakfast participation data during the first 10 weeks of school with participation data during the same period of time in 1990 indicated a net 9.5% increase in the number of breakfasts served. Similar comparisons for the months of September and October indicated respective 8.1% and 5.8% net increases in school breakfasts.

Some handout materials disseminated during the project were: (a) pencils, stickers, book markers and coupons distributed during "I Love School Breakfast Week"; (b) two months menu fliers for bused students; (c) posters, pencils, erasers, bowling and pizza certificates, and stickers distributed during the "Bring a Friend to Breakfast Week"; (d) pencils distributed during the "Breakfast Bell-Ringer Day"; and (e) stickers distributed during the "Breakfast Sticker Day."

Project publicity was achieved by publishing menus developed by the students in the "City Newslines" newsletter, reading school menus over local radio stations, and distributing menus and memos promoting the SBP.

**Participation Data.** Participation data indicated that 15,000 students from 23 campuses and 30 food service personnel participated in the project. Approximately 10,000 parents or guardians received menus and other information pertaining to school breakfast. Children of both sexes participated almost equally in the project. Fifty-two percent of the children were females and 48% were males. The children's ethnic background varied, with the majority (58%) being White followed by Hispanics (33%). Only 8% of the children were Black and 1% were from the East Indies.

**Budget Expenditure.** Budget expenditures were \$1,854.96, almost twice the \$1,000.00 assigned by NET to the project. The extra funding was provided by the ISD. All expenditures coincided with allowable categories stated in the RFP and the contract.

**Plans for Continued Activities.** Plans for continued activities to extend the benefits of the project were: (a) having "I Love School Breakfast" and "Bring A Friend to Breakfast" weeks each year, and (b) targeting bused students and notifying them of opportunities to eat either at the school where they ride the bus or at their own schools.

**Major Problems.** The project helped to identify conflicts between school bus schedules and breakfast serving time. Most of these conflicts were resolved by extending the time of serving breakfast.

**Suggested Improvements.** When asked about ways that the NET staff could improve their assistance to NET mini-contract recipients, the contractor cited her interest in knowing about school districts experiencing bus/breakfast schedule conflicts and their creative solutions to this problem. The contractor also expressed interest in learning about similar food service program projects and their evaluations.

## **Mumford ISD Project**

### **Results of Monitoring the Project**

The trainer who monitored this project gave it ratings of 3 out of a total of 5 points on whether the activities were implemented as planned, whether they were implemented in a timely manner, and whether budget expenditures coincided with allowable categories stated in the RFP and the project contract.

Data on the Follow-up Form indicated that the Mumford ISD was keeping records of the project's objectives, materials, methods, evaluation instruments, number and function of participants, as well as participants' affiliation, sex and ethnic background.

The NET trainer observed that up to the time of the follow-up visit (November 5, 1991), only teachers and food service personnel had received training. Plans to work with students were not implemented as stated in the contract and were rescheduled for December and January. The contractor was not sure if the schools were going to award prizes to classes highest in SBP participation.

About one-third of the grant (\$336.50) was expended but the trainer was not permitted to examine the budget file. A teacher from the ISD was hired as a consultant/resource person to locate and acquire materials, present the SBP to parents, and participate in the training of other school personnel.

The contractor indicated that: (a) the amount of the grant (\$1,000) was not sufficient, (b) paperwork required for the project was too much for the amount of the grant, (c) there was a shortage of educational materials on the importance of breakfast, (d) there was a need to develop a specific curriculum on the importance of breakfast for the teachers to use with their students since they do not usually have time to develop such curriculum, (e) additional funds would permit hiring of a part-time consultant who would spend time with students in the classroom and develop materials.

At the request of the contractor, the NET trainer gave a 45-minute presentation to teachers. The trainer based her presentation on the NET workshop, "Nutrition: The Basics."

## End-of-Project Report

**Activities and Accomplishments.** The End-of-Project Report indicated that the project activities were implemented as stated in the contract. The project achievements listed were: (a) increased awareness of parents, teachers, students, and food service personnel on the importance of breakfast, and (b) increased number of students who ate school breakfast.

No handout materials were listed in the report. Computer software, films and videos were used.

Project promotion was done through home visits and the students. No public announcements were used for publicity.

**Participation Data.** The project was conducted in one school. Participation data indicated that six teachers and two cafeteria staff members received in-service training. There was a 3% increase in SBP participation during the months of December, January, and February when the project was implemented for the students. Sixty-five students participated in the SBP as a result of the project. Forty-five students were Black, 5 were White, and 50 were Hispanic. Fourteen parents ate breakfast during this period.

**Budget Expenditures.** Budget expenditures coincided with the amount of the grant and all expenditures were in agreement with allowable categories stated in the RFP and the contract. The ISD plans to use the software purchased to teach students the importance of breakfast and nutrition in general, in the following years.

**Suggested Improvements.** In response to the question about technical assistance needed from the NET staff the project director stated that the NET staff was more than helpful.

**Major Problems.** The main problem facing the contractor in implementing the project was lack of funds. To solve this problem, school personnel volunteered their time. In implementing the project, it was realized that the students did not know enough about nutrition and its effect on their lives. A need for more funds was felt, to expand the nutrition education project that was started by the mini-contract.

## **Pasadena ISD Project**

### **Results of Monitoring the Project**

The NET trainer visited the implementing school on January 24, 1992. She rated the project activities and budget expenditure as very effective. She noted that all records were kept and updated.

The trainer found that a video geared to elementary school students was underway. The video used puppets which talked about the importance of breakfast. Handouts were developed and distributed to students and their parents to promote breakfast. Students also received school menus and menu-backs. Prizes such as stencils, stickers, pencils, book marks, dino sacks, and photo frames were purchased and used as incentives and prizes for students participating in the SBP.

Teachers were encouraged to urge their students to participate in activities conducted in the school cafeteria to promote SBP during the week of January 13-17, 1992. Principals were encouraged to support the breakfast promotion efforts and were provided with a list of public announcements to share in their schools during the breakfast promotion week. Miz Moo, the puppet, visited 10 schools in the ISD during that week. Both teachers and principals were provided with graphs illustrating that students who ate breakfast received higher grades in language, math, and reading than students who did not eat breakfast, and their absence rate was lower.

## **End-of-Project Report**

**Activities and Accomplishments.** A series of nutrition education activities were conducted to increase participation in the SBP. The number of students participating in the breakfast program was 5.5% higher at the end of the project. Based on these activities and their results, Pasadena ISD was awarded the Southwest Regional Honorable Mention for the best school breakfast expansion practices.

The school district published a breakfast newsletter containing information about breakfast consumption among school age children and its positive effects on academic performance and learning behavior. The newsletter was circulated to parents, principals, and teachers. Parents received letters and flyers on the importance of breakfast for children. Most of the circulated materials were in English and Spanish. Several mini-contests, such as a nutrition poster contest and count the peanut contest, were coordinated at each school.

During a breakfast promotion week incentives were distributed to attract elementary students to breakfast. Copies of the menu with special menu items for each day was prepared. Nutrition information was provided on the back of the menus. One morning breakfast was designated to the "Operation Desert Storm" as the dessert storm breakfast day. Parents were invited to be more closely involved in the breakfast program.

A breakfast puppet show was created and videotaped. The show was prepared with the cooperation of a teacher and two students (puppeteers), a librarian (script writer), and the nutritionist as the coordinator of the breakfast puppet show.

A breakfast promotion committee was organized to further study other possibilities of promoting the breakfast program on a yearly basis. The committee included three food service managers, a nurse, the school district's nutritionist, and the AMPI consultant.

**Participation Data.** All the elementary schools in the district (30) participated in the project. Total enrollment in these schools was 25,000 students. All teachers in these schools (3,000) and food service personnel (450) received information on the importance of breakfast. Almost all parents received letters and newsletters on the importance of breakfast.

**Budget Expenditures.** The entire project budget (\$1,000) was spent on allowable categories. Most of the budget (75%) was spent on buying print and audiovisual materials. The rest of the budget was spent on providing the puppeteer's fee and incentives (\$400) and miscellaneous supplies (\$135).

**Plans for Continued Activities.** The ISD decided to continue the breakfast expansion program in the same format in the following year. Program funding was secured, in part, from the ASFSA foundation.

**Major Problems.** Project implementation indicated that further support is required to address the need for nutrition education activities among school age children, parents, and administrators.

**Suggested Improvements.** The contractor felt that the NET program provided quality nutrition education support for Pasadena ISD schools and community. No improvements to the NET services were suggested.

## **Plano ISD Project**

### **Results of Monitoring the Project**

The NET trainer conducted telephone conferences with the contractor and one on-site visit on February 19, 1992. She gave the activities and the activities' timely implementation a rating of 4 out of 5. Budget expenditures were rated as very effective.

The trainer stated that the ISD was keeping records of the project's objectives, materials, methods of instruction, evaluation instruments, and participation data. Subsequent visits to three school sites lead the instructor to recommend that more efforts be made to involve parents in the project activities.

### **End-of-Project Report**

**Activities and Accomplishments.** The main goal of the project was to improve the eating behaviors of students enrolled in two elementary schools, and

incorporate nutrition education concepts into subjects taught to first through fifth grade students. Health and nutrition words were added to spelling lists; maps were described as looking like a head of broccoli or cauliflower; ethnic dishes were sampled during social studies and each food component was identified by food group; the number and percent of students who ate breakfast were calculated during math classes; and, the Food and Nutrition Service Manager read nutrition stories to students during meal service.

Additional activities were conducted to stress the importance of breakfast and nutrition as a whole. Some of these activities were: sampling of new foods, cooking activities, kitchen tours, presentations conducted by a nutritionist and by the Food and Nutrition Service Manager, use of balloons and stickers to emphasize healthy food, decorating serving areas with posters, rotating large stuffed animals dressed with aprons, pins, etc. between grades to compare dietary needs of animals with those of children, contests and awards for children who make healthy food choices.

The project--as implemented in one of the elementary schools-- won the TSFSA Nutrition Education award for the best single unit in the state, and the Texas Department of Health 1992 Award of Excellence in Texas School Health.

Buttons and awards were designed by the students and were given to individual students or classes for eating breakfast regularly, for eating vegetables, or for exceptional class work related to nutrition. The "Nutrition Bits and Bites" newsletter was developed and circulated.

Ten press releases including pictures and events were processed through the Plano ISD Communications Office. Some of these were published in the Plano Star Courier and the Dallas Morning News.

Project evaluation indicated a 25% decrease in desserts and approximately a 20% increase in vegetables and fruits produced by the school cafeteria. Student reports indicated about a 40% increase in breakfast consumption. First, second, and third graders were randomly selected and questioned about the four food groups. Ninety-five percent of the students were able to correctly classify food items under the food groups. Two meetings and a campus survey indicated an increase in parent participation through an advisory committee. Teachers attended in-service training and received a monthly nutrition newsletter.

**Participation Data.** The project was implemented in two public schools. The number of participating students was 1,153. There were 41 Black students, 993

White, one American Indian/Alaskan, and 92 other ethnic groups (Middle Eastern and Oriental). Six team leaders, 24 teachers, and five food service personnel participated in the project as well. Ten parents served on an advisory council.

**Budget Expenditures.** The amount of the grant was \$994.16. Actual expenditures was \$1,017.07--about 2.3% over the originally approved budget. All expenditures were in allowable categories. Less money was spent on software and more on printed and audiovisual materials.

**Plans for Continued Activities.** The project helped identify health problems related to nutrition. The district planned to use this information to help other campuses focus on the problem. One of the elementary schools that implemented the project planned to focus on nutrition as new students enroll in the school. Some of the implemented activities, such as stressing the importance of eating breakfast every day and providing a nutrition newsletter to team leaders, would be replicated on other campuses.

**Major Problems.** Time to coordinate, plan, and carry out all activities and maintain the momentum was a challenge. Another difficulty was depending on others to complete a portion of a task that had to be done before other tasks could be completed. There were limited materials available for bulletin boards and displays.

**Suggested Improvements.** When asked about suggestions on how NET can improve services to mini-contract recipients, the Plano ISD asked for information on available grants.

## **Spring Branch ISD Project**

### **Results of Monitoring the Project**

A follow-up was conducted on November 25, 1991. The NET trainer rated the activities, their timely implementation, and budget expenditures as very effective. She indicated that records were kept of objectives, materials, methods of instruction, instruments of evaluation, and participation data.

The ISD hired a health/physical fitness coordinator to implement the BC in the district. The coordinator met with principals and health/physical fitness instructors to explain the project. Students who signed a commitment form were entitled to sign a banner in their



cafeteria and have their pictures taken. The food service personnel produced a breakfast newsletter.

The trainer pointed to a need for more money to: (a) develop nutrition education materials to be used in teacher training, (b) buy materials to be used as incentives to students, and (c) conduct more comprehensive activities. She also indicated a need to: (a) update the NET library, (b) allow the library borrowers to keep the borrowed items for a longer period of time, and (c) provide more instructional materials on breakfast. She recommended sharing the project and its activities with other districts.

## **End-of-Project Report**

**Activities and Accomplishments.** Project activities included promoting participation in a breakfast club for students. Members of the club pledged commitment to eating breakfast and they and their parents signed a contract to this effect. Club members received prizes, pencils, and food recipes. All students participated in class breakfasts and taste tests.

Handouts included colorful breakfast and lunch registration forms, nutrition promotion slogans, and breakfast report forms with puzzles, riddles, games, and how-to-do-it art work.

The project was implemented by health and physical fitness staff who felt ownership in the project. Achievements were accomplished through a cooperative effort between the staff and the food service department. There was about a 30% increase in the number of students who ate breakfast each day from March 30 to April 3.

All third graders enrolled in one elementary school (101 students) completed a breakfast intake record before and after the breakfast promotion. The number of students registering for the BC and the number of students signing the BC bulletin board were recorded. Results indicated that 352 out of 500 students receiving a BC registration form (70.4%) returned the completed forms. Three hundred fifty-two students signed their names on the BC bulletin board. There was no significant difference in the students' breakfast intake before and after the breakfast promotion. Students consumed an average of two of the four food groups before and after the promotion. However, 5% of the students skipped breakfast before the promotion compared to 1% who skipped breakfast after the promotion.

**Participation Data.** Five hundred fifty-four students from one elementary school participated in the project. Forty-four of the students (about 8%) were Black,

another 44 students were Asian/Pacific Islanders, 200 (about 36%) were Hispanic, and 266 (about 48%) were White. Parents of all the students (554) and five food service personnel participated in the project.

**Budget Expenditures.** The Spring Branch ISD grant was \$1,000.15. Project expenditures were exactly the same amount of money. The district, however, spent less money than anticipated on travel and consultant fees and more money on a taste test for the students.

**Plans for Continued Activities.** The Spring Branch ISD intended to continue the breakfast promotion project the following year since the basic idea of the promotion was easy to implement without extra funding.

**Major Problems.** The major problem encountered was lack of interest of principals, which hindered efforts of implementing the project district-wide. Only one school elected to participate. However, this resulted in concentrating the efforts in one location which was more beneficial to the participants.

**Suggested Improvements.** The project manager indicated that the NET trainer provided all the technical assistance needed. She suggested increasing the amount of the grant to be able to implement proposed projects district-wide.

## **St. Phillips ISD Project**

### **Results of Monitoring the Project**

At the first visit in December 13, 1991, the NET trainer found that the ISD was implementing the project according to the contract but the activities were not implemented in time, due to delay in receiving project monies. The ISD was keeping complete records of the project. The instructor evaluated the educational materials purchased with the grant and discussed evaluation techniques with the contractor.

The AMPI was involved in the project. Donated items were being used as incentives for children. These included stickers, buttons, pencils, erasers, coloring books, fanny packs, and T-shirts. The contractor was preparing calendars of events, breakfast menus, faculty/staff handouts and in-class activities divided by age or grade, announcements to parents, and pre/post tests.

On the second follow-up, February 21, 1992, activities were proceeding as stated in the contract and documentation remained exemplary. Breakfast participation had increased

as a result of the project and the number of meals served per week remained high during evaluation weeks. The school nurse reported fewer students in her office in the mornings with hunger-related complaints since the breakfast promotion began. Teachers observed that students who participated in the SBP were more alert and cooperative in class. Faculty support, however, was not as enthusiastic as expected. Thus, fewer students participated in the essay contest.

The NET trainer discussed the End-of-Project Report in detail with the contractor and arranged breakfast promotion presentations for parents, staff, and children.

### **End-of-Project Report**

**Activities and Accomplishments.** School staff, parents, and all students were educated on the importance of a nutritious breakfast. This was accomplished through training sessions, student contests, audiovisual presentations, parent letters, and related handouts.

The strength of the project was the outside resources provided by AMPI and NET. The AMPI dietitian provided a large number of incentive prizes and contest prizes for the students. The NET trainer conducted in-class nutrition presentations on the importance of breakfast. Awareness of the importance of a balanced breakfast and of the availability of the school breakfast program was further enhanced by the in-class visits and parent presentations made by the Food Service Director and the school nurse throughout the duration of the project.

The impact of the project increased school breakfast participation throughout the school year. An average of 406 breakfasts per week were served before the start of the project. This average increased 44.1% at the end of the project. The greatest increase by age/class was in the number of four-year-old students, which went up from five to eight students per day to 22 students per day (100% participation).

Thirteen staff and 50 parents were given a six-question multiple choice pre-test/post-test after their training sessions on the school breakfast program and the importance of breakfast. Three and four-year-old students were given an oral test that consisted of five multiple choice items on the food groups and five true/false items on balanced meals. The first, second, third, and fourth graders were given the same test, written in the pre-test and oral in the post-test. The performance of parents, staff, and students improved in the post-test.

Three major handouts were distributed to parents and staff: (a) a news release on the SBP published in the "Nutrition Week," a newsletter of the Community Nutrition Institute in Washington D.C., (b) an article on the importance of breakfast published in the "Diet and Nutrition Letter," and (c) a series of four news releases on the importance of breakfast distributed by AMPI. Thirteen handouts related to nutrition were given to students to be used in activities such as coloring pictures, crossword puzzles, and fill in spaces. A St. Philip's School and Community Center weekly memo which included a food service news on the importance of breakfast was distributed to parents and staff.

**Participation Data.** All St. Philip's students received services funded by the grant. The number of students was 181. Fifty parents participated in the project, 14 teachers, and four food service personnel. The participants were predominantly Black (242 individuals). Only four Whites participated in the project. Sixty percent of the participants were females.

**Budget Expenditures.** The project budget was \$926.00. All expenditures were within allowable categories and they were spent on buying print and audiovisual materials and supplies.

**Plans for Continued Activities.** There were plans for in-class presentations and utilization of NET and AMPI resources in the following year. The video and food models purchased with the project's funds would be used to educate students, parents, and staff on the importance of nutritious meals and a daily breakfast. No outside funds, however, were anticipated for the following year.

**Major Problems.** The only problem the contractor encountered was the delayed receipt of funds. This resulted in postponement of the starting date of the project. In order to adhere to the original time frame as closely as possible, the contractor acquired breakfast support materials which required no funding.

The school staff did not realize that a great number of students and parents were not aware of the SBP. The staff also did not realize that a large number of students came to school without having breakfast and reported to the school nurse with hunger related complaints. These problems were identified and addressed through the project activities.

**Suggested Improvements.** The only improvement to the procedures followed in administering the project was to ensure that project funds were received on time.

## **Evaluation of the Mini-Contract Project**

The aggregated effectiveness of the nine contracted projects was measured and considered an indicator of how well the mini-contract project was planned and administered, and how instrumental the project was in achieving the NET program goals.

### **Extent of Adhering to the Provisions of the Contract**

#### **Activity Implementation**

Most of the activities suggested in the project plans were implemented as planned. However, lack of interest of some school administrators, busy school schedules, difficulty in coordinating several sequential activities, and tardiness in awarding grant monies resulted in implementing some of the activities at a smaller scale. The benefits of one project were limited to fewer number of schools in one ISD. One parent breakfast was implemented rather than four in another ISD. In another ISD, one curriculum instead of four was implemented. A late start of three projects lessened their anticipated impact on the ISDs.

#### **Time Table**

The administrative problems cited above resulted in a shift in the time table and delay in the activities of four out of the nine projects.

#### **Budget Expenditures**

Budgets of all nine contracted projects were expended in allowable fund expenditures. Expenditures of only two contracted projects exceeded their budgets. This, however, did not require extra funding from the NET program. The contractors were able to receive the extra funds from their districts.

#### **Record Keeping**

Records were kept and updated by all except two contractors. Lack of documentation of these two contractors was discovered during the monitoring procedures and was corrected in time for the final report. One end-of-project report was submitted four months after

the due date. The contractor responsible for submitting the report did not understand what constituted a final report.

### Problems Encountered By Contractors

The contractors were asked during the monitoring process and when completing the end-of-project report to cite problems they encountered as they were implementing the projects. Table 10 lists the problems the contractors cited.

**Table 10**

#### **Problems Contractors Encountered in Implementing the Projects**

Problem	Frequency
1. Insufficient contract funds	6
2. Delay in awarding contract funds	3
3. Shortage of educational materials	3
4. Insufficient time to plan, coordinate, implement, and impact	2
5. Lack of interest among school administrators	2
6. Correlation between nutrition and health problems	2
7. School calendars too full with academic activities	1
8. Conflict between school bus and school breakfast schedules	1
9. Inadequate school menus	1
10. Too much paperwork	1
<b>TOTAL</b>	<b>22</b>

Table 10 indicates that all except three problems the contractors encountered were administrative in nature. The major administrative problems were financial due to insufficient or delayed funds. Shortage of educational materials on breakfast and unawareness of the effect of nutrition on health were the main nutrition education problems the contractors encountered. Inadequate school menus may be an educational problem or may be caused by other administrative problems, such as cost and procurement of food items.

### **Problems Encountered by the NET Staff**

Problems were encountered by the NET staff during the process of administering the mini-contracts project. The RFP was announced in the Chuckwagon, the newsletter published by TEA, and distributed to school food service managers. Ten grants for \$1,000 each were announced. Only nine proposals were received as a result of the announcement. Thus, nine instead of 10 contracts were awarded. The staff did not have the opportunity to select additional proposals.

It was planned to monitor the contracted projects at least quarterly. Due to turnover in the NET staff and the instructors responsible for monitoring the projects, only one or two follow-ups were conducted. One project was completed without monitoring.

All projects were completed on or close to the deadline. One contractor submitted samples of educational and promotional materials developed and/or distributed but did not complete an end-of-project report until about four months after the deadline. The contractor failed to understand what constituted an end-of-project report.

Review of the submitted final reports indicated inaccuracies in measuring the effects of some projects and in the project participation data.

### **Effectiveness of Projects in Achieving the NET Program Goals**

The projects were expected to realize several NET program goals. Table 11 lists the number and percent of the contracted projects achieving each goal.

**Table 11****Number and Percent of Projects Achieving NET Program Goals**

	Goal	Number	Percent
1.	Provide information to students on the importance of breakfast	8	88.9
2.	Provide information to parents on the importance of breakfast	8	88.9
3.	Provide information to teachers on the importance of breakfast	4	44.4
4.	Provide information to school food service personnel on the importance of breakfast	4	44.4
5.	Increase student participation in the SBP	8	88.9
6.	Develop nutrition education materials tailored to school needs on breakfast	6	66.7
7.	Increase availability of nutrition education materials on breakfast to schools	8	88.9
8.	Develop methods and techniques for educating NET target populations on breakfast	3	33.3
9.	Increase ISD's awareness of problems hindering the nutrition education efforts	6	66.7
10.	Encourage ISD's efforts in finding solution to problems in implementing nutrition education and training programs	2	22.2
11.	Encourage continuation of initiated nutrition education and training efforts	5	55.6

Table 11 indicates that the projects made an effort toward the realization of several of the NET program goals. Most of the projects (88.9% to 66.7%) directed their efforts toward



toward the provision of information and materials on breakfast. The material provided was mostly videos and printed visuals. These materials were provided through purchase or circulation. One school district developed an integrated curriculum. Two-thirds of the contracted projects developed instructional materials tailored to the district's needs.

Three contracted projects (33.3%) were able to create innovative methods and techniques for teaching nutrition education. Students participated in planning their school's menus; nutritional concepts were integrated in the study of math, social studies, and language; and students signed contracts with their parents to eat breakfast.

The majority of the projects (88.9%) reported an increase in student participation in the SBP compared to participation in the previous year. The reported increase varied from over four times the number of students who ate breakfast during the same period of the previous year to 5.5%. The increase in SBP participation was relative to the number of students who participated in each project. When fewer students participated in one of the projects, an increase in the number of students participating in the SBP showed an inflated percentage.

Six out of the nine contractors were aware of problems hindering the nutrition education and training efforts in their districts. Only two were actively involved in finding solutions to these problems. Efforts were directed toward synchronizing the school bus schedules with the SBP schedule. An attempt was made to reduce sugar and highly processed foods on school menus.

Over half the contractors (five out of nine) were encouraged to find funds and to use developed or purchased materials to promote breakfast in their school districts in the following years.

### Suggestions for Improvement

The contractors were asked for suggestions to improve mini-contract projects conducted by NET in future years. Table 12 lists the contractors' suggestions.

**Table 12****Contractors' Suggestions for Improving Mini-Contract Projects' Goals**

Suggestion	Number
1. Provide funds in a timely manner	3
2. Provide information on common problems and their solutions	2
3. Provide information on similar projects and their evaluations	2
4. Do not change the designated project manager	1
5. Provide clear instructions on required documentation	1
6. Move deadline of final report to after the school year	1
7. Continue developing and administering mini-contract projects	1
8. Update the NET lending library	1
9. Extend allowable time to keep borrowed library items	1
10. Provide more instructional materials on breakfast	1

It is apparent from Table 12 that most suggested improvements revolve around the need for more information and materials and timely distribution of funds. Stability in the NET staff and NET trainers, better communication between the NET staff and the contractors, and better timing of deliverables were also mentioned as desired improvements.

## **Recommendations**

- Since the mini-contract projects helped NET achieve several goals and had direct impact on children and their parents, it is recommended that NET include this type of intervention as part of the program's regular activities.
- In administering future mini-contract projects, NET needs to allow more time for careful planning and implementation and needs to increase the contract money to fund meaningful and creative efforts. This may entail awarding fewer contracts to develop exemplary programs, methods, and/or materials.
- Data indicated a need for closer and more frequent monitoring of the contracted projects throughout the process of their implementation. Guidance was specifically needed in curriculum development and project evaluation. Early monitoring could have avoided or solved funding and scheduling problems. School districts could have benefitted from each other's efforts and some duplication of effort could have been avoided.
- Data revealed the importance of securing approval and support of school superintendents and principals for the success of contracted projects conducted in public school systems. Projects were able to achieve success by involving the superintendents and/or the principals in catalyzing efforts and announcing events.
- Contractors expressed interest in sharing information on similar programs and experiences, common problems, and possible solutions. It is recommended that NET expand its activities and work as an information clearinghouse on innovative practices and ideas in nutrition education and training for schools and child care facilities in Texas.
- To maximize NET's return on money and efforts invested in the mini-contract project, it is recommended that a follow-up to the project be considered part of the project administration. NET should share the results, products, and experiences gained from each project with other contractors and with interested school districts. A package of developed curricula and materials should be available in the NET library for reference.
- Contractors expressed a need for more instructional materials on breakfast. NET could satisfy this need by compiling a bibliography of resources in this area as part of NET's effort to promote breakfast. The NET lending library could include selected resources on breakfast in the library collection.

- Since the number of project proposals was even less than the available grants, it is recommended that NET improve the planning and advertising procedures of contracted projects. More time is needed for planning and large-scale advertising. Contractors should be allowed more time to prepare their proposals. The amount of the grant should be enough to fund exemplary projects. This requires flexibility in committing NET funds to FFY activities.

## **IV. EVALUATION OF THE "EARL E. BIRD" PUBLIC SERVICE ANNOUNCEMENT**

### **Introduction**

### **Background**

Coordination with TEA identified the School Breakfast Program and breakfast in general as a priority area in need of development and promotion in Texas. The NET program agreed to participate in efforts to develop and distribute materials to promote breakfast to school children of all ages.

In 1991, NET, with the help of TDHS Media Services, contracted with a private business firm to produce two public service announcements (PSAs). The first PSA was a video cartoon that was designed to target children in grades 1-6. This PSA was named "Earl E. Bird" after the cartoon character in the PSA. The second PSA was designed to target teenage children and was named "Breakfast Party" after the breakfast party that was illustrated in the PSA. Each PSA lasted for a maximum of 30 seconds but shorter versions of the PSAs were produced as well.

A poster that illustrated the Earl E. Bird cartoon character was also developed as part of a breakfast promotion package. The poster was designed for use in elementary school cafeterias and in other child care facilities.

### **Formative Evaluation**

A formative evaluation was conducted during the process of the "Earl E. Bird" PSA development. The evaluation was conducted in the period from April 15 to May 15, 1991. Twenty-three frames representing the main events of the PSA were enlarged on 8½" by 11" white paper, and were colored. One or two questions were developed on each frame. The responses expected from elementary school students to each question were stated. A response sheet was prepared for students to enter their response to each question.

The PSA frames and responses to these frames were collected from one second grade, one third grade, and one fourth grade class in three elementary schools in Austin on April 18, April 24, and May 3, 1991. The schools were selected to include students from

different socio-economic classes, as well as Hispanic and Black minorities. Presentation of the frames and students' recording of their response to the frames lasted 45 minutes.

A NET staff member showed the PSA frames to the students one frame at a time. As the students viewed each frame, the staff member read the narration that accompanied the frame to the children twice, posed the question(s) related to the frame, and waited for the students to record their answers on the response sheet while still showing the frame to them.

Responses of each class were analyzed and tallied for each question. Student responses were compared to expected responses. Agreements and discrepancies between expected and actual responses were noted and shared with the producer of the PSA. The producer was asked to modify the PSA frames that did not elicit the expected responses.

### Promoting the PSA

A poster that illustrated the "Earl E. Bird" cartoon character was developed as part of the breakfast promotion package. The poster was designed for use in elementary school cafeterias and in other child care facilities. In addition, a menu-back was designed to be placed on the back of the monthly breakfast and lunch menus distributed to elementary school children and their parents.

The "Earl E. Bird" PSA was copied and distributed to 85 affiliated network television broadcasting stations. Five copies of the PSA were distributed to Public (community) Service Broadcasting channels. In addition, 18 VHS copies of the PSA were given to NET contract trainers, 25 copies to public schools upon request, and 3 copies to TSFSA. TSFSA used the PSA to promote breakfast during the "Texas School Breakfast and Lunch Week," in March 1992.

In addition to in-state distribution of the PSA, copies were given to the Southwest Region NET Coordinator to be duplicated and distributed in other states in the region. A copy was sent to representative Ron Wyden of Oregon State. The representative was promoting legislation to limit "junk food" advertisements aimed at children. A copy was also sent to Agnes Molnar, in the Community Food and Resource Center of New York State.

Fifteen hundred copies of the "Earl E. Bird" poster were distributed to public elementary schools and child care facilities throughout Texas. Four thousand copies of the menu-back were distributed to public elementary schools in Texas.

## **Purpose of Evaluation**

The purpose of conducting a summative evaluation of the "Earl E. Bird" PSA was to find out if the PSA reached the target population--namely, third through sixth grade students--if they understood the PSA's message, and if they have changed their eating habits accordingly. The following questions were answered:

1. How many third through sixth grade students watched the PSA on television?
2. On what weekdays and at what times was the PSA watched more often?
3. How many students understood the message conveyed by the PSA?
4. How many students liked the PSA? Why?
5. Did the students eat breakfast as a result of watching the PSA?
6. Did student responses vary according to their grade level, sex, or school district characteristics?

## **Method**

### **Sample**

A proportionally stratified sample of public elementary school students in grades three through six was selected. Three strata were used: Texas geographical counties, grade level, and students' sex.

Since selection of the sample of students was dependent upon superintendent and principal approvals, the procedures for selecting the sample were as follows:

1. One primary superintendent and one back-up superintendent were randomly selected from each Texas county (254 counties). The reason for selecting back-up superintendents was to have other superintendents on file in case some of the primary superintendents did not grant their approval.

2. One primary principal and one back-up principal were randomly selected from the school districts of the above selected superintendents. Back-up principals were selected in case some of the primary principals did not grant their approval.
3. The principals who consented to surveying their school students were instructed to select the first teachers listed on their school records who were teaching third, fourth, fifth, and sixth grade students.
4. The selected teachers were instructed to, in turn, select the fifth female and fifth male student on their class rosters, to be surveyed. Thus, the total number of surveyed students was expected to be 2,032 students (one school from each of the 254 counties \* 4 grade levels \* 2 students, one male and one female).

The sample was selected from the TEA database using a program developed by that agency. It was noted by the agency that one county did not have a school district and 49 counties had only one school district. Random selection of superintendents from these counties was not possible. It was also noted that, in most cases, sampling at grade six involved a different school from sampling in grades three through five.

### Instrument

A questionnaire was developed to collect the needed data from the elementary school students. The questionnaire consisted of two sections: (a) a general information section, and (b) eleven questions concerning the PSA.

The general information section of the questionnaire asked for name of the respondent's school, name of the school district, and the respondent's grade and sex. The first question on the main section asked if the respondent saw the "Earl E. Bird" poster in the school cafeteria. The second question asked if the respondent watched the PSA on television. The third, fourth, and fifth questions enquired about the number of times the PSA was watched on television, on what weekday, and at what time. The sixth and seventh questions asked if the respondent liked the PSA and why. The eighth question asked the respondent to identify the message conveyed by the PSA from among three listed messages. The ninth, tenth, and eleventh questions asked the respondents if they had been eating breakfast before watching the PSA and if they were eating breakfast after watching the PSA and why.



The questionnaire, as well as the procedures followed in applying it, were piloted in two schools in Austin. Results of piloting the questionnaire indicated a need to add a third choice to one of the questions and to add a note for teachers at the end of the questions to make sure that all the questions had been answered. A copy of the final version of the questionnaire is included in Appendix C.

### **Procedure**

An introductory information package was developed and mailed to the primary sample of school superintendents. The package was mailed to the superintendents between March 17 and March 31, 1992. It included a letter to the superintendent stating the purpose of the survey, how the school district was selected, and the name of the school(s) selected from the district. A response form and a self-addressed stamped envelope were included for the superintendent to mail back his approval or disapproval to participate in the evaluation.

The information package also included a letter to the principal(s) selected stating the purpose of the survey, a response form to indicate principal approval or disapproval to participate in the evaluation, and a self-addressed stamped envelope for the principal(s) to mail back the response form. The superintendents were instructed, subject to their approval, to forward the principal materials to the selected principals.

Superintendents and principals who did not approve to participate in the evaluation were replaced by their back-ups. The back-ups received cover letters, response forms, and self-addressed stamped envelopes. A copy of the superintendent and principal letters are included in Appendix C.

After receiving the superintendent and principal approvals, a second information package was mailed to the principal. The package included: (a) a letter thanking the principal for agreeing to participate in the evaluation and instructing him/her on how to select teachers to conduct the survey, (b) a letter to the teacher stating the purpose of the evaluation, (c) instructions to teachers on how to conduct the survey, (d) letters to parents stating the purpose and importance of the project being evaluated and asking for their written consent to their children's participation, (e) copies of the questionnaires, and (f) a self-addressed stamped envelope to mail back the parents' consent forms and the completed questionnaires. A copy of the principal, teacher, and parent letters, as well as the teacher instructions, are included in Appendix C.

Superintendents and principals who did not respond by April 20, 1992, were contacted by phone to remind them of the package they had received, and to ask for their oral

response since the end of the school year was approaching. If they approved, an information package was mailed directly to the principals. The package included the same materials that were mailed to the principals who mailed back their approvals. The superintendent received a response form to mail back written approval.

On April 24, 1992, a follow-up letter and information package were mailed to the superintendents and principals who were not reached by phone. The information package included materials similar to the material included in the introductory information package. If the superintendents or the principals did not agree to participate in the evaluation by May 11, 1992, efforts to replace them and contact their back-ups were postponed to September 1992 since the 1991-1992 school year was close to end.

Teacher procedures for conducting the questionnaires were as follows:

1. Select the fifth boy and the fifth girl on the class roll.
2. Give the selected students the parents' letter, with its attached permission form, to take home to their families. Ask the students to return the signed permission forms back next day.
3. If a parent did not give signed permission, choose the next student on the class roll and send a letter home to his or her parents.
4. After obtaining parent signed permission take one of the selected students to a quiet place. Explain to the student that the questionnaire is not a test but part of a research project designed to find out how to teach nutrition more effectively. Read each question and circle the number which corresponds to the student's answer. In the case of questions 7 and 11 (open-ended questions) enter the student's answer in the teacher's own words. If the student's answer was not clear explain the question to him or her.
5. After asking the last question, check to make sure all questions have been answered.
6. Repeat the process with the second student.
7. Return completed questionnaires and signed permission forms to the principal within a week after receiving these materials.

## **Statistical Analyses**

The number and percentage of respondents to each item on the questionnaire were calculated. One-way chi squares were conducted to test significance of deviations between the observed frequencies and expected frequencies. Two-way chi square tests of independence were conducted to assess the effect of students' grade, sex, and district characteristics on their response.

The extended statistical package for social studies (SPSS-X) was used to analyze the data. SPSS-X procedures for conducting the statistical analyses and the cross-tabulations were performed on the mainframe.

## **Results and Discussion**

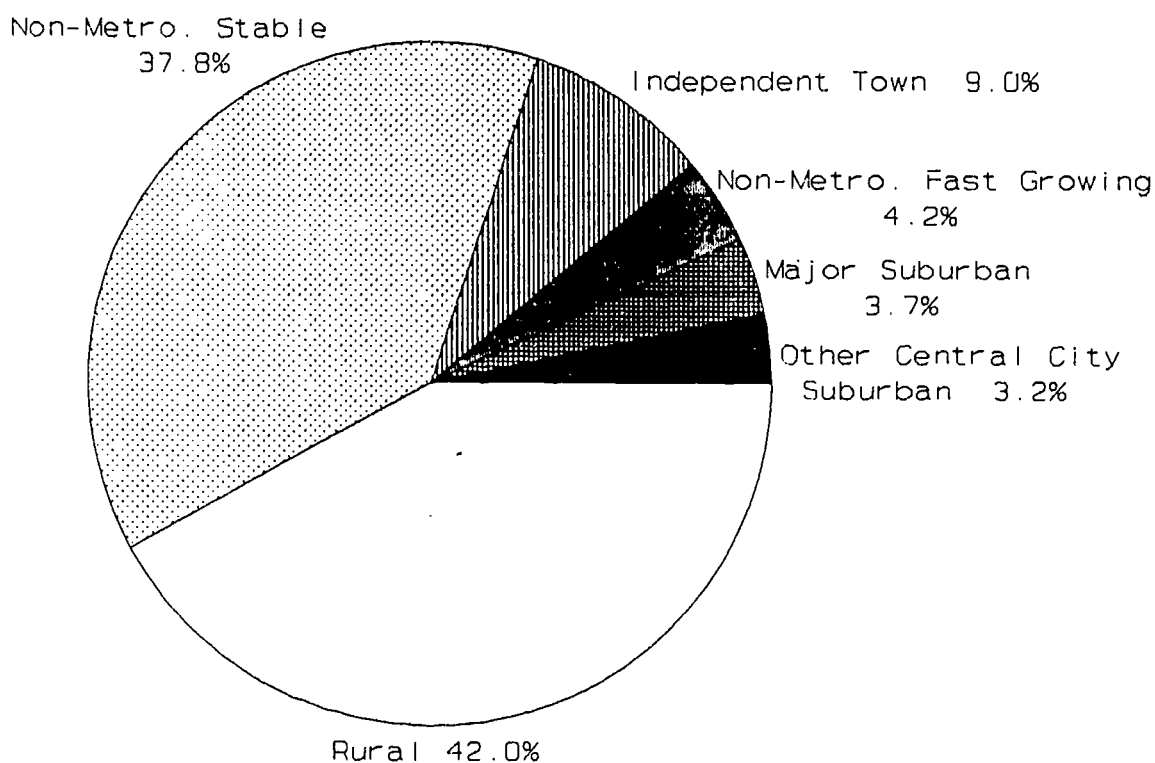
### **Characteristics of Responding Sample**

The number of students responding to the questionnaire was 930. The general information section of the questionnaire completed by the students indicated that they were enrolled in schools spread over 158 out of the 254 Texas counties. Thus, 62.2% of the counties were represented in the actual sample. Since one ISD was randomly selected out of each county, the number of ISDs represented in the sample was 158. TEA classifies the ISDs on a scale ranging from major urban to rural. Factors such as size, growth rate, and proximity to urban areas are used to determine the appropriate classification. Districts are classified as:

1. Major Urban, which includes the eight largest school districts serving metropolitan areas.
2. Major Suburban, which includes other school districts in and around the Major Urban areas.
3. Other Central City, which includes the major school districts in other large Texas cities.
4. Other Central City Suburban, which includes school districts in and around the other large but not major Texas cities.

5. Independent Town, which includes the largest school districts in counties with populations of 25,000 to 100,000.
6. Non-Metro Fast Growing, which includes school districts that fail to be in any of the above categories and that exhibit a five-year growth rate of at least 20%.
7. Non-Metro Stable, which includes school districts that fail to be in any of the above categories yet have an enrollment that exceeds the state median.
8. Rural, which includes districts that fail all of the above tests for placement.

Figure 11 illustrates type and percentage of districts represented in the sample.

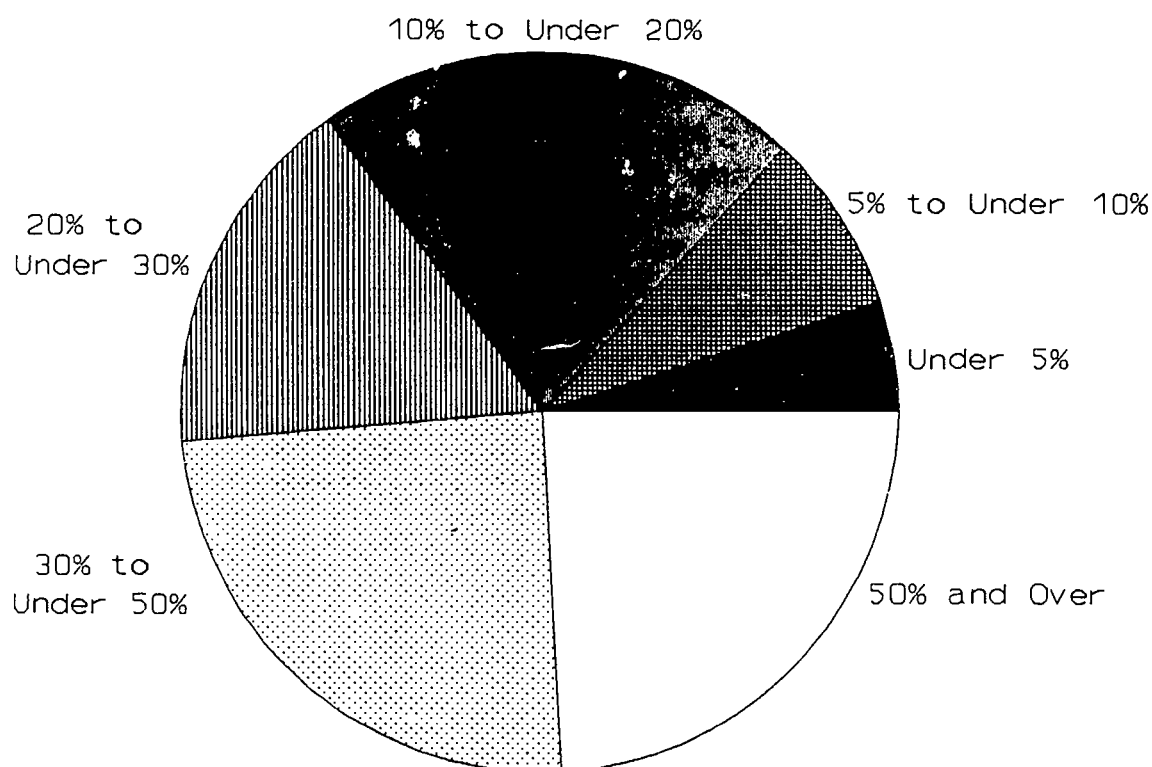


**Figure 11. Type of District Represented in the Sample**

Figure 11 shows that the majority of the respondents (79.8%) were from rural and non-metropolitan stable districts. Two district types--the Major Urban and the Other Central

City--were not represented in the sample. District superintendents and school principals in these two district types approved participation in the survey more than superintendents and principals of other district types. Teachers from these two district types cooperated by conducting the survey.

Districts are grouped according to the ethnic composition of their student populations. Minority percent is calculated as the sum of all non-White populations expressed as a percent of the total. The non-White populations include American Indian or Alaska Native, Asian or Pacific Islander, African-American not of Hispanic origin, and Hispanic. Minority percent in school districts range from less than 5% to 50% and over. Figure 12 illustrates minority representation in the participating ISDs.



**Figure 12. Minority Representation in the Sample ISDs**

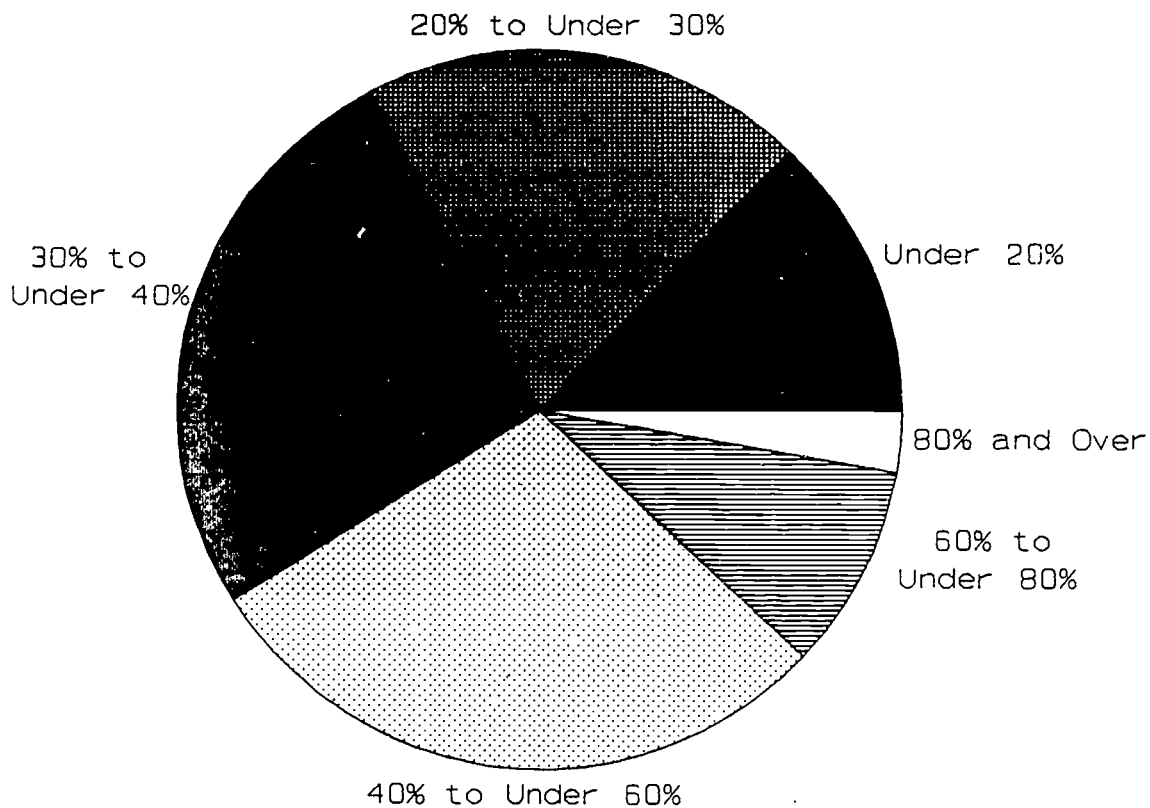
Figure 12 shows that about half the respondents were enrolled in school districts with higher minority percentages (30% and over). Since the student sample was drawn at random, it is likely that the sample consisted of a relatively high percentage of minorites.

Neither the teachers or the students, however, were asked to indicate student ethnicity on the questionnaires.

TEA also classifies the ISDs according to the percent of low-income students enrolled in them. Low income or economically disadvantaged students are those who meet any of the following conditions:

- Eligible for free or reduced-price meals under the NSLP and CNP
- From a family with an annual income at or below the federal poverty line
- Eligible for AFDC or other public assistance programs
- Received a Pell Grant or comparable state program of need-based financial assistance
- Eligible for programs assisted under Title II of the Job Training Participation Act

Figure 13 illustrates income representation in the sample ISDs.



**Figure 13. Income Representation in the Sample ISDs**

Figure 13 shows that the majority of the respondents were enrolled in school districts with 20% to under 60% low-income students. Only 11.7% of the respondents were enrolled in districts with a higher percentage of low-income students and 12.9% were enrolled in districts with a lower percentage. It may be noted on the questionnaires, however, that neither the teachers nor the students were asked to indicate the income level of the responding students.

Table 13 lists responding students by grade and sex.

**Table 13****Grade and Sex of Students**

Grade	Sex		Total
	Boys	Girls	
Third	123	122	245 (27.4%)
Fourth	113	114	227 (25.4%)
Fifth	109	112	221 (24.7%)
Sixth	98	102	200 (22.45)
<b>TOTAL</b>	<b>443 (51.9%)</b>	<b>449 (47.3%)</b>	<b>893 (100.0%)</b>

**Note.** Data on student sex and/or grade level were missing on 37 cases.

Table 13 indicates that approximately the same number of boys and girls from the third, fourth, fifth, and six grades responded to the questionnaire. Chi-square test of significance indicated that there was no significant difference in the numbers of students due to sex or grade level.

Review of the above mentioned data on sample characteristics indicates that the sample was homogeneous with respect to grade and sex. There were strong indications that the sample was representative of geographical region, ethnicity, and income level.

**Frequency of Sighting the Poster**

As a step toward identifying the PSA in question, the first item on the questionnaire asked students if they noticed the "Earl E. Bird" poster in their school cafeterias. A reduced copy of the poster was printed on the top right side of the first page of the questionnaire and the question directed student attention to this poster image. Table 14 records the number and percent of student responses to this question.



**Table 14**

**Number and Percent of Students Who Recognized the Earl E. Bird Poster**

Poster Recognition	Frequency	Percent
Recognized Poster	328	35.3
Did Not Recognize Poster	600	64.7
<b>TOTAL</b>	<b>928</b>	<b>100.0</b>

Table 14 indicates that over one-third of the students (35.3%) recognized the poster. The majority of the students, however, did not recognize the poster in their school cafeterias, even though NET distributed copies of the poster to all the ISDs in Texas. Chi-square test verified that the difference between the number of students who recognized the poster and the number of students who did not recognize it was highly significant (d.f. 1, P .00). The Earl E. Bird poster may not have been distributed to all the elementary schools, may have been displayed in inconspicuous areas of school cafeterias, or may not have been displayed at all. In addition, sixth grade students in many districts were placed in junior high schools.

**Frequency of Watching the PSA**

The second item on the questionnaire asked students if they watched the Earl E. Bird commercial on television. Table 15 lists the number and percent of students who answered yes or no to the question.

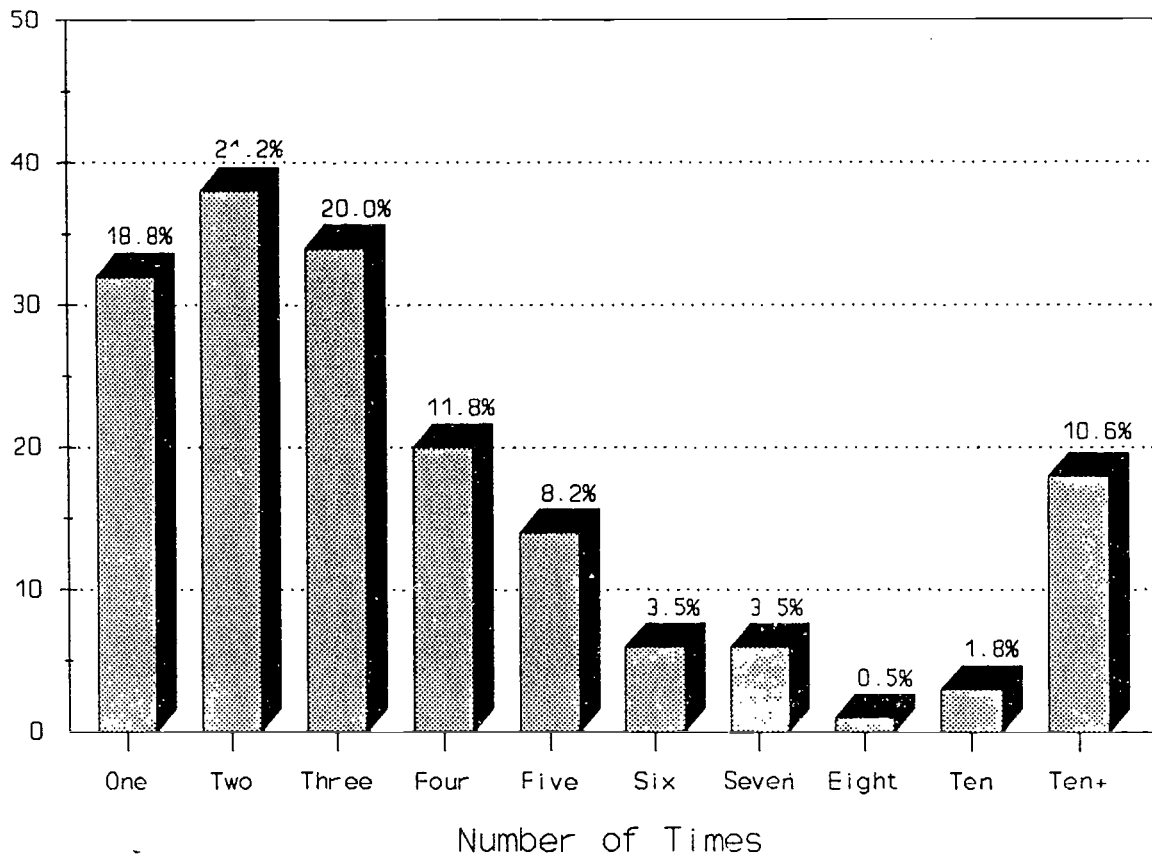
**Table 15****Number and Percent of Students Who Watched the PSA on Television**

PSA Watching	Frequency	Percent
Watched the PSA	168	18.1
Did Not Watch the PSA	759	81.9
<b>TOTAL</b>	<b>927</b>	<b>100.0</b>

It is apparent from Table 15 that less than one-fifth (18.1%) of the students watched the PSA on television. The percent of students who watched the PSA on television was even less than the percent of students who sighted the Earl E. Bird poster in their school cafeterias (35.3%). Chi-square test indicated a highly significant difference (d.f. 1, P .00) between the number of students who watched the PSA and the number of students who did not.

To find out the number of times the PSA was watched, the third item on the questionnaire asked the students to select a number between zero and more than 10. Figure 14 illustrates the number of times students watched the PSA.

## Number of Students

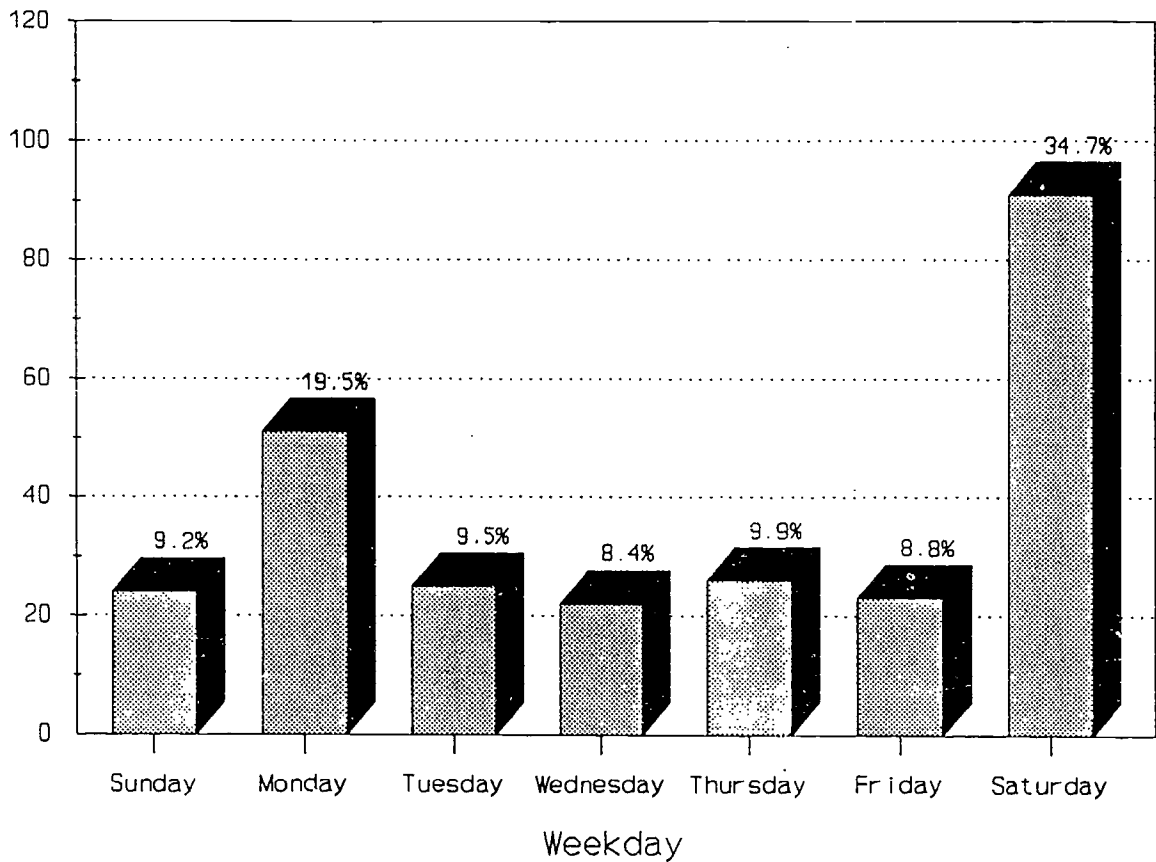


**Figure 14. Number of Times Students Watched the PSA**

Figure 14 shows that the majority of the students who watched the PSA on television (71.8%) watched it between one and four times. About 10.6% of the students watched the PSA more than 10 times, while about twice as many students (18.8% and 21.2%, respectively) watched the PSA only once or twice. Chi-square test indicates that there was a highly significant difference (d.f. 9,  $P < .00$ ) between the number of times the PSA was watched. Since the number of times a PSA is watched correlates positively with the effect of the PSA on its viewers' behavior, it may be safe to conclude that the PSA may have affected the behaviors of about 22 students who watched the PSA eight times or more out of the 930 respondents (2.4%).

To find out if there were better days for broadcasting the PSA, the fourth item on the questionnaire inquired about the day of the week the students watched the PSA. Figure 15 illustrates the frequency of the PSA on each weekday.

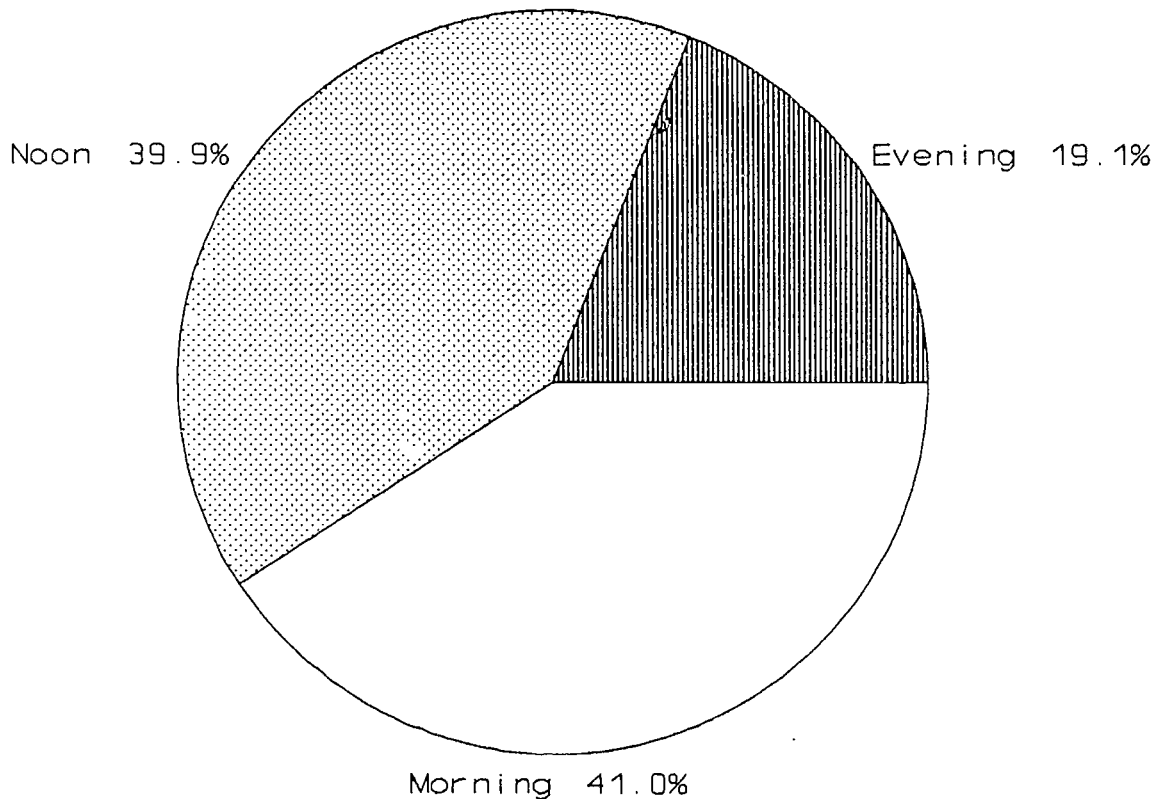
Number of Students



**Figure 15. Frequency of Watching the PSA on Each Weekday**

It is apparent from Figure 15 that Saturdays were the most suitable days for broadcasting the PSA since students watched the PSA on that weekday over one-third of the time. Monday followed Saturday, being selected by 19.5% of the respondents. The PSA was watched about equally during the remaining weekdays. Chi-square test indicated a significant difference (d.f. 31, P .00) between the number of times the PSA was watched during the different weekdays.

To find out the suitable time of day to broadcast the PSA, the fifth item on the questionnaire asked the students to indicate whether they watched the PSA in the morning, afternoon, or evening. Figure 16 illustrates the time of day during which students watched the PSA.

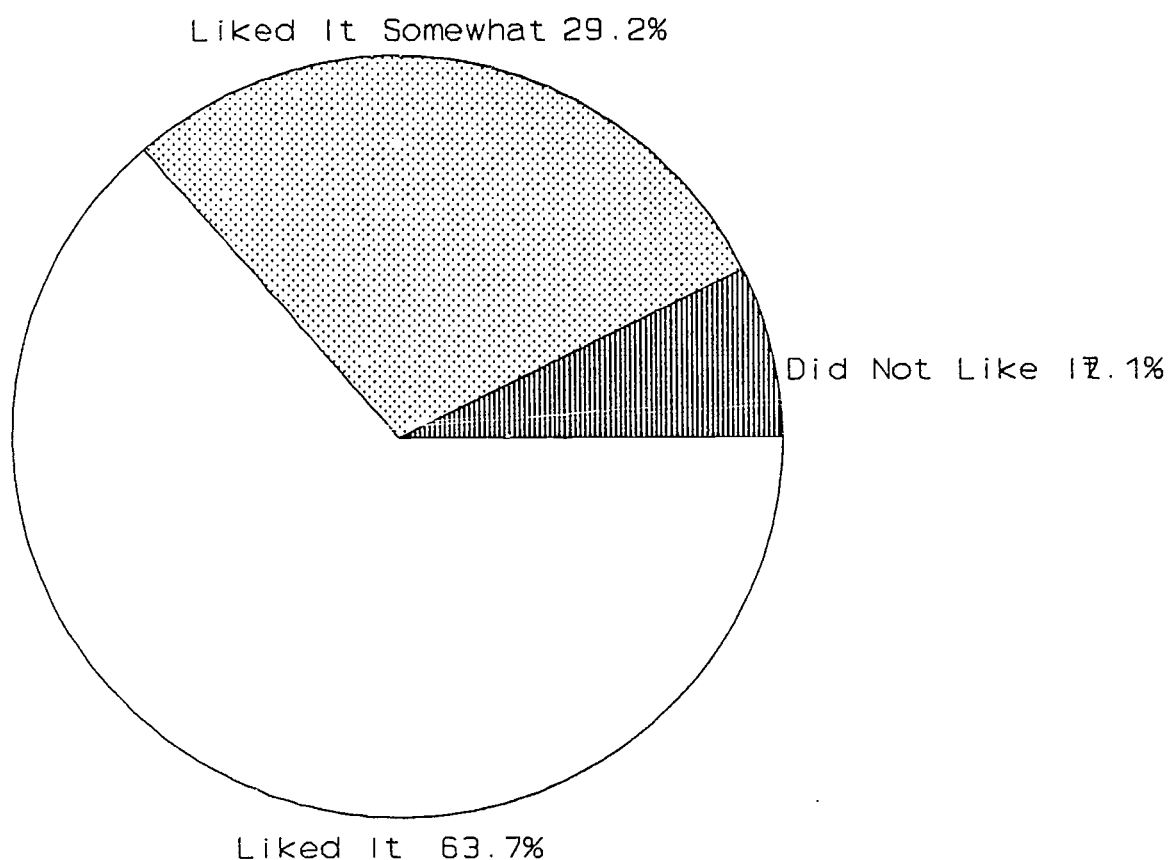


**Figure 16. Time of Day During Which Students Watched the PSA**

Figure 16 shows that an almost equal number of students (73 and 71, respectively) watched the PSA in the mornings and afternoons. Less than one-fifth of the students (19.1%) watched the PSA in the evening. Chi-square test indicated a significant difference (d.f. 7, P .00) in the number of students who watched the PSA during the day and in the evening.

### **Effectiveness of the PSA**

Six items on the questionnaire were designed to measure the effectiveness of the message conveyed by the PSA. The first of these items asked students if they liked the PSA. Figure 17 shows the student reactions to the PSA.



**Figure 17. Student Reactions to the PSA**

It is apparent from Figure 17 that the majority of the students (63.7%) liked the PSA; over 29% of the students liked it somewhat, and only 7.1% indicated that they did not like it. Chi-square test indicated a significant difference between the number of students who selected each answer (d.f. 2, P .00). Thus, it is justifiable to conclude that most of the students who watched the PSA liked it.

The seventh item on the questionnaire asked the students to write down why they liked or did not like the PSA. Table 16 lists student reasons for liking or not liking the PSA.

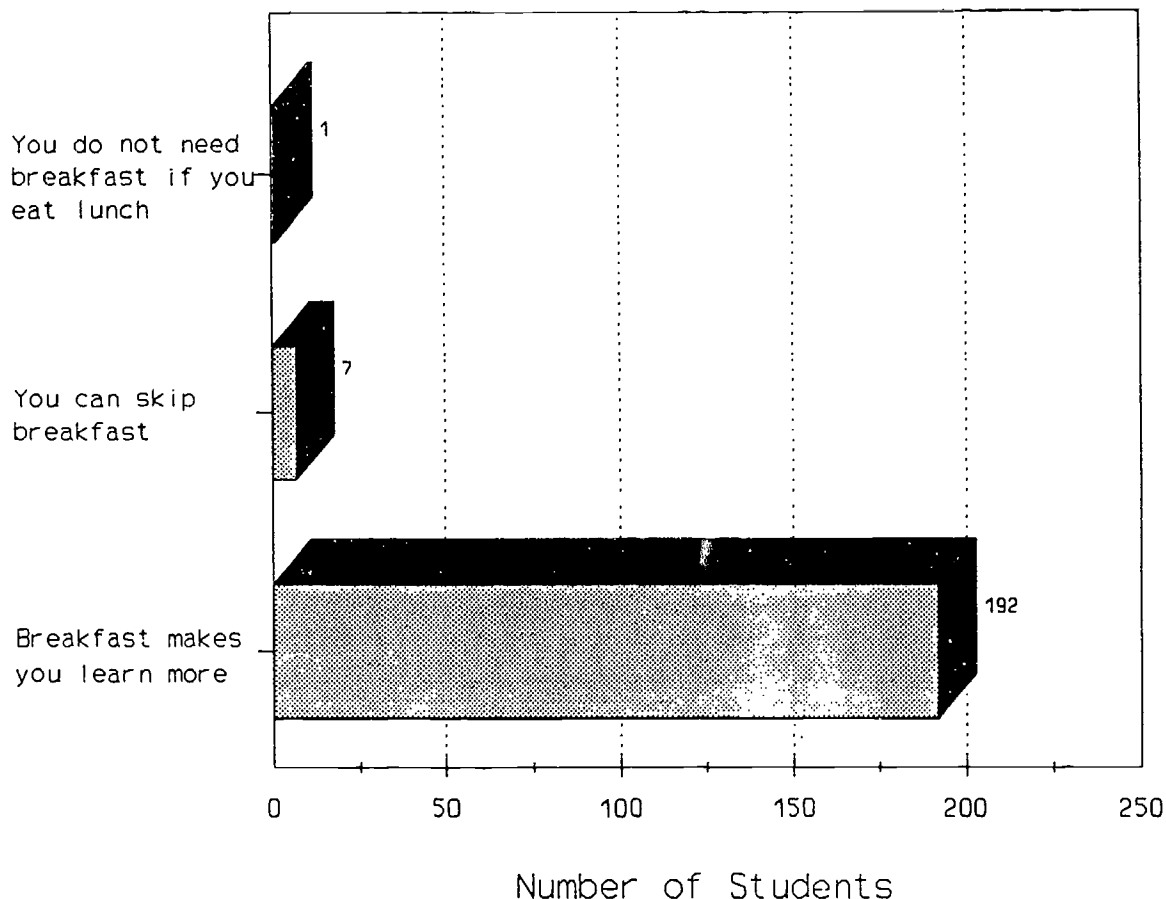
**Table 16****Student Reasons for Liking or Not Liking the PSA**

Reason	Frequency	Percent
1. It says you have to be healthy	53	31.4
2. Because it was funny	41	24.3
3. Because of the way the Earl E. Bird looked	26	15.4
4. Because it was exciting	9	5.3
5. It talks about the importance of breakfast	7	4.1
6. Because it was unique	6	3.6
7. Did not know where the bird ate breakfast	2	1.2
8. It was too pushy	3	1.8
9. Did not make sense	22	13.0
<b>TOTAL</b>	<b>169</b>	<b>100.0</b>

Table 16 indicates that six out of the nine reasons the students gave for liking or not liking the PSA were positive. The most frequent reason for liking the PSA was the message it conveyed; namely, that it promotes good health. The second most frequent reason for liking the PSA was its method of presentation. Negative student reactions to the PSA were attributed to the vagueness of the message or its intensity.

To test student understanding of the PSA's message, the eighth item on the questionnaire asked the students to select the messages that the PSA conveyed out of three possible messages. Figure 18 shows the number of students who selected each message.

## Message



**Figure 18. Student Understanding of the PSA Message**

As Figure 18 points out, almost all the students who responded to this item (96%) selected the correct message conveyed by the PSA. Only seven students out of 200 thought that the PSA message was that "You can skip breakfast," and one student thought that the message was "You do not need breakfast if you ate lunch." Chi-square indicated a highly significant difference (d.f. 2,  $P .00$ ) in the number of students who understood the PSA's message and those who did not.

The ninth item on the questionnaire asked if the students ate breakfast before watching the PSA, to compare their response with their response to the next item asking if they ate breakfast after watching the PSA. Two hundred twenty-five students (71.9%) said that they ate breakfast before watching the PSA and 28.1% said they did not. Chi-square test indicated a significant difference (d.f. 1,  $P .00$ ) between the students who answered in



the affirmative and the students who answered in the negative. Thus, the majority of the students were eating breakfast even before watching the PSA.

When asked if they have been eating breakfast at the time of responding to the questionnaire (item 10 on the questionnaire) 743 students (82.5%) said they did, compared to 49 students (5.4%) who said they did not and 109 students (12.1%) who said they sometimes did. Chi-square test indicated a significant difference (d.f. 2, P .00) between these numbers.

It may be recalled that the total number of students who watched the PSA was 168 students. Thus, it would be inaccurate to conclude that students ate breakfast as a result of watching the PSA since the number of students who said that they ate breakfast at the time of responding to the questionnaire was about four and one-half times the number of students who watched the PSA.

The last item on the questionnaire asked the students to state their reasons for eating or not eating breakfast. Table 17 lists the students' reasons for eating breakfast.

**Table 17**

**Student Reasons for Eating Breakfast**

Reason	Frequency	Percent
1. To satisfy my hunger	345	37.8
2. To get energy	228	25.0
3. To remain healthy and strong	152	16.6
4. Because I like breakfast	66	7.2
5. Because breakfast is important	55	6.0
6. Because my mother makes me	53	5.8
7. To eat with friends	14	1.5
<b>TOTAL</b>	<b>913</b>	<b>100.0</b>

**Note.** Some students stated more than one reason.

Data in Table 17 reveals that the most frequently stated reason for eating breakfast was to satisfy student hunger, followed by eating breakfast to get energy, followed by eating breakfast to remain healthy and strong. Comparing students' reasons for eating breakfast with the message conveyed by the PSA shows that the PSA message coincided with the second most frequent reason for eating breakfast, namely, to get energy.

Table 18 lists student reasons for not eating breakfast.

**Table 18**

**Student Reasons for Not Eating Breakfast**

Reason	Frequency	Percent
1. Because I do not have time	86	59.3
2. Because I am not hungry	44	30.4
3. Because I do not like what is being served	15	10.3
<b>*TOTAL</b>	<b>145*</b>	<b>100.0</b>

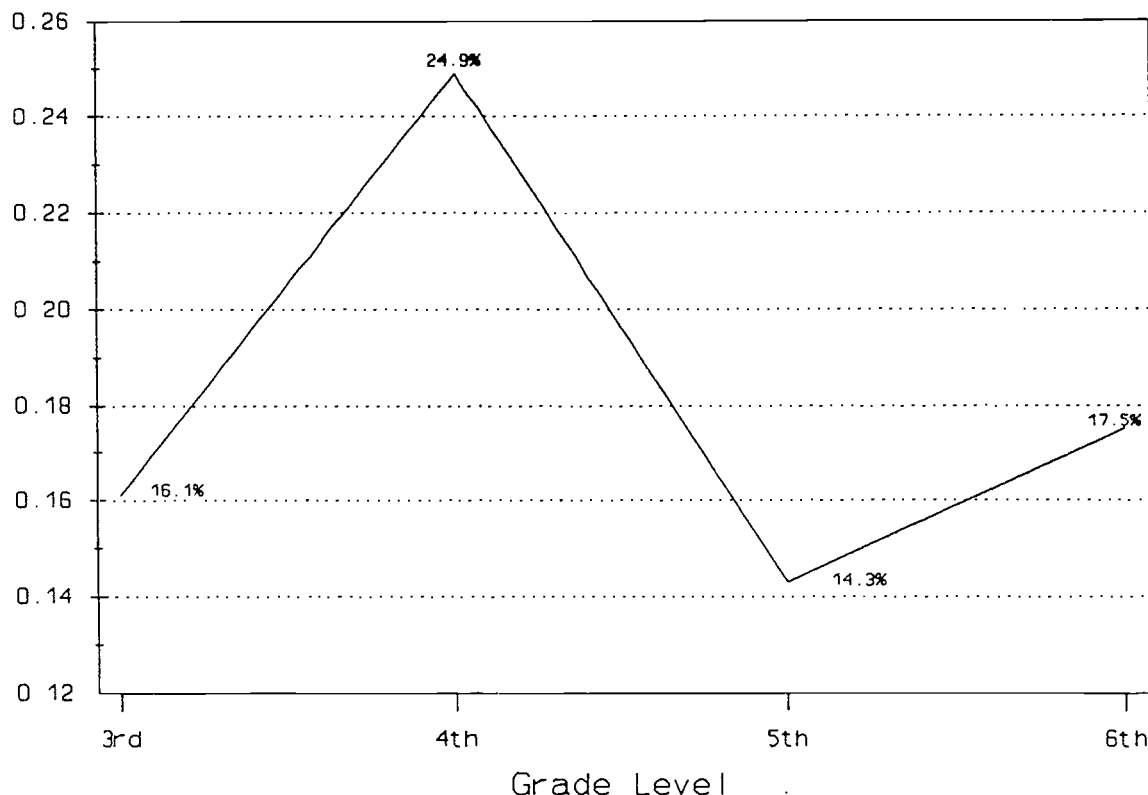
**\*Note.** Some students stated more than one reason.

Table 18 reveals that the most stated reason for not eating breakfast was because students did not have time in the morning. Some students who mentioned this reason said that they ride the school bus too early to have time for breakfast. Others reasons for not eating breakfast were because the student was not hungry or because he/she did not like what was being served for breakfast.

**Effect of Grade Level and Sex on Student Responses**

Chi-square tests of independence and Pearson's R correlation coefficients were conducted to find out if student sex or grade level affected student responses to items on the questionnaire. Chi-square indicated that there was a significant relationship between student grade level and watching the PSA on television (d.f. 3, P .02). Figure 19 illustrates the percent of students from each grade who watched the PSA on television.

Percent of Students



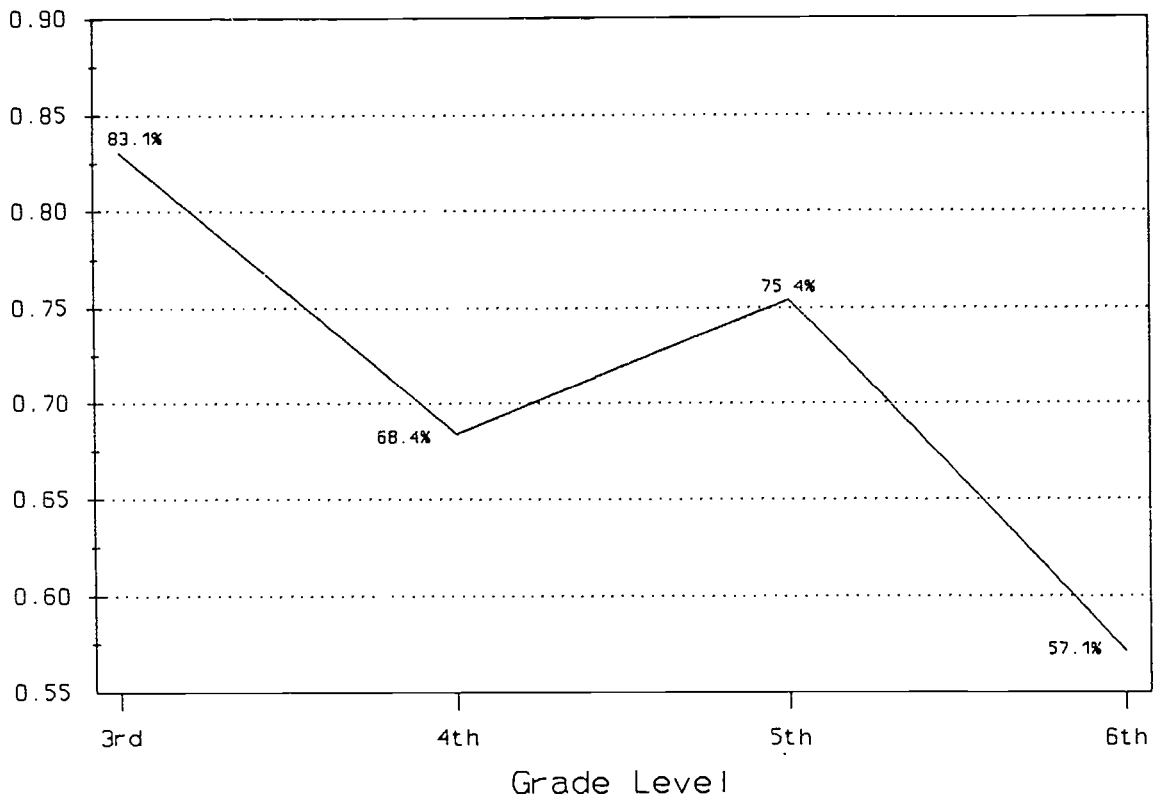
**Figure 19. Percent of Students From Each Grade Who Watched the PSA on Television**

Figure 19 reveals that fourth graders watched the PSA more than students from other grade levels. There may be a general tendency between students around age 10 to watch television more, before developing interests in other activities. It is also possible that the PSA was broadcast during television programs targeting this age group. This last explanation is supported by the fact that significantly more fourth graders watched the PSA on Saturdays (d.f. 3, P .01).

A significant negative correlation ( $R = -.15$ , P .03) was found between student grade level and their response to whether or not they liked the PSA. Younger students indicated that they liked the PSA more than older students.

Both Chi-square test of independence (d.f. 4, P .01) and Pearson R ( $R = .16$ , P .00) indicated a relationship between student grade level and whether or not they ate their breakfast before watching the PSA. Figure 20 illustrates the percent of students from each grade who ate breakfast before broadcasting the PSA.

### Percent of Students



**Figure 20. Percent of Students Who Ate Breakfast Before the PSA**

Figure 20 indicates that more third, fourth, and fifth graders than sixth graders used to eat their breakfast before the PSA. Thus, the popularity of the PSA's message and treatment with relatively younger students may be due to the fact that it reinforced their behavior.

There were no significant differences between student response and their sex.

### Relationship Between District Characteristics and Student Responses

Table 19 shows the correlation matrix between district type, percent minority, and percent income on one hand, and student responses to items on the questionnaire on the other hand.

**Table 19**

**Matrix of Correlations Between District Characteristics and Student Responses**

	District Characteristics		
	Type	% Minority	% Income
Saw Poster	.08 (928) P = .01**	-.02 (928) P = .28	-.05 (928) P = .08
Watched PSA	-.00 (927) P = .49	-.11 (927) P = .00***	-.05 (927) P = .08
Number of Times	-.03 (170) P = .35	.08 (170) P = .15	.07 (170) P = .18
Liked PSA	.08 (168) P = .17	.20 (168) P = .00***	-.00 (168) P = .50
Understood Message	.02 (2200) P = .38	-.01 (200) P = .42	-.07 (200) P = .15
Ate Breakfast Before PSA	-.15 (313) P = .01**	.02 (313) P = .35	.07 (313) P = .11
Ate Breakfast After PSA	.01 (901) P = .33	-.04 (901) P = .14	-.04 (901) P = .13

\*\*Note. Significant at the .01 level.

\*\*\*Note. Significant at the .001 level.

Table 19 indicates that the number of students who saw the poster in their school cafeterias correlated with the type of district. More students in Rural and Non-metropolitan Stable districts saw the posters in their school cafeterias. When asked if they ate breakfast before watching the PSA, more students from Independent Towns, Other Central City Suburban, and Major Suburban districts said they did. On the other hand, more students from districts with a higher percent minority watched the PSA and liked it.

It is worth noting that significant correlations were found between district type, percent minority, and percent income. Thus, it is not possible to decide from the data if the relationship between student response and district characteristics is due to district type, percent income, percent minority, or combinations of these factors. But it is justifiable to conclude that the above mentioned variables are relevant to student behaviors related to nutrition and that the PSA was probably broadcast, and consequently watched, variably in different regions.

### **Recommendations**

- Since less than one-fifth of the student sample watched the PSA on television, there is a need to follow-up with the broadcasting television stations so as to broadcast the PSA more often throughout Texas geographical regions.
- Prime time for watching the PSA was Saturdays during the daytime. It is recommended that NET recruit sponsors willing to purchase television time to broadcast the PSA during this time.
- To boost the number of elementary school students who watch the PSA, copies of the PSA on video may be integrated with other audiovisual materials to form complete presentations. These presentations could be delivered in elementary school cafeterias and in vending machine areas during meal times and breaks.
- Since a little over one-third of the student sample recognized the poster developed based on the PSA character, it is recommended that NET follow-up massive distributions of materials by arranging visits or phone calls to samples of the receiving facilities to see if the distributed materials were received and used for the intended purpose. Instructions on how to use the distributed materials may accompany their distribution.

- None of the efforts promoting breakfast to elementary school students were directed to students' parents. Since parents play a major role in their children's behaviors at this age, it is recommended that NET involve parents in the breakfast campaign.

## V. GENERAL EVALUATION OF THE NET PROGRAM

### Introduction

#### Background

Formal evaluation of the Texas NET program was initiated in October 1984 to meet federal requirements for program evaluation and to collect information that helps make the program as effective as possible. Since then, a number of studies have been conducted each year to develop information the General Accounting Office cited in 1982 as being necessary to:

- Effectively administer the program
- Guide program revisions and planning
- Ensure that federal funds are spent effectively
- Supply the USDA with data to submit to Congress to aid decisions about how to apportion scarce resources

During FFY 1992, four studies were conducted to answer the following questions about performance of the Texas NET Program:

1. To what extent did the NET Program achieve its participation goals during FFY 1992?
2. How effective was the Mini-Contract Project in promoting the SBP and in achieving NET program goals?
3. How often was the Earl E. Bird PSA watched by targeted elementary school students, if at all, and how effective was the PSA in conveying the PSA message?
4. How effective was the Texas NET Program in achieving its goals, relative to its resources?



The first three questions were answered in the previous four sections of this report. The fourth question is answered in this section.

### **Purpose**

The purpose of this study was to assess overall program performance during FFY 1992. The results of the evaluations conducted during the year were combined to produce an index of program effectiveness. Key questions answered in this section are:

1. Relative to its resources, was the overall effect of the Texas NET program in 1992 positive, negative, or nonsignificant?
2. Did the program promote positive changes in child nutrition related knowledge, attitudes, and consequently, behaviors of significant numbers of individuals in NET's priority populations?
3. What were the strengths and weaknesses of overall program performance during FFY 1992?

### **Program Resources**

Two main resources of the Texas NET program are its budget, which provides the material resource, and its staff, which provides the human resource. Table 20 summarizes and compares the program's resources for the past eight years.

**Table 20**

**Texas NET Program Resources for the Past Eight Years**

<b>Resources</b>	<b>FFY85</b>	<b>FFY86</b>	<b>FFY87</b>	<b>FFY88</b>	<b>FFY89</b>	<b>FFY90</b>	<b>FFY91</b>	<b>FFY92</b>
<b>BUDGET</b>	294,060	294,060	295,860	315,290	315,000	318,642	513,518	703,396
<b>STAFFING</b>								
Coordinator	1.000	.300	.125	.750	1.000	1.000	1.000	1.000
Evaluator	1.000	1.000	1.000	0.850	1.000	1.000	1.000	1.000
Program Specialists	2.000	1.500	2.000	2.000	2.000	1.500	2.000	2.000
Librarian	—	—	—	—	—	0.500	1.000	1.000
Assistant	—	—	—	—	—	—	2.000	3.000
Clerical & Automation Support	3.000	2.670	3.000	3.000	2.500	3.000	1.000	1.000
Consulting Nutritionists	2.000	1.900	1.800	1.600	1.600	1.600	1.800	3.000
<b>Total Staff</b>	<b>9.000</b>	<b>7.370</b>	<b>7.925</b>	<b>8.200</b>	<b>8.100</b>	<b>8.100</b>	<b>9.800</b>	<b>12.000</b>

It is apparent from Table 20 that NET program funding increased considerably over 1991. This increase brings the 1992 budget 139.2% over the program's budget for FFY 1985 and 37.0% over 1991. This increase reflects the inflation rate and a need to expand program activities during 1992. In addition, the USDA funding formula for the NET program is based on the number of school children in the state. In Texas, the number of children attending public schools grew from 2,884,000 in 1985 to 3,460,378 in 1992 (i.e., over 20%).

It must be noted here that over 17% of the 1992 budget (\$120,000) was invested in research. The University of Texas at Austin received a \$20,000 grant to conduct a study titled "Identifying Factors that Influence the Menu at the Child Care Center: A Grounded Theory Approach for Developing Recommendations for Training, Technical Assistance, and Policy." Texas Tech University was awarded \$100,000 to fund the first phase of a comprehensive nutrition education and training needs assessment. The effect of these research endeavors on the NET program is expected to materialize in future developments and improvements.

A full-time library assistant was added to the staff. The total staff included nine full-time positions. The number of contract trainers rose from 18 in 1991 to 25 in 1992. Thus, in 1992, the total number of NET staff increased about 22% over 1991.

### Program Activities

Table 21 summarizes the main activities of the program since 1985.

**Table 21**

#### Texas NET Program Activities for the Past Eight Years

Activities	FFY85	FFY86	FFY87	FFY88	FFY89	FFY90	FFY91	FFY92
<b>WORKSHOPS</b>								
Developed	2	2	3	1	2	2.0	—	2.0
Conducted	165	145	185	183	112	103.0	164.0	225.0
<b>LIBRARY</b>								
Acquisitions			189	420	68	304.0	606.0	238.0
Items Circulated/Month	70	100	100	150	189	231.4	274.3	305.4
Catalogs Distributed	10,000	12,000	680	200	632	490.0	2,489	383.0
<b>MATERIALS</b>								
Acquisitions	5	5	15		5	5	10	10
Distributions	9,700	10,800	12,800	17,200	11,800	11,776	24,645	32,021
<b>SPECIAL PROJECTS</b>								
Mini-contracts/Development Contracts	3	3	2	0	1	2	4	11
Evaluation/Needs Assessment Studies	6	7	6	5	5	5	6	5
<b>Persons Reached</b>	<b>6,200</b>	<b>9,700</b>	<b>10,900</b>	<b>10,300</b>	<b>23,343</b>	<b>25,760</b>	<b>622,576</b>	<b>955,863</b>

Table 21 shows that expansion in program resources resulted in similar expansion in program activities in most areas. The number of workshops conducted rose from 164 workshops in 1991 to 225 workshops in 1992, an increase of more than 37%.

Acquisition and circulation of library materials increased considerably over 1985, perhaps due to the relative stability and growth of resources allocated to the library. In 1992 library acquisitions dropped 39.3% after the surge in acquisitions in 1991. Monthly circulation of library items was 11.3% more than circulation in 1991. The number of catalogs distributed in 1992 dropped considerably. Catalog distribution is expected to increase in 1993 when the print catalog developed in 1992 is distributed to organizations interested in nutrition education.

Material acquisition and distribution, as well as other aspects of program activities such as the mini-contracts, fluctuated slightly during the past seven years and increased during 1992. The number of mini-contracts more than doubled in 1992. In 1992 participation in the NET program was one and one-half times the participation in 1991.

Considering the program's activities relative to its resources, one must conclude that the program is administered efficiently and that it is realizing its goals.

### **Meta-Analysis of Program Outcomes**

Results of evaluations of specific NET activities were integrated to develop an index and analysis of overall effectiveness of program performance in 1992. The vote counting method for program meta-analysis was applied to integrate results of evaluations conducted during FFY 1992. These evaluations included varied data collection and analysis procedures that were described in detail in the previous sections of this report. Following is a summary of these procedures:

- To estimate the effectiveness of the program in achieving its participation goals for FFY 1992, goals were set for each of the program's major activities and for each of its target populations. Participation goals were estimated based on current priorities, current staffing, and prior participation figures.
- To estimate the effectiveness of nine mini-contracts awarded to promote the school breakfast program, the projects were evaluated individually in light of the specific objectives of each project and as a whole in light of NET's

purpose of the project. Number and percentage goal attainment were used to measure the effectiveness of the individual and aggregated projects.

- To estimate the effectiveness of developing and broadcasting a PSA to promote breakfast to elementary school children, the number and percentage of respondents to each item on a questionnaire were calculated. Chi square tests of significance were conducted to assess variance between observed and expected numbers of students who selected each response. Chi square tests of independence and Pearson R correlation coefficients were calculated to assess the effects of student sex and grade level on respondents' responses to items on the questionnaire. Pearson R correlation coefficients were calculated to assess the relationship between school district type, percent minority, and percent income on one hand, and students' responses on the other.

### **Results and Discussion**

To apply the vote counting method for integrating results across these separate evaluations, counts were made of all findings that were classified as positive, negative, or nonsignificant. Tallies were compared and the modal category accepted as giving the best estimate of NET Program effectiveness. Table 22 summarizes results of the meta-analysis.

**Table 22**

**Results of Meta-Analysis of Program Outcomes**

<b>Activity</b>	<b>Data Analysis</b>	<b>Indicator</b>	<b>Result</b>
<b>Workshops:</b>	Goal-percentage	Number of workshops	Positive
	Goal-percentage	Number of workshop participants	Positive
	Goal-percentage by target population	Number of workshop participants from public schools	Positive
	Goal-percentage by target population	Number of food service personnel participating in workshops	Positive
	Goal-percentage by target population	Number of sponsors and providers participating in workshops	Positive
	Goal-percentage by target population	Number of public school children reached	Positive
<b>Lending Library:</b>	Percentage increase over 1991	Total circulation	Positive
	Goal-percentage by target population	Number of public school children reached	Positive
	Goal-percentage by target population	Number of children reached in child care facilities	Positive
	Rating scale on borrowers feedback forms	Substance of borrowed materials	Positive
	Rating scale on borrowers feedback form	Usefulness of borrowed materials	Positive
	Rating scale on borrowers feedback form	Borrower's satisfaction	Positive
<b>Development and Distribution of Instructional Materials:</b>	Percentage increase over 1991	Number of materials developed	Positive
	Percentage increase over 1991	Number of materials distributed	Positive
<b>Presentations, Exhibits, and Publications:</b>	Goal-percentage	Number of presentations and exhibits	Positive
	Percentage increase over 1991	Number of publications	Positive
<b>Coordination With Related Programs:</b>	Percent increase over 1991	Number of organizations	Positive

Activity	Data Analysis	Indicator	Result
Mini-Contract Project:	Percentage of projects adhering to contract provisions (criteria 90%)	Activity Implementation	Positive
		Time Table	Negative
		Budget Expenditure	Positive
		Record keeping	Negative
	Percentage of projects achieving the NET program goals (50% or over-- positive, less than 50%-- nonsignificant)	Providing information to students	Positive
		Providing information to parents	Positive
		Providing information to teachers	Nonsignificant
		Providing information to food service personnel	Nonsignificant
		Increasing student participation in SBP	Positive
		Developing instructional materials	Positive
		Acquisition of instructional material	Positive
		Developing methods and techniques	Nonsignificant
		Increase ISD's awareness of existing problems	Positive
		Finding solutions to existing problems	Nonsignificant
		Continuation of efforts	Positive
PSA Project:	Chi-square test of significance	Frequency of sighting the Earl E. Bird poster	Negative
	Chi-square test of significance	Frequency of watching the PSA	Negative
	Percentage of students watching the PSA once to more than 10 times	Percent of students watching the PSA eight times or more	Negative
	Percentage of students liking or not liking the PSA, Chi-square	Student reaction to PSA	Positive
	Percentage of students understanding the PSA message, Chi-square	Student selection of correct PSA message	Positive

Table 22 indicates that when data were integrated across the evaluations conducted during FFY 1992, it revealed an overall positive impact of the NET program in Texas. Thirty-seven evaluations were conducted to estimate the effectiveness of the main aspects of the program. Twenty-eight of these evaluations were positive, four were nonsignificant, and five outcomes were negative. Some of the negative or nonsignificant results were due

to a need to improve specific services and procedures; others were due to the nature of the activity; namely, developing and broadcasting a PSA. Evaluation of program outreach showed that all participation goals were attained.

The number of participants in some of the workshops conducted in 1991 was less than the number required to conduct these workshops according to workshop procedures. This indicates a need for a closer look at the procedures followed in scheduling workshops, and on the appeal of some of the workshops to target populations.

Although one of the library evaluation outcomes suggested a need for continued attention to promoting its services to educators in child care facilities, the lending library collection attracted more patrons and circulated more nutrition and food service management materials during 1992 than in any previous year.

In 1992 the NET program also made large strides toward improving coordination with other public sector programs and agencies engaged in child nutrition activities, such as TEA, TDH, and TDA, and toward publicizing its services statewide. This coordination is an extension of a trend that started in 1990 and is expected to continue due to the long range strategic planning between NET and other agencies. Effects of such efforts are expected to materialize in the form of substantial increases in NET outreach and participation in subsequent years.

Developing and broadcasting PSAs is an activity that needs further consideration. The NET program was able to control the quality of the PSA it produced but had less control over the number of times it was broadcast and, consequently, watched by the target population. Expensive PSAs may not be as cost effective unless broadcast repeatedly.

### **Recommendations**

- Since priorities are set for reaching different target populations in the NET State Plan, it is recommended that an action plan for each of the program units specifies suitable strategies for implementation. The program staff must assess the effectiveness of these strategies systematically and adjust NET activities accordingly.



- Since NET is expanding its efforts commensurate to higher budget and staffing levels, it is recommended that nutrition education and training services target parents of small children, due to the important role they play in their children's knowledge, attitudes, and behaviors.
- Related to the previous recommendation, NET should assume the function of a clearinghouse and a consultant to organizations, facilities, groups, and individuals on nutrition education and training in general, and on best practices in the field.
- Since NET is highly successful in coordinating with related publicly supported programs, it is recommended that NET coordinate with food distribution programs by providing information on how to use distributed foods for optimal nutrition and health.
- Since NET is expanding its interventions and strategies, there is an emerging need for measuring the relative cost-effectiveness of various interventions and alternative strategies. Emphasis should be placed on more successful and cost-effective interventions and strategies.
- There is a need to follow-up on the results of NET program evaluations and the results of sponsored research projects. Continuous improvement in services is a significant indicator of successful programs and a major reason for conducting research and evaluation. Results of the evaluations conducted in 1992 point to several areas that need improvement in procedures, materials, and/or methods.

## APPENDICES

131

133

**APPENDIX A**

**EVALUATION INSTRUMENTS USED IN  
NET PROGRAM OUTREACH**

## WORKSHOP REGISTRATION FORM

### General Information (please print)

Name of Workshop: \_\_\_\_\_ Date: \_\_\_\_\_

Your Name: \_\_\_\_\_

Sex: Male \_\_\_\_\_ Female \_\_\_\_\_

Ethnic Origin: White \_\_\_\_\_ Black \_\_\_\_\_ Hispanic \_\_\_\_\_ Asian/Pacific Islander \_\_\_\_\_  
American Indian/Alaskan Native \_\_\_\_\_

Your Social Security Number: \_\_\_\_\_

Name of Your Work Facility: \_\_\_\_\_

Work Address: \_\_\_\_\_

Street or P.O. Box

City

State

Zip Code

Work Telephone Number: \_\_\_\_\_

Area Code

Please circle the number next to the answer you choose.

1. For what type of facility do you work?

- |   |                      |   |                        |
|---|----------------------|---|------------------------|
| 1 | Public school        | 4 | Family day home        |
| 2 | Private grade school | 5 | RCCI                   |
| 3 | Day care center      | 6 | Other. Please specify: |

2. What is your function?

- 1 Educator (a teacher, administrator, health educator, teacher aide, nurse, and other personnel who work in instructional capacity)
- 2 Food service personnel (a person who is employed on a full or part-time basis in the supervision, preparation, planning, or service of meals for children)
- 3 Parent or guardian (natural or legal parent, foster parent and/or other adult with full responsibility for a child's care)
- 4 Other. Please specify: \_\_\_\_\_

3. Approximately how many children do you teach, care for, supervise, or prepare meals for when performing the above mentioned function? \_\_\_\_\_ children

4. In what food program(s) does your facility participate?

- 1 Child Care Food Program
- 2 National School Lunch Program
- 3 School Breakfast Program
- 4 Special Milk Program
- 5 Summer Food Service Program
- 6 None.

THANK YOU!

Developed - September 1990

# NET PROGRAM WORKSHOP EVALUATION

Workshop: \_\_\_\_\_ Instructor: \_\_\_\_\_ Date: \_\_\_\_\_

**Directions:** Please circle the number that best describes your evaluation. Use the following number values:

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

**The Workshop:**

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1. Main points/objectives were clear . . . . .                      | 1 | 2 | 3 | 4 | 5 |
| 2. Was well-organized . . . . .                                     | 1 | 2 | 3 | 4 | 5 |
| 3. Was well-paced/kept my interest . . . . .                        | 1 | 2 | 3 | 4 | 5 |
| 4. Contained the right amount of information . . . . .              | 1 | 2 | 3 | 4 | 5 |
| 5. Gave me enough opportunity to practice the new skills . . . . .  | 1 | 2 | 3 | 4 | 5 |
| 6. Gave enough feedback on how well I used the new skills . . . . . | 1 | 2 | 3 | 4 | 5 |

**The Materials:**

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1. Were well-organized/easy to use . . . . .                | 1 | 2 | 3 | 4 | 5 |
| 2. Directly related to the subject being taught . . . . .   | 1 | 2 | 3 | 4 | 5 |
| 3. Were sequenced logically to help me understand . . . . . | 1 | 2 | 3 | 4 | 5 |
| 4. Represented real-life, believable situations . . . . .   | 1 | 2 | 3 | 4 | 5 |
| 5. Used the right level of vocabulary . . . . .             | 1 | 2 | 3 | 4 | 5 |
| 6. Were visually appealing . . . . .                        | 1 | 2 | 3 | 4 | 5 |

**The Instructor:**

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 1. Was knowledgeable about the subject . . . . .             | 1 | 2 | 3 | 4 | 5 |
| 2. Was well-prepared for class . . . . .                     | 1 | 2 | 3 | 4 | 5 |
| 3. Encouraged class participation and discussions. . . . .   | 1 | 2 | 3 | 4 | 5 |
| 4. Answered questions effectively/non-judgmentally . . . . . | 1 | 2 | 3 | 4 | 5 |
| 5. Illustrated the course with useful examples . . . . .     | 1 | 2 | 3 | 4 | 5 |
| 6. Used class equipment competently. . . . .                 | 1 | 2 | 3 | 4 | 5 |

What part(s) of the session will be most helpful to you in doing your job?

What part(s) of the session will be least helpful to you in doing your job?

What suggestions do you have for improving this session?

Thank You.

Revised January 1992



## CLASSROOM PRESENTATION REGISTRATION FORM

1. Title of Presentation: \_\_\_\_\_
2. Length of Presentation: \_\_\_\_ hours \_\_\_\_ minutes      3. Date: \_\_\_\_\_
4. Name of Presenter: \_\_\_\_\_
5. Title of Presenter: \_\_\_\_\_
6. Name of Facility: \_\_\_\_\_
7. Address of Facility: \_\_\_\_\_  
Street or P.O. Box \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_
8. Telephone Number of Facility: (\_\_\_\_) \_\_\_\_\_  
Area Code
9. Contact Person: \_\_\_\_\_
10. Type of facility. (Please circle the number next to the answer you choose.)
  - 1 Public school
  - 2 Private school
  - 3 Day care center
  - 4 Family Day Home
  - 5 RCCI
  - 6 Other. Please specify: \_\_\_\_\_
11. In what food program(s) does the facility participate? (Please circle the number next to the answer you choose.)
  - 1 Child Care Food Program
  - 2 National School Lunch program
  - 3 School Breakfast Program
  - 4 Special Milk Program
  - 5 Summer Food Service Program
  - 6 None
12. Total Number of Students: \_\_\_\_\_
13. Age Range of Students: \_\_\_\_\_
14. Grade Level: \_\_\_\_\_
15. Total Number of Students by Ethnic Origin (if available):  
White \_\_\_\_\_ Black \_\_\_\_\_ Hispanic \_\_\_\_\_  
Asian/Pacific Islander \_\_\_\_\_ American Indian/Alaskan Native \_\_\_\_\_

Developed January 92

## NET Evaluation of Workshop Instructor

### GENERAL INFORMATION

Name of Workshop: \_\_\_\_\_ Date: \_\_\_\_\_  
 Name of Instructor: \_\_\_\_\_  
 Name of Evaluator: \_\_\_\_\_  
 Workshop Location: \_\_\_\_\_  
   Name of Facility  City

Please circle the number which corresponds to your rating of the instructor's performance during the workshop.

	Excellent (5)	Good (4)	Average (3)	Fair (2)	Poor (1)
<b><u>OBJECTIVES</u></b>					
1. Clearly stated the objectives at the beginning of the session . . . . .	5	4	3	2	1
2. Demonstrated the importance and significance of the objectives . . . . .	5	4	3	2	1
<b><u>CONTENT</u></b>					
3. Presented a brief overview of the teaching points showing how they relate to the objectives . . . . .	5	4	3	2	1
4. Explicitly stated the relationships among the teaching points . . . . .	5	4	3	2	1
5. Periodically summarized the main ideas and concepts . . . . .	5	4	3	2	1
6. Presented content that covered the stated objectives . . . . .	5	4	3	2	1
<b><u>METHODS</u></b>					
7. Explained the ideas and concepts clearly and to the point . . . . .	5	4	3	2	1
8. Invited participants to share their ideas and knowledge . . . . .	5	4	3	2	1
9. Encouraged participants to ask questions and gave them meaningful answers . . . . .	5	4	3	2	1
10. Provided cues or rephrased the questions to help participants answer their own questions whenever possible . . . . .	5	4	3	2	1

	Excellent (5)	Good (4)	Average (3)	Fair (2)	Poor (1)
11. Stated at least one problem to be solved or discussed during the workshop . . . . .	5	4	3	2	1
12. Related materials to real life situations and to the participants' backgrounds . . . . .	5	4	3	2	1
13. Changed approaches to meet new situations . . . . .	5	4	3	2	1

**AUDIOVISUALS**

14. Presented examples, illustrations or graphics to clarify the content . . . . .	5	4	3	2	1
15. used the board efficiently and legibly . . . . .	5	4	3	2	1

**EVALUATION**

16. Asked questions periodically to determine whether too much or too little information was being presented . . . . .	5	4	3	2	1
17. Varied content and methods according to the participants' levels . . . . .	5	4	3	2	1
18. Gave adequate instructions on how to complete the evaluation instruments . . . . .	5	4	3	2	1

**WORKSHOP MANAGEMENT**

19. Followed the curriculum as planned and did not digress from the main topic . . . . .	5	4	3	2	1
20. Was well organized and appeared to be in control . . . . .	5	4	3	2	1
21. Managed the time so as to cover all planned activities . . . . .	5	4	3	2	1
22. Solved or otherwise dealt with problems raised by participants . . . . .	5	4	3	2	1

**OVERALL**

23. Was friendly towards workshop participants . . . . .	5	4	3	2	1
24. Seemed enthusiastic about the subject matter . . . . .	5	4	3	2	1
25. Noted and responded to signs of puzzlement boredom, curiosity, etc. . . . .	5	4	3	2	1

Total

Was the anti-discrimination poster "And Justice for All" prominently displayed?

Yes No



**GENERAL COMMENTS**

If you were giving this workshop:

- a. What would you add? \_\_\_\_\_  
\_\_\_\_\_
- b. What would you leave out? \_\_\_\_\_  
\_\_\_\_\_
- c. What would you do differently? \_\_\_\_\_  
\_\_\_\_\_

If you have other suggestions or observations, please specify: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**REPORTING**

Returns the workshop report files within <b>two weeks</b> of workshop delivery . . . .	All the Time	Most of the Time	Sometimes	Rarely
Returns the training reports within <b>two weeks</b> of training . . . . .	All the Time	Most of the Time	Sometimes	Rarely
Returns the presentation reports within <b>two weeks</b> of presentation . . . . .	All the Time	Most of the Time	Sometimes	Rarely
Returns the library evaluation forms within <b>30 days</b> of receiving the materials . . . . .	All the Time	Most of the Time	Sometimes	Rarely

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



LIBRARY EVALUATION FORM

Please fill out this form and return it with the material you borrowed. Your response will help us improve our services.

General Information (please print)

Title of Borrowed Item: \_\_\_\_\_ Date: \_\_\_\_\_

Your Name: \_\_\_\_\_

Please circle the number next to the answer you choose.

1. For what type of facility do you work?

- 1 Public school 4 Family day home
2 Private grade school 5 RCCI
3 Day care center 6 Other. Please specify:

2. What is your function?

- 1 Educator (a teacher, administrator, health educator, teacher aide, nurse, and other personnel who work in instructional capacity)
2 Food service personnel (a person who is employed on a full or part-time basis in the supervision, preparation, planning, or service of meals for children)
3 Parent or guardian (natural or legal parent, foster parent and/or other adult with full responsibility for a child's care)
4 Other. Please specify: \_\_\_\_\_

3. Who and approximately how many saw the item you borrowed?

Table with 2 columns: WHO, HOW MANY. Rows include Self, Children in your facility, Co-workers, Food service personnel, parents or guardians, Others.

4. How did you learn about the NET Library?

- 1 By attending a NET workshop
2 From a friend or co-worker
3 At a professional meeting or conference
4 Other. Please specify: \_\_\_\_\_

5. What is your overall rating of the borrowed item?

Table with 4 columns: Poor, Fair, Good, Excellent. Rows include The item's content, The way the content was presented, How useful was the item to those who saw it.

THANK YOU!



NET Lending Library Collection  
Material Evaluation Form

1. Title:
2. Language:      English      Spanish
3. Target group choices (may select more than one):

- |   |   |
|---|---|
| <input type="checkbox"/> Prenatal               | <input type="checkbox"/> Students               |
| <input type="checkbox"/> Preschool              | <input type="checkbox"/> Parents                |
| <input type="checkbox"/> Kindergarten           | <input type="checkbox"/> Teachers               |
| <input type="checkbox"/> Lower Elementary (1-3) | <input type="checkbox"/> General Adults         |
| <input type="checkbox"/> Upper Elementary (4-6) | <input type="checkbox"/> Food Service Personnel |
| <input type="checkbox"/> Junior High (7 & 8)    | <input type="checkbox"/> Nutritionist           |
| <input type="checkbox"/> High School (9-12)     | <input type="checkbox"/> Child Care Provider    |

4. Numerical Evaluations: Score from 1 to 5 with 1 being the lowest and 5 being the highest quality indicator.

	1	2	3	4	5
Organization of Content	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Accuracy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Motivational Level	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. Annotation:

6. Include in catalog?       yes       no

7. Comments:

8. Evaluator:

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Revised October, 1991

**APPENDIX B**

**RESULTS OF NET'S SURVEY CONDUCTED  
AT THE 82ND ANNUAL CONVENTION OF TEXAS PTA**

149

148

## RESULTS OF NET'S SURVEY

### CONDUCTED AT THE 82ND ANNUAL CONVENTION OF TEXAS PTA

NET shared an exhibit booth with Program Policy at the 82nd annual convention of Texas Congress of Parents and Teachers, held in Dallas, Texas on November 15-17, 1991. During the convention, 296 copies of the attached questionnaire were completed by visitors of the booth. Following are the answers of these visitors to the three main questions on the questionnaire.

#### FUNCTION

##### 1. What is your function?

Parents	Teachers	Administrators	Other Functions
245 82.1%	41 13.9%	18 6.1%	52. 17.6%

21 teachers indicated that they were also parents.

3 administrators indicated that they were also parents.

33 parents indicated that they had also other functions.

##### Other functions:

PTA Officer  
PTA Board Member  
School Board Member  
Counselor  
Assistant Teacher  
Aide Volunteer

## TOPICS

2. Which topics listed below are you interested to learn more about?

Topic	Parents	Teachers	Admnstr	Other	Total
Child Nutrition and Dental Health	125 51.4%	23 56.1%	10 55.6%	24 46.2%	152 51.4%
Nutrition for Children with Disabilities	39 16.0%	17 41.5%	2 11.1%	13 25.0%	54 18.2%
Childhood Obesity	73 30.0%	15 36.6%	8 44.4%	13 25.0%	91 30.7%
Eating Disorders in Children	70 28.8%	14 34.1%	7 38.9%	14 26.9%	92 31.1%
Planning Nutritious Meals and Snacks for Children	149 61.3%	20 48.8%	9 50.0%	36 69.2%	175 59.1%
Food Service Management	25 10.3%	4 9.8%	6 33.3%	10 19.2%	37 12.5%
Caring for the Diabetic Child	33 13.6%	6 14.6%	2 11.1%	7 13.5%	41 13.9%
Effective Use of Puppets in Teaching Children Good Nutrition	61 15.1%	22 53.7%	6 33.3%	13 25.0%	82 27.7%
Other Topics	4 1.6%	1 2.4%	1 5.6%	1 1.9%	5 1.7%

Other Topics:

Allergies and Behavior  
 Improving Children Attitudes Toward Nutritious Meals  
 Hypoglycemia  
 Programs for PTA Parent Education  
 Assistance Program for Needy Children

## METHODS

### 3. Are you interested in receiving the information through:

Method	Parents	Teachers	Admnstr	Other	Total
Workshops	94 38.7%	21 51.2%	8 44.4%	21 40.4%	115 38.9%
Presentations in PTA meetings	142 58.4%	24 58.5%	12 66.7%	25 48.1%	170 57.4%
Presentations in other arranged meetings	23 9.5%	5 12.2%	3 16.7%	7 13.7%	27 9.1%
Handouts	139 57.2%	30 73.2%	9 50.0%	37 71.2%	173 58.4%
Other	1 0.4%	1 2.4%	0 0.0%	0 0.0%	1 0.3%

Other Methods: //

Any way possible.

**NUTRITION EDUCATION AND TRAINING PROGRAM**

**OPINION SURVEY**

Please check the appropriate answer. You may check more than one answer.

1) What is your function?

- Parent
- Teacher
- Administrator
- Other

2) Which topics listed below are you interested in learning more about?

- Child Nutrition and Dental Health
  - Nutrition for Children with Disabilities
  - Childhood Obesity
  - Eating Disorders in Children
  - Planning Nutritious Meals and Snacks for Children
  - Food Service Management
  - Caring for the Diabetic Child
  - Effective Use of Puppets in Teaching Children Good Nutrition
  - Other (Please Specify): \_\_\_\_\_
- 

3) Are you interested in receiving this information through:

- Workshops
  - Presentations in PTA meetings
  - Presentation in other arranged meetings
  - Handouts
  - Other (Please Specify): \_\_\_\_\_
- 

**THANK YOU!!!**



**APPENDIX C**

**CORRESPONDENCE AND QUESTIONNAIRE USED IN  
EVALUATING THE "EARL E. BIRD" PSA**

157

153

Dear Superintendent:

Last year the Texas Nutrition Education and Training (NET) program, one of the United States Department of Agriculture's Child Nutrition programs, developed a "Breakfast Promotion" project. The purpose of the project was to encourage elementary school students to eat breakfast. To implement this project, NET produced a public service announcement (PSA) and distributed it to television stations for broadcasting.

This year we plan to survey a randomly selected sample of elementary school students, to find out if they have seen the PSA, understood its message, and changed their eating habits accordingly.

We request your approval to contact one or two randomly selected principals from your school system. We will be asking their permission to survey few students from their schools.

Please sign the attached response form and return it to us in the attached self-addressed envelop at your earliest convenience. Your support of the evaluation of the "Breakfast Promotion" project will be greatly appreciated.

Respectfully,

**Response Form**

\_\_\_\_\_   
 (School System)

\_\_\_\_\_ will participate  
\_\_\_\_\_ will not

in the evaluation of the "Breakfast Promotion" project of the Texas Nutrition Education and Training program.

\_\_\_\_\_   
 (Signature of Superintendent)

\_\_\_\_\_   
 (Date)

Dear Principal:

Last year the Texas Nutrition Education and Training (NET) program, one of the United States Department of Agriculture Child Nutrition programs, developed a "Breakfast Promotion" project. The purpose of the project was to encourage elementary school students to eat breakfast. To implement this project, NET produced a public service announcement (PSA) and distributed it to television stations for broadcasting.

This year we plan to survey a randomly selected sample of elementary school students, to find out if they have seen the PSA, understood its message, and changed their eating habits accordingly.

The superintendent of schools in your district has agreed to cooperate with us. If you approve, teachers in your school will randomly select two students from their classes to complete a short questionnaire. You are asked to distribute the materials to the teachers, and collect and return the completed forms in a self-addressed stamped envelope which will be supplied for your convenience.

Please sign the attached response form and return it to us in the attached self-addressed envelope by March 23, 1992. Your assistance will be greatly appreciated.

Sincerely,

**Response Form**

The faculty of \_\_\_\_\_ in \_\_\_\_\_  
(School) (District)

\_\_\_\_\_ will  
\_\_\_\_\_ will not participate in the evaluation of the "Breakfast Promotion"  
project of the Texas Nutrition Education and Training program.

\_\_\_\_\_  
(Signature of Principal)

\_\_\_\_\_  
(Date)

May 13, 1992

1~

Dear 2~:

Thank you for agreeing to participate in evaluating the "Breakfast Promotion" project conducted by the Texas Nutrition Education and Training (NET) program. Enclosed are the forms for implementing the evaluation. One set of instructions to teachers, two letters for parents, and two questionnaires should be distributed to 3~ grade teacher who is listed alphabetically first on the Teachers Directory. There are extra letters for parents and questionnaires should teachers need them.

Please collect the signed permission forms and the completed questionnaires from teachers and return them in the self-addressed envelop provided for your convenience. Please complete this survey within two weeks after receiving the forms.

Thank you for your cooperation.

Sincerely,

Sally Griffin  
Director  
Special Nutrition Programs

SG:ymb

Enc.

April 8, 1992

Dear Teacher:

Your school has been selected to participate in evaluating the "Breakfast Promotion" project conducted by the Texas Nutrition Education and Training (NET) program. Last year NET produced a public service announcement that encourages elementary school students to eat breakfast and distributed it to television stations to broadcast it. In order to evaluate the project this year we need your help in obtaining information from students.

Please read the attached instructions for selecting and interviewing two students. The worth of this project is shown through the individual effort of you and your students, so please give it your careful consideration.

We appreciate your contribution which will result in improving nutrition education in our state. Thank you for your cooperation.

Sincerely,

Sally Griffin  
Director  
Special Nutrition Programs

SG: ymb

Enc.

Dear Parent:

As you are aware, nutrition plays an important role in the total development of a child and breakfast is very important for the physical and mental development of our children. Recognizing the importance of promoting breakfast to elementary school children, the principal and teachers at your child's school have agreed to participate in a state-wide survey to evaluate a "Breakfast Promotion" project developed by the Texas Nutrition Education and Training program.

Your child has been randomly selected to answer questions pertaining to the "Breakfast Promotion" project. Please permit your child to participate in evaluating the project by signing the attached consent form.

Thank you for your cooperation.

Sincerely,

Sally Griffin  
Director  
Special Nutrition Programs

---

\_\_\_\_\_ has my permission to  
(Name of Student)  
participate in the evaluation of the "Breakfast Promotion" project.  
I understand that the student's responses will be used for research  
purposes only and not for receiving a grade.

---

(Parent's Signature)

---

(Date)



NUTRITION EDUCATION AND TRAINING PROGRAM  
SURVEY OF ELEMENTARY SCHOOL STUDENTS  
ON THE BREAKFAST PSA



General Information:

Name of School: \_\_\_\_\_

School District: \_\_\_\_\_

Grade: 1. Third grade 2. Fourth grade 3. Fifth grade 4. Sixth grade

Sex: 1. Boy 2. Girl

-----  
1) Did you notice the "Earl E. Bird" poster shown above in your school cafeteria?

1. Yes 2. No

2) Did you watch the "Earl E. Bird" commercial on television?

1. Yes 2. No

3) How many times did you watch the "Earl E. Bird" commercial?

0 1 3 4 5 6 7 8 9 10 More than 10

4) On what day or days did you watch the commercial?

1. Sunday 2. Monday 3. Tuesday 4. Wednesday  
5. Thursday 6. Friday 7. Sa'urday

5) When did you watch the commercial?

1. Morning 2. Afternoon 3. Evening

6) Did you like the commercial?

1. No

2. Somewhat

3. Yes

7) Why did you like or not like the commercial?

Because \_\_\_\_\_  
\_\_\_\_\_

8) What does the commercial say?

1. You can skip breakfast if you like.

2. Breakfast makes you learn more.

3. You do not need to eat breakfast if you eat lunch.

9) Did you eat breakfast before watching this commercial?

1. Yes

2. No

10) Have you been eating your breakfast this week?

1. No

3. Yes

11) Why have you been eating or not eating breakfast?

Because \_\_\_\_\_  
\_\_\_\_\_

THANK YOU

# TEXAS



**NUTRITION EDUCATION & TRAINING**

Funded by the  
Nutrition Education and Training Program  
PL 85-188

The Texas Department of Human Services NET Program is committed to assuring that program benefits are made available to all persons and provided to all eligible individuals without regard to race, color, national origin, age, sex, disability, political belief or religion. Any person who believes that he or she has been discriminated against in any NET Program activity should immediately contact the Administrator, Food and Nutrition Service, 3101 Park Center Drive, Alexandria, Virginia 22302.

**TEXAS DEPARTMENT OF HUMAN SERVICES  
1992**