THE IDENTIFICATION AND CATEGORIZATION OF EXPANDED FOOD AND NUTRITION EDUCATION PROGRAM AIDES' COMPETENCIES

by

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A Thesis Submitted to the Faculty of the

DEPARTMENT OF AGRICULTURAL EDUCATION

In Partial Fulfillment of the Requirements
For the Degree of

MASTER OF SCIENCE

In the Graduate College

THE UNIVERSITY OF ARIZONA

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ACKNOWLEDGMENTS

The author wants to thank Dr. Arlen Etling, her major advisor for his encouragement and assistance in completing this research project. His patience and advice throughout the author's year in graduate school was appreciated.

Special thanks are expressed to Beryl Burt, Arizona Expanded Food and Nutrition Education Program (EFNEP) Coordinator who initiated the competency research. She coaxed, encouraged, and stimulated the researcher throughout the entire effort.

The Arizona Cooperative Extension Service provided the opportunity to work with EFNEP. This was a good learning experience for the author, she was grateful for the opportunity.

The North Dakota Cooperative Extension Service and the Morton County Extension staff were very supportive of the author's graduate program. This support and encouragement were appreciated.

A final thank you to each of the respondents and everyone else who contributed to this research project.

TABLE OF CONTENTS

TABLE OF CONTENTS--Continued

LIST OF TABLES

LIST OF ILLUSTRATIONS

ABSTRACT

The purpose of this study was to identify Expanded Food and Nutrition Education Program (EFNEP) aide competencies and categorize these competencies into preservice and in-service segments. A previous study included 280 competencies stated as behavioral objectives. A random drawing provided the 143 competencies which were included in this questionnaire. The questionnaire was mailed to a sample of EFNEP aides and Extension home economists (EHEs) in Arizona, New Mexico, and North Dakota.

Responses from 63 paraprofessionals and 25 Extension home economists placed 39 competencies in the "before working with families" preservice category. The in-service "during the first year" category had 100 competencies. Four competencies were placed in both categories. The survey results indicated variances in state and EFNEP unit responses. This implies a need for flexible training guides. The EFNEP aide and Extension home economist need to plan competency based training which meets aide and EFNEP unit needs. The identified and categorized competencies are a basis for the development of such training.

CHAPTER 1

INTRODUCTION

"Although Extension recognizes the significance and value of linking the paraprofessional with previously unreachable clients, it's faced with the problem of determining exactly what tasks the non-degreed person can, does or should assume" (Santopolo and Kell 1976, p. 6). The tasks performed and the competencies needed by the EFNEP paraprofessional aide are the focus of this research. Extension education and the development of the Expanded Food and Nutrition Education Program (EFNEP) influence the use of paraprofessional educators in present and future nutrition education programs.

> Nutritionally inadequate food consumption still prevails among a high proportion of the American people, despite increasing consumer purchasing power. Nutritional problems are apt to be intensified among lower income families. Rising food costs, new knowledge in nutrition new food products, and new developments in securing good nutrition give impetus to the increasing need for Extension education (Focus II Extension Home Economics 1974, p. 4).

Focus II Extension Home Economics reaffirmed nutrition education as an area of national concern for the Cooperative Extension Service. This educational agency of the U. S. Department of Agriculture diffuses useful and

practical information on subjects related to agriculture and home economics.

Food production and food preservation were Extension education programs emphasized during World Wars I and II. The middle 60's, "War on Poverty" raised the nation's social self-consciousness, the poor were recognized. Food and nutrition surfaced as one of the major areas of concern. Inadequate diets among poor families were documented in: (1) 1967 Congressional Hearings on Nutrition; (2) "The People Left Behind," a report by the President's National Advisory Commission on Rural Poverty; (3) the 1965 Nationwide and Dietary Intake Studies 1957-67; and (4) Nutritive Quality of Diets, USA, a report to the Committee on Agriculture, U. S. House of Representatives, prepared by the U. S. Department of Agriculture, 1968 (in "Summary of Activities Related to the Formulation of the Expanded Food and Nutrition Education Program Guidelines," 1977).

The Cooperative Extension Service conducted six pilot projects to test concepts of effective ways of teaching low-income families. The Five-Year Project in Alabama, 1964-69, tested the effectiveness of paraprofessionals who delivered education programs to low-income families on a one-to-one basis in the homes. The paraprofessionals were trained and supervised by Extension home economists (EHE's).

The results of this pilot project and the other five projects encouraged the Federal Extension Service to request additional funds for intensified nutrition education programs with low-income families. In November, 1968, a $10 million grant was provided to initiate the Expanded Food and Nutrition Education Program (EFNEP). Program success was well documented and continuous. Federal appropriations were increased to $20 million in 1969 and $50 million by 1971. Funds were appropriated by Congress through Section 3(d), Nutrition Education, of the Smith-Lever Act, as amended (Mifflin, Verma, and Jones 1976, pp. 145).

Program and policy decisions for EFNEP were based on results of the pilot projects. Methods and materials for working with low-income audiences had been developed and tested. Other procedures were to: enroll families; identify program audience; recruit, hire, and train paraprofessionals. Qualifications for paraprofessional positions, the training and supervision needed were important elements in the pilot projects. Methods of measuring behavior change and the effectiveness of the teaching approach were an integral part of the paraprofessional teaching plan.

The Alabama project identified indigenous paraprofessionals as the best people to help low-income families acquire the knowledge, skills, attitudes, and changed behavior necessary to improve their diets in normal nutrition. This indigenous paraprofessional is a person from the

same neighborhood, community, minority, and/or social economic class as the audience to be reached. Pearl and Riessman (1965, pp. 85-87) have described the potential of the indigenous nonprofessionals.

1. Nonprofessionals relate more readily to the low-income client. They are able to do what professionals cannot or will not do, such as socialize with the client.
2. The nonprofessional is an acceptable model, not labeled as a middle-class outsider.
3. Low-income nonprofessionals know how to deal with neighborhood problems from the "inside."
4. Low-income and indigenous nonprofessionals tend to externalize causes, such as responses to repressed conditions. A professional may describe the client as neglectful while the nonprofessional may identify situations effecting this response.
5. The indigenous worker bridges the gap between middle class professional values and low-income living conditions and values.
6. Employment of indigenous nonprofessionals increases their education, skills, self-concept, and may take them off the welfare rolls.

The employment of paraprofessionals became an integral part of each state's EFNEP pilot project when they

were initiated in 1969. Funds were distributed to states according to the percentage of low-income residents. Each state Cooperative Extension Service determined locations for the pilot projects and additional EFNEP staff as funding increased. These locations (program units) were comprised of paraprofessionals, supervising Extension home economists, and additional Extension staff that might be working out of the same office. As of December, 1973, 7,617 EFNEP aides were employed nationwide in 1300 program units.

Arizona had eight program units, with 54 EFNEP aides. Each unit was supervised by an Extension home economist (EHE). Some larger units (with 12 or more aides) had 4-H professionals as part of the supervisory staff. Not all of the small units had a full time EFNEP supervisor. The EHE in small units also worked with the adult home economics program and/or the youth program.

The EFNEP Guidelines (Revised Policy Guidelines and Suggestions for Conducting the Extension Expanded Food and Nutrition Education Program 1976, p. 14 [EFNEP Guidelines]) clearly define the responsibilities of the supervising EHE:

1. Manage and coordinate the EFNEP program to achieve program objectives.
2. Clarify and communicate the individual and shared roles of staff and volunteers.
3. Recruit, train, and supervise program aides.
4. Is responsible for daily supervision and long-range planning.

5. Evaluate the program.

6. Is responsible for program visibility.

7. Work with appropriate Extension personnel to determine home economics program direction.

8. Work closely with other Extension personnel who can provide additional opportunities for EFNEP participants.

9. Provide leadership for progression of families from EFNEP.

10. Serve as liaison with other agencies in making family referrals.

Additional program supervision and overall leadership was the responsibility of the Arizona EFNEP coordinator. Each state has a person responsible for coordination of the state program. Development, coordination, and management of EFNEP includes the following functions which were identified in EFNEP Guidelines (1976, p. 17):

1. Planning, implementing, reporting, and evaluating;

2. Encouraging and facilitating staff development and training for professionals and paraprofessionals in EFNEP subject matter content; and

3. Evaluating the program and making recommendations for needs and improvements.

Arizona program planning and evaluation was a continual process involving aides, home economists, and the state EFNEP coordinator. In fall, 1977, a needs assessment was conducted to determine what competencies were needed by the aides. The Arizona EFNEP Coordinator, Beryl Burt, and

research assistant Pat Aune developed the assessment. This survey will be referred to as "Aune 77."

The two-part survey contained 280 competency statements. Aides and EHE's in each EFNEP unit responded to the competencies. Responses indicated if the competency was needed before working with families, during the first year, or not needed. This survey was to be used as a program planning tool to determine if and when competencies need to be included in the EFNEP training plan.

The aide and EHE responses to the competencies were tabulated separately. This revealed a difference of as much as 57 percentage points on responses to certain questions. This difference could have indicated weakness in the present program planning process where EHE's plan and conduct training for aides in their unit.

The validity of the Aune 77 survey may be questioned because aides and EHE's previewed the initial competency list and were asked to delete or add to the list. There may have been some problem with interpretation of the statements and/or the instructions for responding to the survey.

The need for competency identification has been supported by EFNEP administration and researchers. Edgar J. Boone in a paper presented at the 1974 National EFNEP workshop identified competencies as a basis for staff development programs.

> Extension needs to take a critical look at the competencies required of each job group associated with EFNEP. Specifically Extension needs to "zero in" on the competencies each job group must possess in order to know how to design and implement strategies to obtain maximal program impact (Boone 1974, p. 6).

Boone recommended threshold competencies be identified and staff development programs (training) be based on the competency needs and changing needs of the paraprofessional EFNEP aide. These recommendations were supported by Marangu (1975) whose dissertation for Iowa State University identified, "Competencies Needed by Family Food Aides." Marangu's recommendations were: (1) training programs be based on the identified competencies, (2) curriculum materials related to each cluster of competencies be developed to be used when training aides. Her survey of 375 competencies identified those needed before entry or not needed before entry as a family food aide. The respondents were supervising home economists. Aides were not included in this survey.

Anderson (1977) studied the training needs of Mississippi EFNEP aides. Her study revealed a high level of agreement between EHE's and aides on the importance of tasks performed by aides. However, the aides perceived their present abilities to perform tasks higher than the EHEs' perceptions. Anderson's study implied that program aides should be involved in the evaluation of their performance and the identification of in-service training

needs. The study also implied that needs identified by program aides should be considered as well as those perceived by supervising EHE's.

These studies indicate a need for aids and EHE's to identify competencies. This identification and categorization of competencies as to when needed would be an asset to the planning and implementation of staff development programs for EFNEP aides.

Problem

The purpose of this study was for aides and EHE's to identify EFNEP aide competencies and categorize if preservice or in-service attainment was needed. A comparison of aide and EHE responses from Arizona, New Mexico, and North Dakota was undertaken to indicate the validity of the Aune 77 survey completed by Arizona EFNEP staff.

Objectives

The following questions were to be answered by the research:

1. What similarities exist in the categorization of EFNEP competencies by EFNEP aides in Arizona, New Mexico, and North Dakota?
2. What similarities exist in the categorization of EFNEP competencies by supervising EHE's in Arizona, New Mexico, and North Dakota?

3. What similarities exist in the categorization of EFNEP competencies by aides and EHE's?
4. Do the results of these comparative surveys support the results of the Aune 77 survey conducted in Arizona?
5. How will these competencies be categorized by aides and EHE's in Arizona, New Mexico, and North Dakota?

Assumptions

The competencies evaluated in the Aune 77 survey included 280 statements. It was assumed that testing 143 statements would validate the entire list. This testing was to identify discrepancies in responses which would indicate a need to replicate the entire Aune 77 survey.

EFNEP aides had experienced the working situations. Their categorization of when or if a competency is needed was assumed to be the most valid. EFNEP aides work with people in rural, urban, and Indian reservation settings. Educational methods may vary among the settings; therefore the author chose to have each geographic area represented. Stratification of the population according to rural, urban, and Indian reservation units provided a sample of respondents representing each area. It was assumed this geographic distribution would include representation of most educational methods used by EFNEP aides.

Delimitations

The following factors may have affected the generalizability of the findings and conclusions of the study. Presently employed EFNEP aides and EHE's in Arizona, New Mexico, and North Dakota participated in the research. The competencies identified and categorized by these EFNEP staff members may not apply in other states. Cultural and geographic differences may have affected responses to the competencies.

EFNEP aides with less than one year of experience were eliminated from the study. Less experienced aides would not be able to identify if a competency had been used during the first year of employment. This identification was used as the guide to determine if the competency was needed.

The EFNEP population in each state was stratified to include respondents from rural, urban, and Indian reservation units. A percentage sample from each stratum was chosen. The researcher felt each geographic area required a slightly different approach to reach EFNEP families. These differences needed to be reflected in the study.

A sample population was chosen. There may have been a positive reaction to the survey because of the selection. Being chosen for an experimental project may have encouraged the respondents to positively react or more readily agree to statements within the survey.

Limitations

Instrumentation seemed to be the only possible threat to internal validity. The one time only test was not affected by history, maturation, testing, selection, statistical regression, or mortality. The Aune 77 survey was administered by EHE's in each unit; their responses to the aide's questions may have affected the results. The present study was mailed directly to the aides and EHE's. There were opportunities for discussion, although this was discouraged in the testing instructions.

Method of Investigation

The present study replicated portions of the Aune 77 competency survey. The present survey of 143 competency statements was answered by aides and EHE's in Arizona, New Mexico, and North Dakota.

Population and Sampling Procedure

The EFNEP aide and supervising EHE populations in each state were stratified according to program unit location. The aide and supervising Extension home economist served as sampling units. Each was grouped into urban, rural, or Indian reservation categories. A random drawing from each category provided the respondents' names. A sample of 14 aides and 6 EHE's were drawn from each state population. The overall percentage for each state of urban,

rural, and Indian reservation staff was used to determine the number of respondents from each category in the state samples.

Design of the Study

This was a descriptive survey with three replications. The replications were conducted in Arizona, New Mexico, and North Dakota. A sample consisting of 143 competency statements was randomly selected from previous work to serve as the subject of this study. Respondents were asked to mark one of three choices indicating the need for the competency.

Collection of Data

The printed survey was mailed directly to respondents by the Extension home economics program leader in each state. Letters authorizing the staff to respond to the survey were written by the program leaders and mailed with the surveys.

The respondents were asked to complete the survey as soon as possible and return it in the enclosed stamped, self addressed envelope. The researcher did not identify individual completed surveys but did keep a record from where replies came. This expedited necessary follow up requests. Because of the time limits, only one follow up phone call was included in the plan.

Analyzing the Data

The data collected were analyzed by computer. Statistical tests for the level of significance of the differences between aide, EHE, and state responses were conducted. The .05 level of significance was chosen to determine which competencies would be more carefully studied for errors.

Definition of Terms

Expanded Food and Nutrition Education Program (EFNEP): An integral part of the Cooperative Extension Service Home Economics and 4-H Youth Programs. Designed to reach low-income audiences with nutrition education.

Paraprofessional aide: A person who receives direction from a county Extension agent or specialist. The aide is employed to assist or extend Extension educational programs to a specific clientele within a specific program or geographic area.

Extension Home Economist (EHE): The Cooperative Extension Service employee responsible for supervision of EFNEP, may be a youth agent or home economist. Usually a college or university graduate or equivalent and has a professional appointment with the respective State Land Grant University.

Aune 77: A survey designed to identify competencies needed by Arizona EFNEP aides. The survey was completed by EFNEP aides and EHE's.

Program unit: The work and reporting group (aides and EHE's) which operate EFNEP in a given geographic area. The unit may be in rural, urban, or Indian reservation settings. The Extension staff in each unit includes professionals and paraprofessionals.

Competency: A behavioral objective which includes the tasks to be performed and the skills needed by EFNEP aides.

CHAPTER 2

LITERATURE REVIEW

The identification and categorization of competencies needed by EFNEP aides was the problem to be emphasized in this study. The researcher needed an understanding of the paraprofessional role, training needs, and education. Competencies were chosen as the educational method for developing EFNEP aide training. This review of literature emphasizes paraprofessional role models, training needs, competency-based education, and the Aune 77 survey.

Paraprofessionals

Extension employs paraprofessionals in all program areas. The roles assumed by these paraprofessionals have been studied by various researchers. Kiesow, Lewis, and Lyday (1974) studied the roles of Extension professionals, paraprofessionals, and volunteer youth workers. A team approach to organizational effectiveness was used with each role position complementing and reinforcing the others. The addition of youth paraprofessionals required a shift in roles and relationships between the professional and the volunteer staff. The professional redefined his role, identified tasks that could be performed by the paraprofessional, moved up in his role tasks, and allowed the

paraprofessional to fill the void. The professional then had more time for planning and supervising the total program. Program effectiveness was determined by the relationship of the staff members. A clear delineation of role tasks and an understanding of the relationships at the beginning of the program was essential for the successful implementation of the Extension youth program.

Figure 1 shows the hierarchical position-centric model used to develop and analyze the Extension youth worker roles. In this design the volunteer position remained the same, the youth agent moved upward in the hierarchy with the paraprofessional filling the intermediate position. Increased role tasks for the youth agent justified the assumption of certain role tasks by the paraprofessionals. This study included two distinct phases: (1) the development of a role model for 4-H paraprofessional, (2) testing of this model.

The development of the role model required an analysis of 300 tasks thought to be relevant to a viable 4-H program in the 1970's. Criteria for this analysis were developed. Another aid in the analysis was functional categories. Boone, Dolan, and Shearon had developed a conceptual schema for planning, implementing, and evaluating task-oriented organizations that function in voluntary settings (cited in Kiesow et al. 1974).

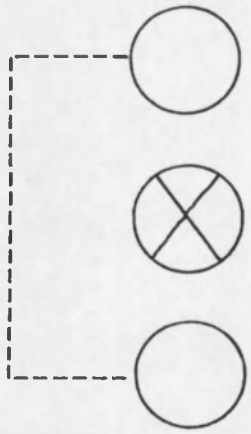

Figure 1. Position-Centric Model for Youth Program Assistant (Kiesow et al. 1974, p. 9)

The functional categories and their definitions were:

Maintenance--an activity which supports, supervises, and renews the organization.

Needs--activity that identifies and analyzes needs of the target audience.

Planning--decision making activities which select objectives and organize learning activities.

Execution--activity that implements, mobilizes, and monitors the teaching learning process.

Evaluation--activity that measures program effectiveness in bringing about change. Criteria from 4-H in the 70's plus these functional categories were used to reduce the task like of 300 to 81. These were then reviewed by

Extension staff and adult educators from national to county level. This review reduced the task list to 50.

Youth agents and volunteers responded to the mailed questionnaires which included a Likert-type scale. The scale ranged from very inappropriate to very appropriate as an essential part of the program assistant's job.

The second phase of the Kiesow et al. (1974) study tested these 50 tasks in a two-county rural environmental situation. This test showed the role model was appropriate. The researchers suggested changing the role model for large metropolitan areas. They believe tasks need to be adapted to suit the capabilities of the volunteer leaders and paraprofessionals.

This role pattern for 4-H paraprofessionals is representative of the pattern being sought in EFNEP. The home economist, aide, and volunteer are a team. The volunteer part of the EFNEP team is still in the developmental stages. EFNEP volunteers require the aide to redefine her role and move upward in the hierarchy of tasks to be done. The development of task lists, analysis, and final consensus and testing of appropriate role tasks for 4=H paraprofessionals is a possible research method to be used in EFNEP task list development.

A paraprofessional role pattern requires training for the role tasks to be performed. The identification of training needs is an integral part of this developmental

process. Paraprofessional training needs have been studied by Sanders (1970) and Anderson (1977); these studies will be reviewed.

Training Needs of Paraprofessionals

Paraprofessional training needs were studied by Sanders (1970). She developed a survey identifying the training needs of Texas EFNEP aides. EFNEP aides and EHE's rated aides' teaching effectiveness, consumer education knowledge, food and nutrition knowledge, and abilities.

Rating scales were completed by 100 aides and their supervising EHE's. Significant differences were evident when the ratings were compared. Sanders' conclusions were that the aides judged their teaching effectiveness, consumer education knowledge, food and nutrition knowledge, and abilities on what they knew before starting to work and after receiving training. They had learned a great deal and felt capable of doing the work. The lower supervising EHE ratings could be explained by the home economists' professional attitudes. Professional standards are expected to be higher than nonprofessional standards, therefore more was expected of the aides.

Four areas of teaching methods received lower scores from the aides. The aides indicated they needed help to adapt the subject matter to the group being taught, to recognize where people are and begin the lesson at that

point, to develop new and interesting ways to present subject matter, and to understand and use family values in teaching. Sanders recommended the development of self evaluation forms to be used with aides; the development of preemployment tests to determine capabilities of the person to be employed, and the development of pre- and post-training evaluations of aides' knowledge and abilities.

Sanders' list of 61 skills provides a basis for initiating discussion of EFNEP training needs. That size list was appropriate for paraprofessional respondents and the time to be spent completing a survey. The list was not comprehensive enough for the various aspects of an aide's job. Significant differences between aide and EHE responses was an indication that both need the opportunity to express their attitudes about aide training.

A study conducted by Anderson (1977) in Mississippi supported Sanders' (1970) findings. Anderson's (1977) survey revealed a high level of agreement between supervising EHE's and aides on the importance of tasks to be performed. The aides perceived their abilities to be higher than they were perceived by supervising EHE's. Also similar to Sanders' (1970) study, was the indication that supervising EHE's felt the aides needed more training than the aides expressed a need for. The implications from Anderson's (1977) study are that aides should be involved

in their performance evaluation and the identification of in-service training needs.

The paraprofessional role models and identification of training needs which were presented by Kiesow et al. (1974), Sanders (1970), and Anderson (1977) provide a basis for developing a study of EFNEP aides' job responsibilities, tasks performed, skills needed, and the training needs. Further development of an EFNEP aide study required a decision on what areas to emphasize: tasks, skills, rules, and/or competencies. Competency based education includes skills, behaviors, and knowledge. Therefore competencies were chosen as the vehicle for developing this EFNEP study.

Competencies

Competencies are "the composite skills, behaviors, and knowledge demonstrated by the learner" (Hall and Jones 1976, p. 11). Competency based education emphasizes the individual learner. The individual controls his/her own learning by exhibiting mastery of a skill, behavior, and/or knowledge. A basic structure for competency based teacher education was developed by Rosner and Kay (1974). An EFNEP aide training plan was superimposed on this structure to visualize a competency based training program for aides (Figure 2).

Figure 3 shows the identification of EFNEP aide competencies as a major step in competency based EFNEP

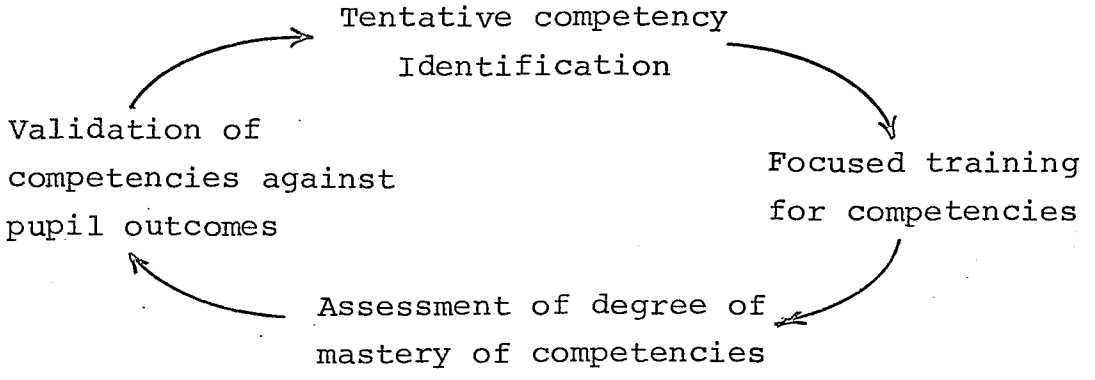

Figure 2. Basic Structure for Competency Based Teacher Education (Rosner and Kay 1974, p. 292)

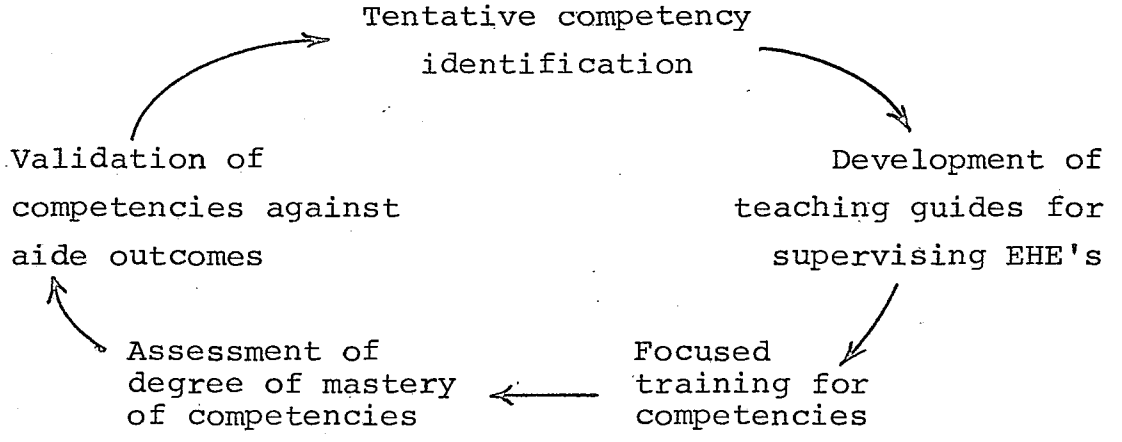

Figure 3. Adapted Structure for Competency Based EFNEP Aide Training -- Adapted from Rosner and Kay (1974, p. 292)

training. Marangu (1975) began this process with her dissertation at Iowa State University, "Competencies Needed by Family Food Aides." Marangu defined competency as the ability to do a job or task well, meeting all expected standards. Marangu's competency list was based on tasks identified by Smith (1972).

Smith (1972) developed a 124 item list of tasks performed by Iowa EFNEP aides working in the adult program. The list was developed through observation of aides at work in client homes, conversations with aides and home economists, careful examination of aides' daily records, and attendance at training sessions for aides and home economists.

The task list was validated by Extension specialists and resident faculty in the College of Home Economics at Iowa State University. The tasks were written so aides would understand the meaning. Home economists administered the task lists with 167 aides responding in three ways: (1) I never do this task; (2) I sometimes do this task; (3) I always do this task. The tasks which seemed to identify related content were grouped to form task clusters. The identified clusters were: teaching nutrition, supplementing resources, purchasing food, health problems, food and health care for children, family relationships, communication, housekeeping, special diets, and clothing needs.

Smith recommended a follow up study be developed to identify competencies needed to perform the tasks.

Marangu's (1975) dissertation was designed to identify the competencies needed by EFNEP aides to perform tasks identified by Smith (1972). Marangu (1975) developed a competency list of 615 items. These were divided into a two part survey which was sent to supervising EHE's. The EHE's ranked each competency on a 1 to 9 scale: (1) competency not needed before entry to (9) competency needed before entry.

The identified competencies were grouped into subject matter clusters by Marangu and Extension specialists. These clusters were developed as a means for presenting related competencies in EFNEP training. The clusters were:

1. Food production and preservation.
2. Food management.
3. Food selection: planning and purchasing.
4. Food preparation and service.
5. Food safety and storage.
6. Infant and child feeding.
7. Nutrition and dietetics.
8. Safety.
9. Health.
10. Teaching techniques.
11. Housing, household cleanliness, home furnishings, and household equipment.

12. Management of human, material, and community resources.
13. Family relationships.
14. Physical, emotional, and social developmental needs of children.
15. Discipline and guidance of children.
16. Miscellaneous.

Marangu's competencies were based on tasks identified from what the aide does on the job. This eliminated some human relationship skills and mental processes. These competencies were reviewed only by professionals: Extension home economists and specialists. The researcher assumed there would be little, if any, difference between aide responses and professionals' responses. These limits indicate a need for future research.

Recommendations from Sanders (1970), Anderson (1977), Smith (1972), Marangu (1975), and Rosner and Kay (1974) indicate needs for: evaluation of pre- and post-training knowledge and abilities; aide involvement in identifying in-service training; training focused on the individual learner; and competencies needed to perform tasks. These study results and recommendations were considered when the Aune 77 survey was developed.

Aune 77 Survey

The development of a competency based EFNEP aide training plan was a goal of the Arizona EFNEP coordinator, Beryl Burt. Attainment of this goal required the identification of EFNEP aide training needs and/or competencies. Arizona EFNEP research assistant Pat Aune began this training needs assessment, later called competency identification, in the fall of 1977.

Marangu, Beavers, and Smith provided the initial list of competencies. Arizona EFNEP aides and EHE's added to the competency list. Duplicate competencies and those not fitting into EFNEP Guidelines (1976) were eliminated. The final list included 280 competencies stated as behavioral objectives.

The identification of needed competencies and categorization as to when needed were objectives of the Aune 77 survey. Competencies categorized as needed before working with families would be included in preservice training. Those categorized as needed within the first year would be included in in-service training.

The two part competency survey was mailed to eight Arizona EFNEP units in October, 1977. These units were located in Yuma, Maricopa, Coconino, Santa Cruz, Pima, Navajo, Pinal, and Apache Counties. The EFNEP aides and supervising EHE's in each unit were asked to complete the

survey by categorizing each competency (total of 280). The categories were:

A. Before (this means you knew and did this before starting to work with program families).

B. During the first year (this means you knew and did this during the first year you worked with program families).

C. Not needed (this means you have not yet used this competency).

The tabulation and recording of responses was completed in January, 1978, with 49 aides and 9 supervising EHE's reporting. The total possible number of respondents was 54 aides and 12 supervising EHE's (including four 4-H EFNEP agents). The total number of respondents and percentage of respondents in each category were tabulated for each competency. Aide and EHE responses were tabulated separately.

Marangu's (1975) competency study included clustering the competencies into subject matter groups. Clustering would expedite the development of training guides. Therefore, Arizona Extension specialists with EFNEP responsibility and the researcher clustered the competencies. The subject matter areas were taken from Revised Policy Guidelines and Suggestions for Conducting the Extension Expanded

Food and Nutrition Education Program (1976). The 280 competencies were categorized into 15 clusters.

The aide and EHE responses to the clustered competencies were then analyzed to determine when or if the competency was needed. It was assumed that EFNEP aides had the best knowledge and experience to identify the needed competencies. Therefore the highest response percentage from EFNEP aides was used to stratify the competencies into the categories: needed before working with families, needed during the first year, and not needed. The EHE responses were used as reference points to determine if there would be a great difference in the responses. An example of the differences is competency 49: Demonstrate care and cleaning of an oven. This competency was placed in the "needed before working with families" category because the majority of aides so identified its placement. A few competencies were listed in both "before" and "during" categories since aide responses were evenly split between the two. These are: 181, 276, 28, and 129. The final report which was sent to Arizona EFNEP units may be found in Appendix A. This report contains the clustered and categorized competencies and the percentage of aide and EHE responses. Differences between aide and EHE responses were evident. These differences were not studied for significance. This survey assumed the aide responses were the appropriate guides to use.

This final report was used to develop training guides for the supervising EHE's. A training guide sample may be found in Appendix B. This competency identification, clustering, and the training guide fit into the competency based EFNEP training program illustrated in Figure 3.

What were the limits of the Aune 77 survey?

1. Arizona EFNEP staff were the only participants and respondents.
2. Arizona staff contributed to the competency list which may have influenced their survey responses.
3. The two part questionnaire was too long.
4. Significant differences between aide and EHE responses were not analyzed.
5. The respondents were not stratified by unit location, nor limited by length of service.

These Aune 77 survey limits implied a need for validation of the survey results. Replication of the entire study would have been ideal in another location, or at a later date. Replication would have alleviated some of the Aune 77 survey limits.

Summary

The youth staff role model introduced a team approach to staffing patterns that include paraprofessionals, professionals, and volunteers. Kiesow et al. (1974) used a Likert-type scale to clarify the role model.

This clarification of roles and the team approach provide a basis for EFNEP development.

Additional study of EFNEP training needs and aide involvement in the identification of training needs were recommended by Sanders, Anderson, and Marangu. These limited studies indicated a need for additional EFNEP research which includes human relationship skills; mental processes; and tasks, knowledge, and skills. Broader generalizations may have been possible if both aides and EHE's had been able to respond and if more than one state and/or region of the country had been represented. These studies provided the impetus to develop the Aune 77 survey and to replicate portions of the study for the present research.

CHAPTER 3

PROCEDURE

The purpose of this study was for aides and Extension home economists to identify and categorize EFNEP aide competencies. The categorization was designed to indicate if preservice or in-service attainment of the competency was needed.

The procedure for this identification and categorization of competencies is presented in three sections: population, collection of data and instrumentation, and data analysis.

Population

EFNEP staff in Arizona, New Mexico, and North Dakota were chosen for this study. The author was familiar with Arizona and North Dakota Extension staff so they were chosen as a means of comparing EFNEP in the two states. New Mexico was chosen for its geographic and cultural similarity to Arizona. The EFNEP coordinator in each state was contacted for a list of aides and EHE's. State Extension administrators approved the participation of EFNEP aides and EHE's in the study. The surveys were distributed through the EFNEP coordinator's office in each state. The accessible EFNEP staff included 181 EFNEP aides and EHE's.

Aides with one year or less experience were eliminated from the study, since they would have greater difficulty in categorizing the competencies for preservice or in-service training needs. The researcher and the graduate committee arbitrarily chose a sample size of 14 aides and 6 EHE's from each state.

The state EFNEP populations were stratified to assure representation of staff in urban, rural and Indian reservation program units. This stratification is detailed in Table 1. The researcher randomly drew 14 aide and 6 EHE names from the stratified state populations. The drawing provided a total sample of 60 EFNEP staff, 42 aides and 18 EHE's. The entire EFNEP staff included 149 aides and 32 supervising EHE's.

Collection of Data and Instrumentation

The fourth objective of this study was to compare the results of this study with the results of the Aune 77 survey. Meeting this objective required the use of portions of that survey. The Aune 77 survey included 280 competency statements. About two hours were needed to complete the survey; this length prohibited replication of the entire survey. The Aune 77 competencies had been clustered into possible teaching groups. A copy of the Aune 77 survey results may be found in Appendix A. These clustered competencies were numbered and randomly drawn for inclusion in

Table 1. Numbers and Per Cents of Aides and EHEs by States in Geographic Areas Included in the Study

	Urban			Rural			Indian Reservation		
	No.	%	Sample Size	No.	%	Sample Size	No.	%	Sample Size
N. D.									
Aide	14	42.0	6	5	15.0	2	14	42.0	6
EHE	7	50.0	3	3	21.0	1	4	29.0	2
N. M.									
Aide	39	58.0	8	24	36.0	5	4	6.0	1
EHE	3	50.0	3	2	33.0	2	1	17.0	1
AZ.									
Aide	40	82.0	11	5	10.0	2	4	8.0	1
EHE	9	75.0	4	2	17.0	1	1	8.0	1

the present study. A total of 143 competency statements were selected for the present study. The statements were renumbered and placed in the same order as the Aune 77 competencies. The numerical coding is in Appendix C.

The questionnaire followed the Aune 77 design. Respondents were asked to categorize the statements as to:

1. Before--needed before working with families. (Indicates preservice training).
2. During the first year of working with families. (Indicates in-service training.)
3. Not needed.

The questionnaire was written for the paraprofessional. The terms used, descriptions, and instructions were written at the eighth grade or lower reading level so the terms used would have been familiar to aides in each state and unit.

Additional demographic data were collected in the present study. The rural, urban, and Indian reservation designation was added to verify that each state's respondents included staff working in each situation. The identification number clarified who received each survey. Race identification was listed as a voluntary response.

Separate cover letters were written for the aides and EHE's. A copy of the letters and the surveys are in Appendix D. The questionnaires and letters were sent May

1, 1978, to the EFNEP and/or home economics program leader in each state: Beryl Burt, EFNEP Coordinator, Arizona; Kathryn Treat, Program Leader for Home Economics, New Mexico; and Marilyn Backman, Assistant Director for Home Economics, North Dakota. They mailed the survey to the designated staff. The respondents were asked to mail the survey back to the researcher by May 26th. On June 6th each state was asked to contact the 18 nonrespondents and urge their immediate reply. June 15th the data from 50 of the 60 respondents was taken to quantitative studies for computer analysis. The present study had an 83.0% return rate.

Aune 77 Survey Data

The Aune 77 questionnaires were still available. After eliminating incomplete surveys and those completed by EFNEP aides with less than one year of experience, 37 of the 58 possible questionnaires could be used. The competency statements were matched with those chosen for the present study. The responses were coded for computer analysis.

Data Analysis

Data from the Arizona, New Mexico, North Dakota, and Aune 77 survey respondents were recorded on code sheets and key punched on electronic computer cards for compilation and summary. The demographic data were summarized. A

multivariate ANOVA (analysis of variance) and Chi square tests were used to analyze and compile the data. The analysis was completed at The University of Arizona Computer Center. The analyzed data were used as a response to the study objectives.

CHAPTER 4

PRESENTATION AND INTERPRETATION OF DATA

The data for this study were obtained from a competency survey completed by 63 paraprofessionals and 25 Extension home economists from Arizona, New Mexico, and North Dakota. The respondents were employed by the Cooperative Extension Service; their work assignments were with the Expanded Food and Nutrition Education Program. The Aune 77 survey was administrered to Arizona EFNEP staff in October, 1977. The present survey was administered to a sample of Arizona, New Mexico, and North Dakota EFNEP staff members in May, 1978. All calculations used in this study are based on the 88 completed surveys. This chapter gives a brief description of the respondents, their work location, education, work unit size, and racial ethnic origin. These characteristics appear to affect the varied responses among the states. This chapter also presents the survey data and findings in light of the objectives identified in Chapter 1.

Selected Characteristics of the Respondents

The calculations include responses from aides and EHE's in the three states and the Aune 77 survey. Table 2 illustrates the respondent distribution among the surveys.

Table 2. Distribution of Aide and EHE Respondents Among the States and Aune 77 Survey

State	Aides	EHEs
Arizona	12	6
New Mexico	11	6
North Dakota	10	6
Aune 77	30	7
Total	63	25

Note the Aune 77 survey provided 48% of the responses which have been included in these calculations. The inclusion of these responses provided a basis for comparing responses and noting significant differences among the respondent groups. The survey was sent to 14 aides and 6 EHE's in each state; 79.0% of the aides and 100.0% of the EHE's returned the survey.

Education

Education varied among the aides who responded. This educational variance could have affected the responses given by the aides. Note Table 3, in which the author chose to illustrate the number and per cent of aide respondents who had or had not graduated from high school. Only 10% of the North Dakota aides had less than a high school

Table 3. Number and Per Cent of Aides with Less Than a 12th Grade Education

Grade Completed	AZ.	N.M.	N.D.	Aune	Total
8th	2	2	1	6	11
9th		1		1	2
10th	2	2		4	8
11th		1		4	5
Subtotal	4	6	1	15	26
% of State Sample	33.3	55.0	10.0	50.0	41.3

education; whereas the other respondent groups included 33-55% non-high school graduates. Table 4 illustrates the percentage of aides with greater than a twelfth grade education.

Unit Size

The state sample populations varied as to unit size and the number of aides employed in each work area. All of the North Dakota units had 1-5 aides whereas the other state units ranged from 1 to 20 aides per unit. The entire sample population of aides was made up of 43% units with 1-5 aides, 14% units with 6-10, and 43% units with 11-20 aides.

Table 4. Number and Per Cent of Aides with Greater Than a 12th Grade Education

Grade Completed	AZ.	N.M.	N.D.	Aune	Total
12th	5	3	5	10	23
13	2	1	1	2	6
14	1	1	1	1	4
15				1	1
College Graduate			2	1	3
Subtotal	8	5	9	15	37
% of State Sample	66.7	45.0	90.0	50.0	57.1

The EHE sample included 61% units with 1-5 aides, 8% units with 6-10, and 31% units with 11-20 aides. Since units with fewer numbers of aides usually do not have full time supervising EHE's, this proportion indicates that 61% of the EHE's, 16 of the 26, supervise EFNEP aides on a part time basis. This part time supervision may have affected the responses received from the EHE's.

Ethnic Origin

The Aune 77 survey did not request ethnic origin. This was added, so a profile of the ethnic background would be available. All states lacked Oriental representation.

New Mexico had no Blacks, North Dakota lacked Mexican-Americans and Blacks. The aide population included: 3% Black, 36% Mexican-American, 24% American Indian, and 36% Caucasian. The state variances may be explained by the EFNEP goal to employ aides indigenous to the audience being reached.

How did these population variances affect the survey responses? The researcher felt education of the aide, supervision time by the EHE, and ethnic background would affect the interpretation of the competencies. These variances may explain some of the differences noted in the data analysis. The data analysis will be presented in light of the objectives presented in Chapter 1.

Categorization of EFNEP Competencies by Aides

Objective one of this study was to answer the question: What similarities exist in the categorization of EFNEP competencies by EFNEP aides in Arizona, New Mexico, and North Dakota?

Significant differences at the .05 level were noted among 10 of the 143 competencies. These significant differences will be described in greater detail. Table 5 lists the competencies with significant differences and the frequency of responses by aides. The author will suggest some reasons for the differences that are noted.

Table 5. Competencies Identified by Aides, with Significant Differences Among State Samples at the .05 Level, 6 Degrees of Freedom

Competency No.	Before Working with Families					During the First Year					Not Needed					Significance[a]
	AZ.	N.M.	N.D.	Aune	Total	AZ.	N.M.	N.D.	Aune	Total	AZ.	N.M.	N.D.	Aune	Total	
25	3	8	8	11	30	9	3	2	16	30	0	0	0	3	3	.0337
46	0	4	1	2	7	11	7	9	18	45	1	0	0	10	11	.0050
54	1	6	0	3	10	9	5	10	17	41	2	0	0	10	12	.0007
56	3	8	6	4	21	9	3	4	26	42	0	0	0	0	0	.0008
58	1	6	2	4	13	9	5	8	18	40	2	0	0	8	10	.0234
62	4	3	0	4	11	5	8	10	17	40	3	0	0	9	12	.0313
70	7	9	4	9	29	5	2	6	21	34	0	0	0	0	0	.0218
91	3	8	5	5	21	9	3	5	25	42	0	0	0	0	0	.0045
109	1	1	1	3	6	4	5	9	6	24	7	5	0	21	33	.0089
138	5	8	4	18	35	6	3	3	12	24	1	0	3	0	4	.0295

[a]Level of significance at .05 or less indicates a need for further analysis of the responses to determine reasons for the variance among respondents.

Competency 25: Identify common food weights, measurements, and abbreviations.

Three aides completing the Aune 77 survey decided this was not needed. This decision could indicate misinterpretation of the statement. About half of the Aune survey was completed by aides with less than a high school education. The terms used in this statement may have been unfamiliar to these aides.

The following five competencies may be related:

46. Demonstrate food canning

54. Describe food canning and freezing costs.

58. Identify skills the homemaker needs to successfully can, freeze, or dry foods.

109. Seek community help to find a vegetable garden space in the city.

138. Identify dangers of careless use of insecticides.

Each of these has been identified as not needed by a portion of aides. This identification could indicate an urban vs. rural setting. Aides employed in rural communities will be dealing with home gardening and food preservation as a means of stretching the food dollar. Urban residents may or may not have a home garden, which affects the needs expressed by aides.

Competency 56: Work within the written EFNEP guidelines.

Competency 91: Understand the purposes of EFNEP.

These competencies are related to the orientation and continued training received by the aides. Table 5 shows these

competencies are categorized as needed. The categorization of when needed was more difficult for the aides to determine.

Competency 62: Train volunteers for the food/ nutrition job they have agreed to do.

Arizona aides and those completing the Aune 77 survey indicated this was not needed. The October, 1977, Arizona EFNEP aide conference emphasized volunteer recruitment and training. These competency responses could be an indication of negative feelings toward the use of volunteers. The author is unfamiliar with the training received by New Mexico and North Dakota aides, therefore cannot support this assumption of negative feelings toward volunteers.

Competency 70: Plan and conduct a home visit.

All aides identified this as needed, but they were unable to come to a clearcut decision on when it was needed. Before working with families received 46% of the aides' support, while during the first year received 54%. This narrow majority raises some questions as to when aides need training in planning and conducting home visits.

While 10 of these competencies received significantly different categorization by aides in Arizona, New Mexico, and North Dakota, 133 received similar categorizations. These results suggest agreement among the states; therefore it may not be necessary to develop a competency list for each state.

Categorization of EFNEP Competencies by EHE's

Objective two of this study asks: What similarities exist in the categorization of EFNEP competencies by supervising EHE's in Arizona, New Mexico, and North Dakota?

Significant differences at the .05 level were noted among 12 of the 143 competencies. Refer to Table 6 for frequency of responses to the 12 significant competencies. These competencies will be described in greater detail, with possible explanations for the significant differences.

Nine of these competencies have been clearly identified as needed. The categorization of when these are needed is less firmly established. The competencies are:

1. Describe what each nutrient does for the body (protein, carbohydrate, fat, vitamins, minerals, water).
2. Plan a one-day menu including the right number of servings from each food group.
4. Define a calorie.
12. Identify when fortification and enrichment of food is important.
26. Describe good eating behavior patterns of infants and children.
36. Take away all garbage each day.
73. Work with limited supervision.
123. Avoid impulse buying.
125. Identify good quality fresh fruits and vegetables.

The categorization of these competencies is probably determined by the situation within the EFNEP unit, the

Table 6. Competencies Identified by EHEs, with Significant Differences Among State Samples at the .05 Level, 3 Degrees of Freedom

Competency No.	Before Working with Families					During the First Year					Not Needed					Significance
	AZ.	N.M.	N.D.	Aune	Total	AZ.	N.M.	N.D.	Aune	Total	AZ.	N.M.	N.D.	Aune	Total	
1	2	5	0	3	10	4	1	6	4	15	0	0	0	0	0	.0317
2	2	6	5	3	16	4	0	1	4	9	0	0	0	0	0	.0429
4	2	5	0	3	10	4	1	6	4	15	0	0	0	0	0	.0317
12	3	5	0	3	11	3	1	6	4	14	0	0	0	0	0	.0355
26	0	6	5	2	13	5	0	1	5	11	1	0	0	0	1	.0068
31	2	0	5	1	8	3	5	0	6	14	1	1	1	0	3	.0294
36	2	6	5	3	16	4	0	0	4	8	0	0	1	0	1	.0347
73	2	0	6	4	12	3	6	0	3	12	1	0	0	0	1	.0131
109	1	0	1	0	2	0	4	5	1	10	5	2	0	6	13	.0149
122	0	4	1	1	6	3	2	5	4	14	3	0	0	2	5	.0407
123	1	6	4	2	13	4	0	2	5	11	1	0	0	0	1	.0439
125	1	6	3	2	12	5	0	3	5	13	0	0	0	0	0	.0192

individual aides, and EHE's. The appropriate training time for these competencies may best be determined by the situation.

Competency 31: Demonstrate use of cleaning agents. During the first year was selected by 56% of the EHE's 32% selected before working with families, and 12% not needed. It is interesting to note, in Table 6 only one EHE in each state has identified this as not needed. Could these be EHE's with less direct responsibility to EFNEP? EHE's who are not as familiar with the responsibilities of the aides may not understand the need for improved sanitation.

Competency 109: Seek community help to find a vegetable garden space in the city.

Not needed was selected by 52% of the EHE's. This selection might be explained by rural and urban settings and the emphasis given home gardening in each state.

Competency 122: Use dried foods.

The interpretation of this statement could lead to differing responses. Dried foods include home dried foods and commercially dried foods. Arizona and New Mexico EHE's are more apt to consider home drying processes which may or may not be necessary competencies for the aides. Food drying is not a common preservation method in North Dakota; therefore it is not apt to be considered as part of this competency.

The categorization of these 12 competencies may best be determined by the situation within the EFNEP unit and the individual aide. This study may recommend appropriate times for including the competencies in EFNEP training programs, but the final decision will be made by staff members involved.

There were no significant differences at the .05 level for 131 of the categorized competencies. EFNEP aide competencies categorized by EHE's from different states do not vary according to state or region. These results suggest it may not be necessary to develop separate competency lists for each state.

Aide and EHE Categorization

Objective three of this study asks: What similarities exist in the categorization of EFNEP competencies by aides and EHE's? Significant differences in aide and EHE responses at the .05 level of significance were identified for seven competencies. The data for these seven competencies are in Table 7. The author will describe these competencies and try to give a brief analysis of why differences were evident.

Competency 5: Explain special diets (diabetic, low cholesterol, low sodium).

Significant differences existed between the aide's and EHEs' attitudes toward the necessity of this competency, 52% of the 25 EHE's did not think the aides needed this

Table 7. Frequency and Significance of Responses to Categories by Aides and EHEs, Significant Differences at the .05 Level, 2 Degrees of Freedom

Competency No.	Frequency of Responses by Categories						Significance
	Before Working with Families		During the First Year		Not Needed		
	Aide	EHE	Aide	EHE	Aide	EHE	
5	8	1	43	11	12	13	.0072
28	35	6	21	18	7	1	.0044
33	17	1	38	18	8	6	.0399
80	17	13	46	12	0	0	.0473
106	17	1	29	13	17	11	.0411
107	15	0	42	20	6	5	.0185
138	35	7	24	18	4	0	.0126

competency. Only 19% of the 63 aides said this was not needed. These differences may reflect professional and paraprofessional attitudes toward special diets. EHE's refer specific questions on special diets to the appropriate authority (a dietician or nutritionist). Since aides want to help their program families, they see all phases of food and nutrition as their domain. When aide and EHE responses are combined, 54% selected during the first year as the time when this competency is needed. This choice supports the

assumption that aides know their training needs because of their work experiences.

Competency 28: Demonstrate care and cleaning of an oven.

Both aides and EHE's support the need for this competency. The aides, 55%, selected before working with families whereas 72% of the EHE's chose during the first year. The discrepancy in this may indicate the aides' home visit experiences, where a dirty oven is easier to see and work with than the nutrition needs of family members.

Competency 33: Explain the costs of food freezers and when food freezers save grocery money.

The discrepancy in these responses is evident when noting that 27% of the aides thought this was needed before working with families and 24% of the EHE's identified it as not needed. The majority response was 64% choosing during the first year. Since 87% of the aide responses indicated this competency was needed, the person planning EFNEP aide training may need to include this in some part of the training.

Competency 80: Describe the EFNEP goals.

All staff determined this competency was necessary, but the EHE's were almost evenly divided as to when needed, whereas 73% of the aides chose during the first year. New aides may work with previously enrolled families, therefore it would not be necessary to describe EFNEP goals.

Competency 106: Explain to the unemployed how to get and keep a job.

The interpretation of this competency statement could have led to the significant differences between responses. EFNEP is not a job service program, this type of information fits the guidelines only if it provides a basis for improved food and nutrition habits. Strict interpretation of the guidelines would eliminate this competency.

Competency 107: Identify situations where family resource counseling is needed.

The combined aide and EHE responses (70.0%) strongly favor during the first year. The other responses fluctuated between before working with families and not needed. These choices may have been determined by the types of family services available in the community and the interpretation of the term family resource.

Competency 138: Identify dangers of careless use of insecticides.

The aides, 56.0%, favored having this competency before working with families. The aides know the home conditions, sanitation problems, and/or home gardening problems. This knowledge may have influenced their choice of categories.

Significant differences at the .05 level were not evident for 136 of the competencies. Since aides and EHE's seem to agree on competency categorization it may not be necessary to have both represented when planning for EFNEP aide training.

Present Data Compared with Aune 77

Objective four of this study asks: Do the results of these comparative surveys support the results of the Aune 77 survey conducted in Arizona? Significant differences at the .05 level were noted for 27 of the 143 competencies. The data for these 27 competencies are found in Table 8, which will be described in greater detail.

Seven competencies with significant differences were identified as needed by all of the aides and EHE's. The competencies are:

1. Describe what each nutrient does for the body (protein, carbohydrate, fat, vitamins, minerals, water).
20. Prepare foods to retain (keep) the most nutrients.
70. Plan and conduct a home visit.
80. Describe the EFNEP goals.
83. Describe what EFNEP aides do.
91. Understand the purposes of EFNEP.
125. Identify good quality fresh fruits and vegetables.

The varied responses noted in Table 8 indicate state and Aune survey differences as to when the competency is needed. These differences indicate a need to consider individual state and unit situations when determining competency training for EFNEP aides.

Table 8. Categorization of Aide and EHE Responses in State and Aune Surveys of Competencies with Significant Differences at the .05 Level of Confidence -- Respondents: Arizona = 18, New Mexico = 17, North Dakota = 16, Aune = 37, Total of 88 aides and EHEs.

Competency No.	Per Cent of Responses in Each Category												Significance	df
	Before				During				Not Needed					
	AZ.	N.M.	N.D.	Aune	AZ.	N.M.	N.D.	Aune	AZ.	N.M.	N.D.	Aune		
1	44.4	70.6	25.0	27.0	55.6	29.4	75.0	73.0	0	0	0	0	.0121	3
2	38.9	88.2	68.8	37.8	61.1	11.8	31.3	59.5	0	0	0	2.7	.0145	6
3	33.3	82.4	43.8	45.9	61.1	17.6	56.3	54.1	5.6	0	0	0	.0427	6
20	55.6	82.4	56.3	40.5	44.4	17.6	43.8	59.5	0	0	0	0	.0410	3
25	27.8	76.5	81.3	37.8	66.7	23.5	18.8	54.1	5.6	0	0	8.1	.0074	6
28	44.4	29.4	56.3	51.4	50.0	70.6	18.8	40.5	5.6	0	25.0	8.1	.0409	6
33	5.6	11.8	31.3	27.0	77.8	88.2	68.8	43.2	16.7	0	0	29.7	.0048	6
42	33.3	29.4	43.8	59.5	50.0	70.6	56.3	27.0	16.7	0	0	13.5	.0331	6
46	0	29.4	12.5	5.4	88.9	70.6	87.5	62.2	11.1	0	0	32.4	.0010	6
54	5.6	41.2	6.3	8.1	72.2	58.8	93.8	62.2	22.2	0	0	29.7	.0008	6
56	22.2	76.5	56.3	13.5	72.2	23.5	43.8	86.5	5.6	0	0	0	.0001	6
58	5.6	41.2	18.8	10.8	77.8	58.8	75.0	64.9	16.7	0	6.3	24.3	.0262	6
62	22.2	17.6	12.5	10.8	50.0	82.4	87.5	59.5	27.8	0	0	29.7	.0353	6
64	22.2	23.5	56.3	62.2	33.3	64.7	43.8	16.2	44.4	11.8	0	21.6	.0005	6
70	55.6	82.4	43.8	29.7	44.4	17.6	56.3	70.3	0	0	0	0	.0036	3
80	33.3	52.9	50.0	18.9	66.7	47.1	50.0	81.1	0	0	0	0	.0405	3
83	33.3	70.6	43.8	24.3	66.7	29.4	56.3	75.7	0	0	0	0	.0122	3
87	38.9	41.2	37.5	18.9	33.3	58.8	62.5	54.1	27.8	0	0	27.0	.0340	6
91	27.8	82.4	50.0	21.6	72.2	17.6	50.0	78.4	0	0	0	0	.0002	3
94	38.9	70.6	37.5	27.0	55.6	17.6	62.5	64.9	5.6	11.8	0	8.1	.0486	6
95	22.2	52.9	31.3	21.6	72.2	47.1	68.8	56.8	5.6	0	0	21.6	.0305	6
109	11.1	5.9	12.5	8.1	22.2	52.9	87.5	18.9	66.7	41.2	0	73.0	.0001	6
124	27.8	70.6	37.5	21.6	72.2	29.4	62.5	75.7	0	0	0	2.7	.0314	6
125	33.3	82.4	43.8	56.8	66.7	17.6	56.3	43.2	0	0	0	0	.0245	3
138	33.3	64.7	37.5	51.4	61.1	35.3	43.8	48.6	5.6	0	18.8	0	.0408	6

Eight competencies received a small number of not needed responses from staff in Arizona and on the Aune survey. The Aune survey was also completed by Arizona staff. The competencies are:

25. Identify common food weights, measurements, and abbreviations.

33. Explain the costs of food freezers and when food freezers save grocery money.

42. Identify possible safety hazards caused by electrical equipment, i.e., frayed electrical cords, electrical equipment near water, etc.

46. Demonstrate food canning.

54. Describe food canning and freezing costs.

62. Train volunteers for the food/nutrition job they have agreed to do.

87. Describe what 4-H EFNEP is and does (the youth phase of EFNEP).

Why would Arizona staff identify these competencies as not needed? Work assignments particular to Arizona may have had some effect. Not all Arizona EFNEP aides have youth responsibility, some are assigned only to adult work. Volunteer programs had been a part of the Arizona EFNEP training in October, 1977. These responses could be a result of that training. The canning and freezing responses may reflect the larger unit size, more urban settings, where food preservation is not of financial benefit.

Four competencies received a small number of not needed responses; they are:

2. Plan a one-day menu including the right number of servings from each food group.

3. Plan breakfast, lunch (packed or at home), and dinner menus for one week; include a variety of foods needed by family members.

56. Work within the EFNEP guidelines.

124. Explain the printed information on food labels.

The decision was when these competencies were needed, not if needed. The one person who said these competencies were not needed may have made an error. The state and/or unit situation should be considered when planning training.

Competency 94: Take a 24 hour dietary recall. Why would six staff members indicate this competency was not needed? It is possible the term "dietary recall" was misinterpreted, or that aides were expressing negative attitudes toward this competency. Dietary recalls are required every six months; they are used as a program evaluation tool. Most staff see dietary recalls as a task which must be done, rather than an enjoyable part of the program.

North Dakota staff responded not needed to competencies 28 and 138. These responses may have indicated an attitude toward the competency or the type of training received.

28. Demonstrate care and cleaning of an oven.

138. Identify dangers of careless use of insecticides.

Competency 58: Identify skills the homemaker needs to successfully can, freeze, or dry foods.

Arizona staff in the Aune and present surveys chose not needed for this competency. This may have reflected their attitude toward food preservation or it may have reflected previous training.

64. Keep own body weight within the ideal range.

109. Seek community help to find a vegetable garden space in the city.

The responses to these competencies were widespread among the Arizona, New Mexico, and Aune surveys. The variety of responses could have indicated state and EFNEP unit differences. The significance is that these competencies need to be considered by the individual EFNEP unit when training is being planned.

Was objective four answered? Do the results of these comparative surveys support the results of the Aune survey conducted in Arizona, fall, 1977? The significant differences indicated some variance in responses, not necessarily the differences among the Aune and state surveys. The present data did not clearly answer this objective. Validation of the Aune 77 survey would require replication of the entire survey. The present study indicated support for 116 of the competency statements which were included. This support did not validate the untested statements. Generally speaking, this support may be enough of an indicator to encourage use of all 280 categorized competencies

when planning EFNEP training. A flexible training plan would allow for differences that may exist. A cooperative effort between EHE's and aides would be needed to determine the specific needs in each unit.

Competency Categorization by Aides and EHE's

Objective five was to answer the question: How will these competencies be categorized by aides and EHE's in Arizona, New Mexico, and North Dakota?

This question was developed to make the competencies usable when planning EFNEP aide training. Table 9 lists the competencies in the "before working with families" and Table 10 "during the first year" categories. None of the competencies were identified as not needed by a majority of the staff. Four competencies were listed in both categories: 19, 84, 85, and 103. The "needed before working with families" category had 38 competencies, while "needed during the first year" had 101. The placings ranged from a margin as low as 49.0% to as high as 88.0%. Competencies with a low margin would be considered for either preservice or in-service training programs.

Table 9. Competencies Categorized as Needed "Before Working with Families" by Aides and EHEs in Arizona, New Mexico, and North Dakota

Competency	Frequency and Percentage of Total Responses					
	Before		During		Not Needed	
	F	%	F	%	F	%
2. Plan a one-day menu including the right number of servings from each food group.	33	65.0	18	35.0	0	0
3. Plan breakfast, lunch (packed or at home), and dinner menus for one week; include a variety of foods needed by family members.	27	53.0	23	45.0	1	2.0
10. Identify the nutrients we need every day.	26	51.0	25	49.0	0	0
14. List foods that are a source of complete protein.	27	53.0	23	45.0	1	2.0
16. Cook a variety of foods.	36	71.0	15	29.0	0	0
17. Demonstrate acceptable ways of measuring ingredients	32	63.0	18	35.0	1	2.0
*19. Describe the purpose of various cooking ingredients.	25	49.0	25	49.0	1	2.0
20. Prepare foods to retain (keep) the most nutrients.	27	53.0	24	47.0	0	0

Table 9.--Continued Competencies Categorized as Needed "Before Working with Families" by Aides and EHEs in Arizona, New Mexico, and North Dakota

Competency	Frequency and Percentage of Total Responses					
	Before		During		Not Needed	
	F	%	F	%	F	%
21. Plan for and use leftover food.	27	53.0	24	47.0	0	0
23. Demonstrate table setting.	26	51.0	20	39.0	5	10.0
25. Identify common food weights, measurements, and abbreviations.	31	61.0	19	37.0	1	2
35. Wash all food preparation tools with hot water and soap and thoroughly rinse after working with food.	41	80.0	10	19.5	0	0
36. Take away all garbage each day.	37	72.5	13	25.0	1	2.0
37. Identify household disinfectants.	26	51.0	24	47.0	1	2.0
38. Explain how to identify food spoilage.	30	59.0	20	39.0	1	2.0
39. Select foods needing refrigerator storage.	37	72.5	13	25.0	1	2.0
40. Identify foods needing dry shelf storage	36	70.5	14	27.0	1	2.0
41. Explain safe handling of eggs, poultry, fish and dairy foods.	28	55.0	23	45.0	0	0
44. Identify ways to put out kitchen fires (hot fat).	27	53.0	24	47.0	0	0

Table 9.--Continued Competencies Categorized as Needed "Before Working with Families" by Aides and EHEs in Arizona, New Mexico, and North Dakota

Competency	Frequency and Percentage of Total Responses					
	Before		During		Not Needed	
	F	%	F	%	F	%
48. Respect and like people of all incomes, ages, nationalities, and religions	45	88.0	6	12.0	0	0
50. Work with people and their problems without gossiping.	41	80.0	8	15.5	2	4.0
55. Listen and hear what other people say, without judging their comments.	39	76.0	10	19.5	2	4.0
56. Work within the written EFNEP guidelines.	26	51.0	24	47.0	1	2.0
57. Keep confidences learned about program family.	34	66.5	16	31.0	1	2.0
59. Arrange home life so your co-workers and families can depend on you.	31	60.5	17	33.0	3	6.0
69. Cooperate with co-workers.	32	62.5	19	37.0	0	0
70. Plan and conduct a home visit.	31	60.5	20	39.0	0	0
72. Practice good nutrition.	33	64.5	17	33.0	1	2.0
74. Begin work on time, stay until your working day is over.	33	64.5	18	35.0	0	0

Table 9.--Continued Competencies Categorized as Needed "Before Working with Families" by Aides and EHEs in Arizona, New Mexico, and North Dakota

Competency	Frequency and Percentage of Total Responses					
	Before		During		Not Needed	
	F	%	F	%	F	%
76. Use the telephone directory as a source of information.	28	55.0	19	37.0	4	8.0
*84. Discuss confidential matters only with the supervising home economist.	25	49.0	25	49.0	1	2.0
*85. Show enthusiasm during each program family visit.	25	49.0	25	49.0	1	2.0
91. Understand the purposes of EFNEP.	27	53.0	24	47.0	0	0
94. Take a 24-hour dietary recall.	25	49.0	23	45.0	3	6.0
101. Identify your risks when involved in an accident.	27	53.0	18	35.0	6	11.5
*103. Identify advantages and disadvantages of planning ahead.	25	49.0	25	49.0	1	2.0
123. Avoid impulse buying.	27	53.0	22	43.0	2	4.0
125. Identify good quality fresh fruits and vegetables.	27	53.0	24	47.0	0	0
131. Shop for non-perishable and perishable foods in proper order at the store.	26	51.0	21	41.0	4	8.0

Table 9.--Continued Competencies Categorized as Needed "Before Working with Families" by Aides and EHEs in Arizona, New Mexico, and North Dakota

Competency	Frequency and Percentage of Total Responses					
	Before		During		Not Needed	
	F	%	F	%	F	%
136. Identify foods included in each of the four food groups.	30	59.0	21	41.0	0	0
137. Identify ways of preparing fruits and vegetables to retain nutrients.	30	59.0	21	41.0	0	0
140. Praise small accomplishments to motivate the homemakers.	26	51.0	24	47.0	1	2.0
141. Express feelings without fear of losing face.	26	51.0	22	43.0	3	6.0

*Designates competencies included in both categories.

Table 10. Competencies Categorized as Needed "During the First Year" by Aides and EHEs in Arizona, New Mexico, and North Dakota

Competency	Frequency and Percentage of Total Responses					
	Before		During		Not Needed	
	F	%	F	%	F	%
1. Describe what each nutrient does for the body (protein, carbohydrate, fat, vitamins, minerals, water).	24	47.0	27	53.0	0	0
4. Define a calorie.	23	45.0	28	55.0	0	0
5. Explain special diets (diabetic, low cholesterol, low sodium).	4	8.0	32	63.0	15	29.0
6. Identify agencies (community services) where individuals can get information about special diets.	20	39.0	31	60.5	0	0
7. Identify food fads.	20	39.0	30	59.0	1	2.0
8. Explain why food fads and fad diets may be harmful to the user's health.	14	27.0	37	72.5	0	0
9. Develop a list of situations (times) when an aide needs to get expert help with a family's nutrition needs.	10	19.5	39	76.0	2	4.0
11. Explain why food is enriched.	21	41.0	29	57.0	1	2.0

Table 10.--Continued Competencies Categorized as Needed "During the First Year" by Aides and EHEs in Arizona, New Mexico, and North Dakota

Competency	Frequency and Percentage of Total Responses					
	Before		During		Not Needed	
	F	%	F	%	F	%
12. Identify when fortification and enrichment of food is important.	19	37.0	32	62.5	0	0
13. Explain how combination foods fit into the four food groups, i.e., tacos, stew, macaroni and cheese, etc.	23	45.0	28	55.0	0	0
15. Name essential minerals and list important food sources of each.	19	37.0	31	60.5	1	2.0
18. Cook native foods.	23	45.0	27	53.0	1	2.0
*19. Describe the purpose of various cooking ingredients.	25	49.0	25	49.0	1	2.0
22. Identify ways to introduce new foods to family members.	23	45.0	27	53.0	1	2.0
24. Select recipes suitable for the program families.	16	31.0	35	68.5	0	0
26. Describe good eating behavior patterns of infants and children.	24	47.0	25	49.0	2	4.0

Table 10.--Continued Competencies Categorized as Needed "During the First Year" by Aides and EHEs in Arizona, New Mexico, and North Dakota

Competency	Frequency and Percentage of Total Responses					
	Before		During		Not Needed	
	F	%	F	%	F	%
27. Identify attitudes and circumstances that influence children's food likes and dislikes.	20	39.0	30	59.0	1	2.0
28. Demonstrate care and cleaning of an oven.	22	43.0	24	47.0	5	10.0
29. Explain steps to take when a freezer or refrigerator fails to work.	19	37.0	28	55.0	4	8.0
30. Describe how to save frozen foods when the freezer fails.	16	31.0	33	64.5	2	4.0
31. Demonstrate use of cleaning agents.	20	39.0	26	51.0	5	10.0
32. Plan a kitchen cleaning procedure that saves time and energy and considers the homemaker's ability.	11	21.5	38	74.0	2	4.0
33. Explain the costs of food freezers and when food freezers save grocery money.	8	15.5	40	78.0	3	6.0
34. Describe ways to rid a home of bugs and other pests.	20	39.0	29	57.0	2	4.0

Table 10.--Continued Competencies Categorized as Needed "During the First Year" by Aides and EHEs in Arizona, New Mexico, and North Dakota

Competency	Frequency and Percentage of Total Responses					
	Before		During		Not Needed	
	F	%	F	%	F	%
42. Identify possible safety hazards caused by electrical equipment, i.e., frayed electrical cords, electrical equipment near water, etc.	18	35.0	30	59.0	3	6.0
43. Explain the safe use of food preparation equipment, e.g., knives, gas and electric ranges, barbecue grills, wood stoves.	20	39.0	28	55.0	3	6.0
45. Name the advantages and disadvantages of growing a garden.	8	15.5	42	82.0	1	2.0
46. Demonstrate food canning.	7	13.5	42	82.0	2	4.0
47. Demonstrate food freezing.	9	17.5	39	76.0	3	6.0
49. Recruit volunteers from program families.	6	11.5	43	84.0	2	4.0
51. Demonstrate food drying.	5	10.0	41	80.0	5	10.0
52. Identify family attitudes toward their living conditions.	23	45.0	25	49.0	3	6.0
53. Identify a lack of material and human resources within families.	19	37.0	29	57.0	3	6.0

Table 10.--Continued Competencies Categorized as Needed "During the First Year" by Aides and EHEs in Arizona, New Mexico, and North Dakota

Competency	Frequency and Percentage of Total Responses					
	Before		During		Not Needed	
	F	%	F	%	F	%
54. Describe food canning and freezing costs.	9	17.5	38	74.0	4	8.0
58. Identify skills the homemaker needs to successfully can, freeze, or dry foods.	11	21.0	36	70.5	4	8.0
60. Seek (look for) more resources (information about people, food, heatlh, and money).	9	17.5	42	82.0	0	0
61. Practice EFNEP skills and management in own home.	23	45.0	28	55.0	0	0
62. Train volunteers for the food/nutrition job they have agreed to do.	9	17.5	37	72.0	5	10.0
63. Demonstrate a variety of teaching methods.	9	17.5	40	78.0	2	4.0
64. Keep own body weight within the ideal range.	17	33.0	24	47.0	10	19.5
65. Manage own personal budget to allow for business expenses.	21	41.0	25	49.0	5	10.0
66. Provide written information, teaching ideas, and other helps to volunteers.	8	15.5	39	76.0	4	8.0

Table 10.--Continued Competencies Categorized as Needed "During the First Year" by Aides and EHEs in Arizona, New Mexico, and North Dakota

Competency	Frequency and Percentage of Total Responses					
	Before		During		Not Needed	
	F	%	F	%	F	%
67. Recruit new EFNEP families and individuals.	9	17.5	42	82.0	0	0
68. Thank and praise volunteers.	17	33.0	30	59.0	4	8.0
71. Provide information needed by program families.	14	27.0	37	72.5	0	0
73. Work with limited supervision.	20	39.0	29	57.0	2	4.0
75. Identify agencies and community resources which will help families.	18	35.0	32	62.5	1	2.0
77. Inform other Extension staff of your work activities.	15	29.0	34	66.5	2	4.0
78. Plan learning situations (programs) for individuals and groups.	12	23.5	39	76.0	0	0
79. Explain the Cooperative Extension Service.	25	49.0	26	51.0	0	0
80. Describe the EFNEP goals.	23	45.0	28	55.0	0	0
81. Plan lessons to change or improve people's attitudes, knowledge, and skills.	13	25.0	37	72.5	1	2.0

Table 10.--Continued Competencies Categorized as Needed "During the First Year" by Aides and EHEs in Arizona, New Mexico, and North Dakota

Competency	Frequency and Percentage of Total Responses					
	Before		During		Not Needed	
	F	%	F	%	F	%
82. Present lessons that build on what people already know.	11	21.5	37	72.0	3	6.0
83. Describe what EFNEP aides do.	25	49.0	26	51.0	0	0
*84. Discuss confidential matters only with the supervising home economist.	25	49.0	25	49.0	1	2.0
*85. Show enthusiasm during each program family visit.	25	49.0	25	49.0	1	2.0
86. Provide encouragement and support as the family solves its problems.	16	31.0	35	68.5	0	0
87. Describe what 4-H EFNEP is and does (the youth phase of EFNEP).	20	39.0	26	51.0	5	10.0
88. Involve EFNEP families in the total Extension program (4-H, homemakers, adult classes).	6	11.5	42	82.0	3	6.0
89. Identify ways to help families set short-term or long-term goals.	6	11.5	41	80.0	4	8.0
90. Publicize EFNEP.	11	21.5	37	72.0	3	6.0

Table 10.--Continued Competencies Categorized as Needed "During the First Year" by Aides and EHEs in Arizona, New Mexico, and North Dakota

Competency	Frequency and Percentage of Total Responses					
	Before		During		Not Needed	
	F	%	F	%	F	%
92. Offer programs that meet affirmative action requirements.	17	33.0	28	55.0	6	11.5
93. Adapt subject matter (lesson) so it is understood by the individual being taught.	18	35.0	31	60.5	2	4.0
95. Plan a nutrition lesson for youth.	18	35.0	32	62.5	1	2.0
96. Identify the needs and interests of program families.	12	23.5	38	74.0	1	2.0
97. Provide opportunities for family members to "show and tell" things they are good at doing.	11	21.5	38	74.0	2	4.0
98. Share program ideas with other aides, volunteers, clients, and Extension staff.	8	15.5	43	84.0	0	0
99. Identify the target audience for the Expanded Food and Nutrition Education Program.	24	47.0	27	53.0	0	0
100. Present an effective demonstration.	19	37.0	30	59.0	2	4.0

Table 10.--Continued Competencies Categorized as Needed "During the First Year" by Aides and EHEs in Arizona, New Mexico, and North Dakota

Competency	Frequency and Percentage of Total Responses					
	Before		During		Not Needed	
	F	%	F	%	F	%
102. Identify available family resources and how they can be used more effectively.	16	31.0	32	62.5	3	6.0
*103. Identify advantages and disadvantages of planning ahead.	25	49.0	25	49.0	1	2.0
104. Change your lesson plans to suit the program family or individual.	11	21.5	40	78.0	0	0
105. Describe the free lunch program available in schools.	16	31.0	31	60.5	4	8.0
106. Explain to the unemployed how to get and keep a job.	8	15.5	24	47.0	19	37.0
107. Identify family situations where family resource counseling is needed.	9	17.5	37	72.0	5	10.0
108. Make the best use of available resources.	16	31.0	35	68.5		
109. Seek community help to find a vegetable garden space in the city.	5	10.0	27	53.0	19	37.0
110. Provide emotional support, encouragement to program family members	15	29.0	35	68.5	1	2.0

Table 10.--Continued Competencies Categorized as Needed "During the First Year" by Aides and EHEs in Arizona, New Mexico, and North Dakota

Competency	Frequency and Percentage of Total Responses					
	Before		During		Not Needed	
	F	%	F	%	F	%
111. Help families identify ways to overcome food and nutrition related problems.	13	25.0	36	70.5	2	4.0
112. Identify types of family problems experienced by low-income families.	21	41.0	28	55.0	2	4.0
113. Gain the confidence of families.	19	37.0	32	62.5	0	0
114. Identify the individual needs of program family members.	7	13.5	42	82.0	2	4.0
115. Let families solve their own problems.	17	33.0	24	47.0	10	19.5
116. Evaluate children's behavior according to their age and stage of development.	8	15.5	35	68.0	8	15.5
117. Figure (compute) cost per serving of food.	19	37.0	28	55.0	4	8.0
118. Make simple kitchen repairs.	13	25.0	30	59.0	8	15.5
119. Prepare lesson plans before meeting with small groups or individuals.	20	39.0	31	60.5	0	0
120. Explain E.E.O., the Equal Employment Opportunity Act, and each person's rights because of it.	16	31.0	21	41.0	14	27.5

Table 10.--Continued Competencies Categorized as Needed "During the First Year" by Aides and EHEs in Arizona, New Mexico, and North Dakota

Competency	Frequency and Percentage of Total Responses					
	Before		During		Not Needed	
	F	%	F	%	F	%
121. Explain unit pricing.	13	25.0	35	68.5	3	6.0
122. Use dried foods.	16	31.0	28	55.0	7	13.5
124. Explain the printed information on food labels.	23	45.0	28	55.0	0	0
126. Compare cost of groceries in health food or specialty stores with groceries in a regular grocery store.	18	35.0	33	64.5	0	0
127. Locate professional help for program families during times of crisis.	13	25.0	31	60.5	7	13.5
128. Discuss program family problems with Extension home economist so requests for help can be made.	13	25.0	35	68.0	3	6.0
129. Describe "organic" foods and their role in the diet.	6	11.5	34	66.5	11	21.5
130. Prepare a grocery list from a weekly menu; consider grocery store layout.	23	45.0	26	51.0	2	4.0
132. Compare costs of convenience and home-made foods.	23	45.0	27	52.5	1	2.0

Table 10.--Continued Competencies Categorized as Needed "During the First Year" by Aides and EHEs in Arizona, New Mexico, and North Dakota

Competency	Frequency and Percentages of Total Responses					
	Before		During		Not Needed	
	F	%	F	%	F	%
133. Plan a monthly grocery budget which provides for a well-balanced diet, including holiday, party, or company meals.	12	23.5	36	70.5	3	6.0
134. Plan meals to provide a wider variety of foods for hurriedly prepared meals.	16	31.0	34	66.5	1	2.0
135. Identify special services provided by stores, which may influence food prices.	17	33.0	28	55.0	6	11.5
138. Identify dangers of careless use of insecticides.	23	45.0	24	47.0	4	8.0
139. Identify the importance of talking to and listening to the ideas of youth and children as a basis for planning EFNEP activities.	16	31.0	31	60.5	4	8.0
142. Plan nutritious packed or bag lunches.	25	49.0	26	51.0	0	0
143. Give the family time to change their old patterns of eating.	13	25.0	37	72.5	1	2.0

*Designates competencies included in both categories.

Summary

Four of the five objectives of this study were met: competencies were categorized, similarities did exist between aide and EHE responses, and similarities existed among aide and EHE responses from the various states. Objective four was: Do the results of these comparative surveys support the results of the Aune 77 survey? This was not clearly answered. Further summarization of these data will be found in Chapter 5 where the author expresses attitudes and reactions to this research.

CHAPTER 5

SUMMARY

This chapter deals with the summary of findings and with conclusions and recommendations which are based upon the findings of the study.

Purpose

The purpose of this study was for EFNEP aides and Extension home economists to identify and categorize competencies needed by EFNEP aides. The categorization of these competencies identified preservice and in-service training needs. A comparison of aide and EHE responses from Arizona, New Mexico, North Dakota, and the Aune 77 survey was planned as an indication of the validity of the competencies identified in the Aune 77 survey.

Objectives

The following questions were to be answered by this research:

1. What similarities exist in the categorization of EFNEP competencies by EFNEP aides in Arizona, New Mexico, and North Dakota?

2. What similarities exist in the categorization of EFNEP competencies by supervising EHE's in Arizona, New Mexico, and North Dakota?
3. What similarities exist in the categorization of EFNEP competencies by aides and EHE's?
4. Do the results of these comparative surveys support the results of the Aune 77 survey conducted in Arizona?
5. How will the competencies be categorized by aides and EHE's in Arizona, New Mexico, and North Dakota?

Summary

The summary of findings from this study is reported in terms of the objectives of the study. The summary is organized under the same major headings as the presentation and interpretation of data.

Demographic Data

The information collected identified few differences in the sample populations. The educational level of aides in Arizona and New Mexico was lower than in North Dakota. Less than a high school education was reported by 33.3% Arizona and 55% New Mexico aides, while only 2 or 10% of the North Dakota aides had less than a high school education. The EFNEP unit sizes in Arizona and New Mexico were larger than North Dakota units where all units had only 1 to 4 aides. Arizona units (50%) had 5 to 20 aides. New Mexico

units (88%) had 5 to 20 aides. The ethnic origin also varied among the states. North Dakota had Indian aides but no Mexican-Americans or Blacks. These demographic differences may have had some effect on the responses received from the states.

Categorization of EFNEP Competencies by Aides

Only ten of the 143 competencies had significant differences at the .05 level or less. This Chi square test indicated those competencies should be more carefully examined. Relationships among those competencies and possible cultural and/or educational differences were discussed in Chapter 4. The study results imply flexible preservice and in-service training programs are needed to accommodate variances in staff needs.

Categorization of EFNEP Competencies by EHE's

Significant differences at the .05 level or less were noted for only 12 of the 143 competencies. All competencies were identified as needed, the indecision seemed to be in when they are needed. Again more careful examination may indicate cultural and/or educational differences among the various sample populations. These results imply a need for flexible training programs which allow the EFNEP staff to move competencies from preservice to in-service learning opportunities.

Competency Categorization by Aides and EHE's

Only seven competencies had significant differences at the .05 level or less. The implication of this Chi square test is that these competencies needed to be more carefully considered by persons planning training programs for EFNEP staff. Again the differences could be cultural and/or educational or they could indicate professional and paraprofessional attitudes. Chapter 4 discusses each of these competencies and possible reasons for the significant differences.

Aune 77 Survey Comparison with Present Study

Objective four asked: Do the present study results support the Aune 77 survey? The data from the Aune 77 survey were analyzed along with the present study data. In this analysis the Aune 77 data had the same weight as the state samples in the present study. The Chi square test identified 27 competencies with significant differences at .05 level or less. These significant differences were not clear indicators that the Aune 77 survey was valid nor invalid. The Aune 77 survey had 280 competencies stated. This test of 143 competencies implied some agreement, but validity of all Aune 77 competencies could not be proven without testing each competency. The entire survey would have to be replicated. Generally speaking the agreement which was noted among 116 of the competencies supports the

Aune 77 survey enough so an EFNEP training outline could be developed using the 280 statements. Flexibility in the training plan would be the key to program success.

Competency Categorization by Aides and EHE's

Objective five of this study requested the categorization of competencies by aides and EHE's who completed the present study. The researcher added this objective so the present study results would be reported in a format which would be usable when planning preservice and in-service training for EFNEP staff. This competency categorization placed 39 competencies in the needed "before working with families" category and 100 as needed "during the first year." Four competencies were evenly split between the "before" and "during" categories.

Conclusions

Competencies needed by EFNEP aides will be similar from state to state. The identification and testing of competencies in each state may not be necessary because of these similarities. A well developed and tested list of competencies from one state or region may provide a basis for developing preservice and in-service training programs. The unit and state variances indicate a need for flexibility in planning competency training. The final choice

of "which competency" and "when trained for" may best be determined by the individual aide and supervising EHE.

Similarities between aide and EHE competency categorization indicated that either aides or EHE's could identify competency training needs of EFNEP aides. This flexibility in determining the training program should enable EFNEP units to involve either or both aides and EHE's depending on the unit situation.

The present competency categorization format was readily understood and completed by aides and EHE's with a variety of cultural and educational backgrounds. This will be a usable format for future EFNEP studies.

Recommendations

1. The remaining Aune 77 competency statements should be tested by aides and EHE's.
2. Clustering the competencies into teachable units would provide a basis for developing preservice and in-service training programs for EFNEP aides.
3. The clustered competencies should be tested for compatibility and usefulness.
4. Both EFNEP aides and EHE's need to be included in program planning and the development of preservice and in-service training programs.
5. EFNEP competency training plans should be flexible so the state and/or unit can determine if and/or

when the aide needs training for the individual competencies.

6. Geographic (cultural) program and staff differences should be considered when planning aide training.

APPENDIX A

AUNE 77 ARIZONA COMPETENCY SURVEY

Expanded Food and Nutrition Education Program
IDENTIFICATION OF AIDE COMPETENCIES
January 1978--The University of Arizona

Procedure

A two-part competency questionnaire was mailed to eight Arizona EFNEP Units in October, 1977. These units are located in Yuma, Maricopa, Coconino, Santa Cruz, Pima, Navajo, Pinal, and Apache Counties.

The EFNEP Aides and supervising Home Economists in each unit were asked to complete the questionnaires by categorizing each competency (total of 280) with regard to when it should be acquired. The categories were:

A. Before (this means you knew and did this before starting to work with program families).

B. During first year (this means you knew and did this during the first year you worked with program families).

C. Not needed (this means you have not yet used this competency).

The tabulation and recording of responses was completed in January 1978, with 49 Aides and 9 supervising Home Economists reporting. The total possible number of respondents was 54 EFNEP Aides and 12 supervising Home Economists (including four 4-H EFNEP agents).

Total number of respondents and percentage of respondents in each category were tabulated for each competency. The Aides' and the supervising Home Economists' responses were tabulated separately. These findings are available in the EFNEP Office, The University of Arizona.

Competency Clusters

State Extension Specialists with EFNEP responsibility, and the EFNEP Research Assistant, clustered the competencies by subject matter. The subject-matter areas were taken from Revised Policy Guidelines and Suggestions for Conducting the Extension Expanded Food and Nutrition Education Program (1976). Fifteen clusters were identified.

Analysis and Reporting of Data

After each competency was clustered in the subject-matter area, the per cent responding in each category was analyzed to determine the highest response by EFNEP Aides. It was assumed that EFNEP Aides had the best knowledge and the greatest experience to identify the needed competencies. Therefore, the highest response percentage from EFNEP Aides was used to stratify the competencies into one of the three response categories. The EHE's response references a differing opinion. For example:

F. Use and care of equipment considered necessary for food preparation, storage, and utilization.

49. Demonstrate care and cleaning of an oven.

	Number Respondents		Per Cent Respondents	
	Aides	EHEs	Aides	EHEs
A. Before	30	2	64%	22%
B. During	12	7	25%	78%
C. Not needed	5	0	11%	0
	49	9	100%	100%

This competency was placed in the "needed before working with families" category because the majority of the Aides so identified its placement.

A few competencies were listed in both the "before" and the "during" categories since the Aide responses were evenly split between the two. These specific competencies are numbers 181, 276, 28, 129.

The attached competency lists are clustered and categorized as follows: Before working with families, During the first year, and Not needed.

For more information, contact:

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Project Report by
Pat Aune
Research Assistant
February 22, 1978

kw

	Per Cent Aides[a]	Per Cent EHE[a]
A. Nutrition knowledge and attitudes that lead to improved diets (normal nutrition).		
Before working with families		
1. Name the four food groups.	66%	33%
254. Define malnutrition.	51%	44%
263. Identify foods included in each of the 4 food groups.	56%	56%
During the first year		
2. Describe what each nutrient does for the body (protein, carbohydrate, fat, vitamins, minerals, water).	70%	67%
3. List foods which supply each nutrient.	72%	67%

[a]The "Per Cent Aides" column represents the percentage of Aides who responded in each respective category: (1) Before working with families, (2) During the first year, (3) Not needed. The "Per Cent EHE" column represents the percentages of supervising home economists who answered in the same respective categories. Number of respondents: 48 Aides, 9 EHEs. 1978--8 Units.

	Per Cent Aides	Per Cent EHE
6. Define a calorie.	53%	67%
8. Explain special diets (diabetic, low cholesterol, low sodium).	60%	56%
15. Identify the nutrients we need every day.	60%	67%
21. Define a complete and an incomplete protein.	64%	44%
22. Name foods that are a source of incomplete protein.	65%	38%
23. List foods that are a source of complete protein.	66%	38%
24. Name essential minerals and list important food sources of each.	70%	67%
25. Name essential vitamins and list foods that supply them.	64%	67%
226. Explain why fiber (bulk) is needed in the diet.	55%	67%
B. Planning for daily food needs.		
Before working with families		
5. Plan breakfast, lunch (packed or at home) and dinner menus for one week; include a variety of foods needed by family members.	49%	33%
264. Use the basic four food groups in planning the day's menu.	59%	56%
273. Plan nutritious packed or bag lunches.	60%	33%
During the first year		
4. Plan a one-day menu including the right number of servings from each food group.	58%	67%

	Per Cent Aides	Per Cent EHE
7. Plan a low-calorie one-day menu, based on four food groups.	62%	67%
19. Explain how combination foods fit into the four food groups, i.e., taco, stew, macaroni and cheese, etc.	62%	67%
20. Identify serving sizes of various foods, i.e., hot dogs, ice cream, cheese, bacon, etc.	70%	67%
26. Take a 24-hour dietary recall and list improvements that need to be made.	72%	56%
158. Take a 24-hour dietary recall.	67%	44%
222. Evaluate weight-loss diets.	43%	56%

C. Knowledge and practice in meal planning and food preparation and storage.

Before working with families

27. Cook a variety of foods.	77%	44%
28. Demonstrate acceptable ways of measuring ingredients.	49%	44%
30. Cook native foods.	60%	22%
31. Describe the purpose of various cooking ingredients.	52%	22%
32. Plan meals providing a variety of flavors, colors, shapes, and textures.	57%	56%
37. Plan for and use left-over food.	66%	44%
43. Demonstrate table setting.	55%	44%
45. Identify common food weights, measurements, and abbreviations.	51%	44%

	Per Cent Aides	Per Cent EHE
82. Wear clean clothes that are not flammable, when preparing food.	63%	67%
249. Determine kind, amount, and length of storage for different types of food.	54%	33%
258. Plan meals to provide a wider variety of foods for hurriedly prepared meals. (40% of Aides said not needed.)	55%	33%
265. Identify ways of preparing fruits and vegetables to retain nutrients.	60%	56%
<u>During the first year</u>		
28. Demonstrate acceptable ways of measuring ingredients.	49%	56%
29. Substitute available containers for the standard measuring tools.	50%	56%
33. Demonstrate steps involved in food preparation.	60%	56%
34. Explain the meaning of standard food preparation terms.	62%	33%
35. Prepare foods to retain (keep) the most nutrients.	60%	56%
36. Explain the purpose of spices & herbs in food preparation.	64%	67%
38. Plan meals to save fuel energy.	55%	78%
39. Name common relationships between measurements, e.g., 3 tsp. = 1 Tbsp.	53%	67%
44. Select recipes suitable for the program families.	72%	89%
71. Select appropriate food storage which keeps the food's color, texture, and flavor.	53%	78%

	Per Cent Aides	Per Cent EHE
229. Use dried foods.	51%	62%
266. Identify resources available for meal preparation.	60%	56%

D. Knowledge and practice in food selection and buying.

Before working with families

191. Keep a record of money spent on food.	50%	44%
192. Describe the free lunch program available in schools.	49%	44%
230. Avoid impulse buying.	48%	33%
232. Compare brand names and grocery store prices to get the best buy.	59%	33%
241. Identify good quality fresh fruits and vegetables.	67%	33%
246. Evaluate food sales, specials, cents off and the use of coupons.	51%	33%
247. Use grocery store sale ads to plan a weekly menu.	56%	44%
248. Prepare grocery list from the weekly menu, consider grocery store layout.	55%	44%
250. Shop for non-perishable and perishable foods in proper order at the store.	61%	44%
251. Compare costs of convenience and home-made foods.	57%	33%
253. Count change.	78%	78%
259. Identify factors to consider when purchasing convenience foods.	50%	33%
261. Identify special services provided by stores, which may influence food prices.	54%	33%

	Per Cent Aides	Per Cent EHE
262. Identify where to find special food needs of family members.	53%	22%
During the first year		
16. Explain why food is fortified.	55%	67%
17. Explain why food is enriched.	56%	67%
18. Identify when fortification and enrichment of food is important.	59%	67%
196. Influence family attitudes toward using food stamps and supplemental foods.	60%	89%
197. Describe advantages of using food stamps and supplemental foods as a way of stretching food dollars.	60%	56%
221. Figure (compute) cost per serving of food.	57%	67%
228. Explain unit pricing.	71%	89%
233. Explain the printed information on food labels.	61%	67%
235. Describe the right shopper behavior at the grocery check-out stand.	48%	56%
236. Estimate the average cost of food for one person, or a family, for one month.	53%	89%
237. Identify inexpensive (economical) food sources of nutrients needed by the body.	63%	44%
240. Compare cost of groceries in health food or specialty stores with groceries in a regular grocery store.	45%	56%
245. Describe "organic" foods and their role in the diet.	44%	67%

	Per Cent Aides	Per cent EHE
E. Family financial management as it relates to food needs of family members, adjustment to income, and the local food situation.		
Before working with families		
193. Explain to the unemployed how to get and keep a job.	42%	12%
202. Identify where to buy low-cost items.	56%	44%
260. Identify advantages of keeping a record of money spent for food.	51%	44%
During the first year		
58. Explain the costs of food freezers and when food freezers save grocery money.	39%	56%
185. Identify available family resources and how they can be used more effectively.	55%	78%
186. Identify family attitudes toward their living condition.	57%	67%
187. Identify advantages and disadvantages of planning ahead.	54%	33%
190. Write a monthly spending plan (budget) for a low-income family.	57%	78%
194. Identify where to get help for a family that has no money for food or food stamps.	50%	67%
198. Identify family situations where family resource counseling is needed.	61%	56%
199. Identify a lack of material and human resources within families.	60%	62%
200. Make the best use of available resources.	58%	56%

	Per Cent Aides	Per Cent EHE
203. Evaluate a homemaker's attitude toward shopping.	57%	89%
204. Determine family values related to spending money.	57%	89%
234. Explain what causes food prices to go up or down.	46%	67%
238. Describe the procedure for applying for food stamps.	66%	75%
239. Plan grocery purchases using food stamps rather than money.	64%	75%
252. Plan a monthly grocery budget which provides for a well-balanced diet, including holiday, party or company meals.	44%	67%

F. Use and care of equipment considered necessary for food preparation, storage, and utilization.

Before working with families

48. Improvise and/or use available equipment.	57%	22%
49. Demonstrate care and cleaning of an oven.	64%	22%
50. Demonstrate defrosting and cleaning of a refrigerator.	57%	22%
51. Demonstrate care and cleaning of a food freezer.	49%	25%
52. Demonstrate use and care of kitchen tools.	60%	33%
57. Read and discuss an owner's manual for a range, refrigerator or other kitchen equipment.	47%	11%
76. Describe common household hazards which are harmful to children.	75%	56%

	Per Cent Aides	Per Cent EHE
77. Identify possible safety hazards caused by electrical equipment, i.e., frayed electrical cords, electrical equipment near water, etc.	70%	56%
78. Explain the safe use of food preparation equipment, e.g., knives, gas and electric ranges, barbecue grills, wood stoves.	68%	67%
79. Describe safety measures to take with wet and highly polished kitchen floors.	51%	67%
80. Name steps to take, i.e., people to call, things to do, in an emergency.	56%	44%
81. Identify ways to put out kitchen fires (hot fat).	53%	44%
223. Make simple kitchen repairs.	51%	22%
<u>During the first year</u>		
53. Explain steps to take when a freezer or refrigerator fails to work.	49%	67%
54. Describe how to save frozen foods when the freezer fails.	47%	67%
55. Demonstrate use of cleaning agents.	47%	89%
56. Plan a kitchen cleaning procedure that saves time and energy and considers the homemaker's ability.	50%	67%
G. Food safety and health and sanitation practices as related to food.		
<u>Before working with families</u>		
60. Disinfect and clean kitchen counters, cutting boards and food preparation equipment.	65%	44%

	Per Cent Aides	Per Cent EHE
61. Wash hands with soap and water before handling any food, i.e., preparing, cooking, serving, or eating.	89%	67%
62. Wash all food preparation tools with hot water and soap and thoroughly rinse after working with food.	87%	67%
63. Take away all garbage each day.	85%	56%
64. Store all food in tightly covered, bug-proof containers, e.g., coffee cans or plastic bags.	70%	56%
65. Identify household disinfectants.	68%	56%
66. Explain how to identify food spoilage.	68%	33%
67. Explain food safety practices.	55%	22%
68. Select foods needing refrigerator storage.	72%	56%
69. Identify foods needing dry shelf storage.	72%	56%
72. Describe safe food preparation and storage of snacks, bag or packed lunches, picnic foods, and leftovers.	55%	33%
73. Explain safe handling of eggs, poultry, fish, and dairy foods.	57%	33%
74. Select safe food preparation methods and storage of foods for infants and children.	55%	44%
75. Choose safe places to store cleaning materials, bug and pest killers, paints, varnishes, and any other products that are poisonous.	72%	67%
268. Select proper storage for cleaning materials.	72%	33%

	Per Cent Aides	Per Cent EHE
269. Identify unsanitary conditions and diseases brought about by insects and rodents.	62%	22%
270. Identify dangers of careless use of insecticide.	67%	22%
During the first year		
11. Pick out misleading (wrong) food or health statements.	50%	56%
12. Identify food fads.	62%	78%
13. Explain why food fads and fad diets may be harmful to the user's health.	65%	67%
59. Describe ways to rid a home of bugs and other pests.	47%	78%
70. Explain food storage methods which are safe and retain (keep) nutrients.	53%	67%
H. Improving family food practices that contribute to personal development of family members.		
Before working with families		
40. Plan balanced menus to fit family food habits and custom.	53%	33%
46. Describe good eating behavior patterns of infants and children.	52%	22%
47. Identify attitudes and circumstances that influence children's food likes and dislikes.	51%	22%
219. Identify ways to encourage good eating habits in children.	51%	33%
280. Encourage people to follow the doctor's orders.	64%	56%

	Per Cent Aides	Per Cent EHE
During the first year		
41. Identify ways to introduce new foods to family members.	52%	67%
42. Discuss formation of food habits.	59%	56%
279. Give the family time to change their old patterns of eating.	61%	89%
I. Gardening and food preparation		
Before working with families		
During the first year		
83. Name the advantages and disadvantages of growing a garden.	59%	44%
84. Explain when and if home gardening is a way to save money.	59%	56%
85. Describe garden and mini-garden planting procedures.	62%	78%
Not needed		
206. Seek community help to find a vegetable garden space in the city.	70%	71%
J. Food Preservation		
Before working with families		
During the first year		
86. Demonstrate food canning.	53%	67%
87. Demonstrate food freezing.	55%	78%
88. Demonstrate food drying.	55%	67%

	Per Cent Aides	Per Cent EHE
89. Describe food canning and freezing costs.	51%	78%
90. Identify skills the homemaker needs to successfully can, freeze, or dry foods.	53%	78%
91. Identify equipment needed to can foods.	52%	78%
92. Identify equipment needed to freeze foods.	62%	78%
93. Identify equipment needed to dry foods.	59%	89%
94. Describe the procedure for cooking home canned food.	48%	78%
95. Identify length of storage for canned and frozen foods.	60%	89%

K. Understanding the audience and how to use effective methods and techniques in recruiting and teaching the low-income audience.

Before working with families

99. Respect and like people of all incomes, ages, nationalities, and religions.	94%	100%
212. Let families solve their own problems.	49%	50%
218. Evaluate children's behavior according to their age and stage of development.	44%	25%
274. Identify the importance of talking and listening to the ideas of youth and children as a basis of programs.	50%	33%
267. Identify safe methods of caring for children's play materials and equipment.	72%	22%

	Per Cent Aides	Per Cent EHE
During the first year		
103. Seek (look for) more resources (information about people, food, health, and money).	53%	67%
117. Provide information needed by program families.	74%	67%
121. Be familiar with the people and your assigned geographic area.	62%	22%
151. Plan lessons so the homemaker or youth stays interested and learns the information.	70%	50%
152. Present lessons that build on what people already know.	51%	56%
154. Adapt subject matter (lesson) so it is understood by the individual being taught.	61%	78%
155. Evaluate family situations and needs.	72%	67%
156. Evaluate family learning and progress toward goals.	72%	100%
160. Identify the needs and interests of adults.	60%	44%
161. Describe ways to motivate adults.	47%	78%
167. Motivate people to help themselves.	52%	67%
170. Identify the needs and interests of program families.	69%	62%
184. Identify ways to help families set short-term or long-term goals.	60%	67%
188. Change your lesson plans to suit the program family or individual.	73%	78%
201. Identify when it is best to work with the individual, or small groups.	70%	89%

	Per Cent Aides	Per Cent EHE
211. Identify types of family problems experienced by low-income families.	57%	33%
214. Provide encouragement and support as the family solves its problems.	58%	89%
215. Identify individual needs of program family members.	63%	88%
216. Identify needs of program families.	63%	88%
217. Identify the physical, emotional, social, and mental changes that take place as children grow.	53%	75%
271. Identify how short-term family objectives lead to long-range family goals.	63%	56%
272. Identify advantages of decision-making process as a means of helping individuals find satisfaction in everyday life.	50%	56%
207. Provide emotional support, encouragement to program family members.	62%	43%
208. Praise small achievements of program family members.	60%	75%
209. Identify the homemakers' strong points and encourage their development.	60%	78%
210. Help families identify ways to overcome food and nutrition and related problems.	70%	78%
L. Use effective methods and techniques		
Before working with families		
275. Praise small accomplishments to motivate the homemakers.	50%	44%

	Per Cent Aides	Per Cent EHE
During the first year		
107. Include volunteers in program planning.	64%	62%
108. Recruit volunteers for program families.	69%	75%
109. Train volunteers for the food/ nutrition job they have agreed to do.	63%	75%
110. Provide written information, teaching ideas, and other helps to volunteers.	66%	75%
111. Thank and praise volunteers.	56%	50%
112. Find jobs volunteers can do.	65%	62%
116. Plan and conduct a home visit.	74%	67%
136. Plan learning situations (programs) for individuals and groups.	81%	62%
137. Identify knowledge and skills needed to conduct a lesson.	72%	44%
146. Involve EFNEP families in the total extension program (4-H, homemakers, adult classes).	76%	100%
150. Conduct organized, well planned group meetings.	77%	89%
153. Plan lessons to change or improve people's attitudes, knowledge, and skills.	68%	44%
162. Demonstrate a variety of teaching methods.	60%	67%
163. Plan a nutrition lesson for adults.	58%	67%
164. Plan a nutrition lesson for youth.	51%	56%

	Per Cent Aides	Per Cent EHE
165. Develop illustrative teaching materials for nutrition lesson	68%	56%
166. Develop different ways to present information to a variety of audiences.	58%	62%
168. Involve whole family in the nutrition program.	60%	100%
174. Provide opportunities for family members to "show and tell" things they are good at doing.	56%	100%
176. Operate audio-visual equipment.	44%	56%
177. Present an effective demonstration.	67%	44%
179. Use teaching methods that encourage low income adults and youth to learn.	61%	56%
180. Identify other educational activities available for program families.	61%	75%
189. Use the telephone to communicate with program families.	52%	38%
225. Train 4-H EFNEP leaders.	55%	50%
227. Prepare lesson plans before meeting with small groups or individuals.	71%	56%
Not needed		
257. Use a microphone when speaking in front of groups	60%	67%
M. Know own abilities and skills.		
Before working with families		
96. Work with people and their problems without gossiping.	67%	78%

	Per Cent Aides	Per Cent EHE
97. Identify own ability to do work.	65%	78%
100. Listen and hear what other people say, without judging their comments.	78%	78%
101. Accept self as worthwhile person.	89%	100%
102. Arrange home life so your co-workers and families can depend on you.	67%	56%
104. Learn and believe that others can learn.	77%	78%
105. Seek (look for) ways to improve self and work.	53%	56%
122. Practice good nutrition.	55%	44%
123. Do the best job possible.	66%	44%
276. Show enthusiasm even when progress is slow.	50%	56%
277. Keep own body weight within the ideal range.	67%	71%
278. Express feelings without fear of losing face.	70%	44%
<u>During the first year</u>		
106. Practice EFNEP skills and management in own home.	65%	44%
169. Show enthusiasm during each program family visit.	56%	62%
178. Present accurate food and nutrition information during home visit.	73%	56%
213. Gain the confidence of families.	56%	78%
255. Train 4-H EFNEP leaders.	61%	25%

	Per Cent Aides	Per Cent EHE
N. Information on services available and how to advise the family about these services.		
Before working with families		
98. Identify times when aide needs more information or help.	52%	44%
131. Use the telephone directory as source of information.	73%	44%
During the first year		
9. Identify agencies, community services where individuals can get information about special diets.	60%	67%
10. List community and neighborhood resources (groups and individuals) who work with nutrition problems.	66%	56%
14. Develop a list of situations (times) when an aide needs to get expert help with a family's nutrition needs.	77%	78%
130. Identify agencies and community resources which will help families.	69%	75%
183. Identify sources of information and where to refer families needing help.	57%	56%
195. Describe how families are helped by community service agencies.	62%	67%
220. Identify situations when families need to be referred to family counseling agencies or groups.	52%	75%
244. Locate professional help for program families during times of crisis.	63%	75%

	Per Cent Aides	Per Cent EHE
O. Operational procedures of the program.		
Before working with families		
114. Speak, write, and read Spanish if needed in your community.	50%	75%
115. Read, write, and speak English.	85%	89%
118. Drive a car.	91%	89%
125. Accept and follow supervision.	54%	78%
126. Begin work on time, stay until your working day is over.	52%	67%
129. Organize time so all work tasks are completed.	47%	33%
132. Ask for assistance or help when you need it.	60%	44%
181. Use a community road map.	36%	78%
182. Identify your risks when involved in an accident.	65%	67%
During the first year		
113. Cooperate with co-workers.	50%	56%
119. Explain services provided by DES (Department of Economic Security).	65%	75%
124. Work with limited supervision.	56%	44%
127. Complete information for the six-month Unit report.	72%	100%
128. Manage own personal budget to allow for business expenses.	50%	33%
129. Organize time so all work tasks are completed.	47%	67%

	Per Cent Aides	Per Cent EHE
133. Inform other Extension staff of your work activities.	73%	56%
134. Recruit new EFNEP families and individuals.	81%	67%
135. Explain the Affirmative Action Plan.	48%	44%
138. Explain the Expanded Food and Nutrition Education Program.	79%	78%
139. Explain the Cooperative Extension Service.	77%	56%
140. Describe the EFNEP goals.	81%	78%
141. Describe what EFNEP Aides do.	77%	67%
142. Describe what 4-H EFNEP is and does.	58%	56%
143. Publicize EFNEP.	83%	78%
144. Refer youth to 4-H EFNEP.	74%	67%
145. Refer adults to EFNEP.	81%	78%
147. Understand the purposes of EFNEP.	81%	67%
148. Work within the written EFNEP guidelines.	83%	89%
149. Offer programs that meet affirmative action requirements.	62%	78%
157. Graduate EFNEP families when they reach EFNEP objectives.	73%	89%
159. Write and keep neat, accurate family records.	63%	56%
171. Share program ideas with other aides, volunteers, clients, and Extension staff.	69%	88%
172. Keep confidences learned about each program family.	53%	62%

	Per Cent Aides	Per Cent EHE
173. Discuss confidential matters only with supervising home economist.	49%	62%
175. Identify the target audience for the Expanded Food and Nutrition Education Program.	63%	50%
181. Use a community road map.	36%	22%
231. Explain E.E.O., the Equal Employment Opportunity Act and each person's rights because of it.	43%	43%
242. Discuss program family problems with Extension home economist so requests for help can be made.	66%	100%
243. Discuss your work problems with Extension home economist.	76%	88%
256. Try new ideas, i.e., food, teaching, management, etc.	58%	67%
Not needed		
120. Speak, read, and write the appropriate Arizona Indian Language if needed in your program unit or county.	83%	28%
224. Organize 4-H EFNEP Clubs.	60%	75%

APPENDIX B

SAMPLE EFNEP AIDE TRAINING GUIDE

These EFNEP training guides were developed to illustrate the use of the competency statements which were categorized in the Aune 77 survey. Please note the guides are categorized into preservice (before) and in-service (during the first year) segments. The clustered segments were also grouped into related topics for easier teaching.

EFNEP Aide Competencies

Needed before working with families

D. Knowledge and practice in food selection and buying

Competency	Knowledge, attitudes and skills to be exhibited	Suggested Methods (What the trainer will do)	Suggested Resource Materials	Who will do Training	Date
260. Identify advantages of keeping a record of money spent for food. 191. Keep a record of money spent on food.	-Compares food record keeping methods. -Selects a method suitable for program families. -Keeps a record of money spent on food.	Have available a variety of record keeping forms.			
192. Describe the free lunch program available in school.	=Identifies meal programs available to school children.	Ask aides to visit with their local school administrators.			
247. Use grocery store sale ads to plan a weekly menu.	-Compares store ads. -Identifies best buys. -Selects a store to do weekly shopping in. -Writes one week's menus using best buys found in the ads.	Ask aides to bring along newspaper grocery ads. Plan low cost menus for their own family.			

Needed during the first year

D. Knowledge and Practice in food selection and buying.

Competency	Knowledge, attitudes and skills to be exhibited	Suggested Methods (What the trainer will do)	Suggested Resource Materials	Who will do Training	Date
16. Explain why food is fortified.	Fortification--define -identify fortified food -explain why fortified	Bring samples or sample labels of foods that are fortified and enriched (milk, bread, flour, cereal, etc.). Aides sort the products read label to determine why foods are enriched or fortified.	Food labels		
17. Explain why food is enriched.					
18. Identify when fortification and enrichment of food is important.	Enrichment--define -identify enriched foods -explain why enriched				
233. Explain the printed information on food label.	-Describe ROA's -Describe serving sizes -Describe other information found on the label.	Provide labels for aides to read and explain. Conduct a judging event for the aides. Food labels could include: convenience foods, frozen, canned and dried foods.	Food labels 4-H judging class		
237. Identify inexpensive (economical) food sources of nutrients needed by the body.	-List nutrients needed -Compare food labels descriptions of foods for nutrient content -Identify less expensive foods which supply the necessary nutrients -Compare foods for cost & nutrition value	Distribute daily food guides. Use guides to determine nutrients furnished by certain foods. Compare food labels and food models, identify nutrient. Ask aides to comparison shop a specific list of foods.	List of foods for comparison shopping.		

APPENDIX C

NUMERICAL CODING

Aune 77 competency survey statements numerically coded to the present study.

Aune (A) and Present (P) Statement Numbers

A	P	A	P	A	P	A	P	A	P	A	P
2	1	30	18	62	35	100	55	133	77	162	63
4	2	31	19	63	36	102	59	134	67	164	95
5	3	35	20	65	37	103	60	136	78	169	85
6	4	37	21	66	38	106	61	139	79	170	96
8	5	41	22	68	39	108	49	140	80	171	98
9	6	43	23	69	40	109	62	141	83	172	57
12	7	44	24	73	41	110	66	142	87	173	84
13	8	45	25	77	42	111	68	143	90	174	97
14	9	46	26	78	43	113	69	146	88	175	99
15	10	47	27	81	44	116	70	147	91	177	100
17	11	49	28	83	45	117	71	148	56	182	101
18	12	53	29	86	46	122	72	149	92	184	89
19	13	54	30	87	47	124	73	152	82	185	102
23	14	55	31	88	51	126	74	153	81	186	52
24	15	56	32	89	54	128	65	154	93	187	103
27	16	58	33	90	58	130	75	158	94	188	104
28	17	59	34	99	48	131	76	160	96	192	105
193	106	215	114	240	126	261	135				
198	107	218	116	241	125	263	136				
199	53	221	117	242	128	265	137				
200	108	223	118	244	127	270	138				
206	109	227	119	245	129	273	142				
207	110	228	121	248	130	274	139				
210	111	229	122	250	131	275	140				
211	112	230	123	251	132	277	64				
212	115	231	120	252	133	278	141				
213	113	233	124	258	134	279	143				
214	86										

APPENDIX D

COVER LETTERS AND SURVEY QUESTIONNAIRE

April 26, 1978
To: Certain EFNEP Aides
In: Arizona, New Mexico, and North Dakota

Dear

I need your help. Enclosed is an EFNEP survey that I would like you to respond to. Your response to this survey will help describe the work done by EFNEP aides in Arizona, New Mexico, and North Dakota.

You and thirteen other aides from your state were chosen to respond to the survey. Your answers are important to the project. The answers you give will be combined with answers from other aides in your state. I will be the only one to see your individual answers, so respond the way you want to.

Why do I want this information? New EFNEP aides have a lot to learn before they start to work with families and during the first year of their work. With the information you give, better aide training programs can be planned. Also, I personally need this information to complete my work for a Master's degree in Extension Education at The University of Arizona in Tucson.

You do not have to respond to this survey, and there will not be a penalty if you do not. But, I need your responses and appreciate your help.

To complete the survey, please follow the instructions. Return it in the envelope provided. I need the survey back no later than May 26, 1978.

Thank you.

Sincerely,

Pat Aune
Room 110, School of Home Economics
The University of Arizona
Tucson, AZ 85721

April 26, 1978
To: Certain EFNEP Professional Supervisors,
Extension Agents
In: Arizona, New Mexico, and North Dakota

Dear

I need your help! Enclosed is an EFNEP competency survey which is being sent to certain aides and supervisors in Arizona, New Mexico, and North Dakota. The responses to this survey will help determine "if" and "when" aides need to receive training for the identified competency. I hope you will participate in this research by completing a survey.

The survey was written for EFNEP aides. When you respond, please consider each statement as to when you think aides need this competency.

The responses from each state will be combined so no one individual can be identified. I will be the only person to see or use the individual responses from you and the aides.

This research is being used for my Master's thesis in Extension Education at The University of Arizona. The program leader or EFNEP Coordinator in your state will receive an analysis of the final data from the research. I plan to have that completed before February 1, 1979.

Attached is a copy of the letter sent to aides. You may want to know what information they have received. Please do not discuss the survey with them.

Your response to this survey is voluntary. Only six professionals from each state will be surveyed, so your response is quite important.

Please return the survey in the envelope provided no later than May 26, 1978.

Thank you.

Sincerely,

Pat Aune
Room 110, School of Home Economics
The University of Arizona
Tucson, AZ 85721

Attachment

Competency Survey

EFNEP Aides need to know certain information and be able to do certain things. This knowledge and these abilities are called competencies.

Your help is needed to identify (pick out) competencies which Aides should have. Your answers to this survey will help with planning training meetings and other learning experiences for EFNEP Aides.

As soon as possible, please complete the survey and return to Pat Aune, Room 110, School of Home Economics, The University of Arizona, Tucson, AZ 85721. Please return before May 26, 1978.

It is important that you respond to each competency statement, numbered 1 to 143. The computer will not accept any of your responses if you forget even one answer. Mark only one response to each competency.

The information which describes your working situation is for my information only. It will not be used to identify you in any way. If you do not want to answer any of these questions, you do not have to. The information you give will be combined with information from other Aides and will be reported as totals.

****

You do not have to fill out this survey. If you do fill it out, that means you give your consent for your responses to be added to the responses of other EFNEP Aides and reported as totals. The information provided by you and other EFNEP Aides will help improve the EFNEP program.

The survey will take 45-60 minutes. Please respond to the statements to the best of your ability. There are no right or wrong answers, only your opinions.

DO NOT SIGN YOUR NAME.

Please do not discuss the statements with other Aides or your supervisor. Your opinion is needed, not anyone else's.

THANK YOU*****THANK YOU*****THANK YOU

The following information will help us use this survey. This is for our information only. It will not be used to identify you in any way. Do not answer any question you do not feel good about.

Survey Number:_____

The state you work in is:_____

Your Extension Service position is:

_____EFNEP Aide

_____EFNEP professional supervisor (Extension Agent)

Have you worked with EFNEP one year or longer? ___Yes ___No

Have you worked as a homemaker or youth aide with a different agency?

___Yes How long?_____

What did you do?_____

___No

Where is most of your work done?

___Indian Reservation

___Rural (communities with populations less than 2,500)

___Urban (communities with populations more than 2,500)

Check the highest grade you have completed:

___8th grade

___9th

___10th

___11th

___12th

___13 years of school

___14 years

___15 years

___college graduate

How many Aides work in your EFNEP Unit? ___1-5 Aides;

___6-10 Aides; ___11-20 Aides; ___over 20 Aides.

Please check your racial/ethnic origin. (You do not have to answer. This is for our information only.)

___Black; ___Oriental; ___Mexican/American;

___American Indian; ___White

COMPETENCY SURVEY

How is the survey to be completed?

Read each competency statement and mark X beside the statement which best describes "if" or "when" you need that competency. This means "if" or "when" YOU need that competency, not when another Aide needed that competency.

Example:

O. Drive a car.

X A. Before (this means you needed to know and be able to do this before starting to work with EFNEP families).

___B. During the first year (this means you needed to know and be able to do this during the first year you worked with program families).

___C. Not needed (this means you have not used this competency).

The statements will be shortened. Please refer to the example above for an explanation of what each means.

REMEMBER: pick ONE response to EACH competency statement.

****

1. Describe what each nutrient does for the body (protein, carbohydrate, fat, vitamins, minerals, water).

___A. Before
___B. During first year
___C. Not needed

2. Plan a one-day menu including the right number of servings from each food group.

___A. Before
___B. During first year
___C. Not needed

3. Plan breakfast, lunch (packed or at home) and dinner menus for one week; include a variety of foods needed by family members.

___A. Before
___B. During first year
___C. Not needed

4. Define a calorie.

___A. Before
___B. During first year
___C. Not needed

5. Explain special diets (diabetic, low cholesterol, low sodium).

___A. Before
___B. During first year
___C. Not needed

6. Identify agencies (community services) where individuals can get information about special diets.

___A. Before
___B. During first year
___C. Not needed

7. Identify food fads.

___A. Before
___B. During first year
___C. Not needed

8. Explain why food fads and fad diets may be harmful to the user's health.

___A. Before
___B. During first year
___C. Not needed

9. Develop a list of situations (times) when an aide needs to get expert help with a family's nutrition needs.

___A. Before
___B. During first year
___C. Not needed

10. Identify the nutrients we need every day.

___A. Before
___B. During first year
___C. Not needed

11. Explain why food is enriched.

___A. Before
___B. During first year
___C. Not needed

12. Identify when fortification and enrichment of food is important.

___A. Before
___B. During first year
___C. Not needed

13. Explain how combination foods fit into the four food groups, i.e., tacos, stew, macaroni and cheese, etc.

___A. Before
___B. During first year
___C. Not needed

14. List foods that are a source of complete protein.

___A. Before
___B. During first year
___C. Not needed

15. Name essential minerals and list important food sources of each.

___A. Before
___B. During first year
___C. Not needed

16. Cook a variety of foods.

___A. Before
___B. During first year
___C. Not needed

17. Demonstrate acceptable ways of measuring ingredients.

___A. Before
___B. During first year
___C. Not needed

18. Cook native foods.

___A. Before
___B. During first year
___C. Not needed

19. Describe the purpose of various cooking ingredients.

___A. Before
___B. During first year
___C. Not needed

20. Prepare foods to retain (keep) the most nutrients.

___A. Before
___B. During first year
___C. Not needed

21. Plan for and use leftover food.

___A. Before
___B. During first year
___C. Not needed

22. Identify ways to introduce new foods to family members.

___A. Before
___B. During first year
___C. Not needed

23. Demonstrate table setting.

___A. Before
___B. During first year
___C. Not needed

24. Select recipes suitable for the program families.

___A. Before
___B. During first year
___C. Not needed

25. Identify common food weights, measurements, and abbreviations.

___A. Before
___B. During first year
___C. Not needed

26. Describe good eating behavior patterns of infants and children.

___A. Before
___B. During first year
___C. Not needed

27. Identify attitudes and circumstances that influence children's food likes and dislikes.

___A. Before
___B. During first year
___C. Not needed

28. Demonstrate care and cleaning of an oven.

___A. Before
___B. During first year
___C. Not needed

29. Explain steps to take when a freezer or refrigerator fails to work.

___A. Before
___B. During first year
___C. Not needed

30. Describe how to save frozen foods when the freezer fails.

___A. Before
___B. During first year
___C. Not needed

31. Demonstrate use of cleaning agents.

___A. Before
___B. During first year
___C. Not needed

32. Plan a kitchen cleaning procedure that saves time and energy and considers the homemaker's ability.

___A. Before
___B. During first year
___C. Not needed

33. Explain the costs of food freezers and when food freezers save grocery money.

___A. Before
___B. During first year
___C. Not needed

34. Describe ways to rid a home of bugs and other pests.

___A. Before
___B. During first year
___C. Not needed

35. Wash all food preparation tools with hot water and soap and thoroughly rinse after working with food.

___A. Before
___B. During first year
___C. Not needed

36. Take away all garbage each day.

___A. Before
___B. During first year
___C. Not needed

37. Identify household disinfectants.

___A. Before
___B. During first year
___C. Not needed

38. Explain how to identify food spoilage.

___A. Before
___B. During first year
___C. Not needed

39. Select foods needing refrigerator storage.

___A. Before
___B. During first year
___C. Not needed

40. Identify foods needing dry shelf storage.

___A. Before
___B. During first year
___C. Not needed

41. Explain safe handling of eggs, poultry, fish, and dairy foods.

___A. Before
___B. During first year
___C. Not needed

42. Identify possible safety hazards caused by electrical equipment, i.e., frayed electrical cords, electrical equipment near water, etc.

___A. Before
___B. During first year
___C. Not needed

43. Explain the safe use of food preparation equipment, e.g., knives, gas and electric ranges, barbecue grills, wood stoves.

___A. Before
___B. During first year
___C. Not needed

44. Identify ways to put out kitchen fires (hot fat).

___A. Before
___B. During first year
___C. Not needed

45. Name the advantages and disadvantages of growing a garden.

___A. Before
___B. During first year
___C. Not needed

46. Demonstrate food canning.

___A. Before
___B. During first year
___C. Not needed

47. Demonstrate food freezing.

___A. Before
___B. During first year
___C. Not needed

48. Respect and like people of all incomes, ages, nationalities, and religions.

___A. Before
___B. During first year
___C. Not needed

49. Recruit volunteers from program families.

___A. Before
___B. During first year
___C. Not needed

50. Work with people and their problems without gossiping.

___A. Before
___B. During first year
___C. Not needed

51. Demonstrate food drying.

___A. Before
___B. During first year
___C. Not needed

52. Identify family attitudes toward their living conditions.

___A. Before
___B. During first year
___C. Not needed

53. Identify a lack of material and human resources within fmailies.

___A. Before
___B. During first year
___C. Not needed

54. Describe food canning and freezing costs.

___A. Before
___B. During first year
___C. Not needed

55. Listen and hear what other people say, without judging their comments.

___A. Before
___B. During first year
___C. Not needed

56. Work within the written EFNEP guidelines.

___A. Before
___B. During first year
___C. Not needed

57. Keep confidences learned about each program family.

___A. Before
___B. During first year
___C. Not needed

58. Identify skills the homemaker needs to successfully can, freeze, or dry foods.

___A. Before
___B. During first year
___C. Not needed

59. Arrange home life so your co-workers and families can depend on you.

___A. Before
___B. During first year
___C. Not needed

60. Seek (look for) more resources (information about people, food, health, and money).

___A. Before
___B. During first year
___C. Not needed

61. Practice EFNEP skills and management in own home.

___A. Before
___B. During first year
___C. Not needed

62. Train volunteers for the food/nutrition job they have agreed to do.

___A. Before
___B. During first year
___C. Not needed

63. Demonstrate a variety of teaching methods.

___A. Before
___B. During first year
___C. Not needed

64. Keep own body weight within the ideal range.

___A. Before
___B. During first year
___C. Not needed

65. Manage own personal budget to allow for business expenses.

___A. Before
___B. During first year
___C. Not needed

66. Provide written information, teaching ideas, and other helps to volunteers.

___A. Before
___B. During first year
___C. Not needed

67. Recruit new EFNEP families and individuals.

___A. Before
___B. During first year
___C. Not needed

68. Thank and praise volunteers.

___A. Before
___B. During first year
___C. Not needed

69. Cooperate with co-workers.

___A. Before
___B. During first year
___C. Not needed

70. Plan and conduct a home visit.

___A. Before
___B. During first year
___C. Not needed

71. Provide information needed by program families.

___A. Before
___B. During first year
___C. Not needed

72. Practice good nutrition.

___A. Before
___B. During first year
___C. Not needed

73. Work with limited supervision.

___A. Before
___B. During first year
___C. Not needed

74. Begin work on time, stay until your working day is over.

___A. Before
___B. During first year
___C. Not needed

75. Identify agencies and community resources which will help families.

___A. Before
___B. During first year
___C. Not needed

76. Use the telephone directory as a source of information.

___A. Before
___B. During first year
___C. Not needed

77. Inform other Extension staff of your work activities.

___A. Before
___B. During first year
___C. Not needed

78. Plan learning situations (programs) for individuals and groups.

___A. Before
___B. During first year
___C. Not needed

79. Explain the Cooperative Extension Service.

___A. Before
___B. During first year
___C. Not needed

80. Describe the EFNEP goals.

___A. Before
___B. During first year
___C. Not needed

81. Plan lessons to change or improve people's attitudes, knowledge, and skills.

___A. Before
___B. During first year
___C. Not needed

82. Present lessons that build on what people already know.

___A. Before
___B. During first year
___C. Not needed

83. Describe what EFNEP Aides do.

___A. Before
___B. During first year
___C. Not needed

84. Discuss confidential matters only with the supervising home economist.

___A. Before
___B. During first year
___C. Not needed

85. Show enthusiasm during each program family visit.

___A. Before
___B. During first year
___C. Not needed

86. Provide encouragement and support as the family solves its problems.

___A. Before
___B. During first year
___C. Not needed

87. Describe what 4-H EFNEP is and does (the youth phase of EFNEP).

___A. Before
___B. During first year
___C. Not needed

88. Involve EFNEP families in the total Extension program (4-H, homemakers, adult classes).

___A. Before
___B. During first year
___C. Not needed

89. Identify ways to help families set short-term or long-term goals.

___A. Before
___B. During first year
___C. Not needed

90. Publicize EFNEP.

___A. Before
___B. During first year
___C. Not needed

91. Understand the purposes of EFNEP.

___A. Before
___B. During first year
___C. Not needed

92. Offer programs that meet affirmative action requirements.

___A. Before
___B. During first year
___C. Not needed

93. Adapt subject matter (lesson) so it is understood by the individual being taught.

___A. Before
___B. During first year
___C. Not needed

94. Take a 24-hour dietary recall.

___A. Before
___B. During first year
___C. Not needed

95. Plan a nutrition lesson for youth.

___A. Before
___B. During first year
___C. Not needed

96. Identify the needs and interests of program families.

___A. Before
___B. During first year
___C. Not needed

97. Provide opportunities for family members to "show and tell" things they are good at doing.

___A. Before
___B. During first year
___C. Not needed

98. Share program ideas with other aides, volunteers, clients, and Extension staff.

___A. Before
___B. During first year
___C. Not needed

99. Identify the target audience for the Expanded Food and Nutrition Education Program.

___A. Before
___B. During first year
___C. Not needed

100. Present an effective demonstration.

___A. Before
___B. During first year
___C. Not needed

101. Identify your risks when involved in an accident.

___A. Before
___B. During first year
___C. Not needed

102. Identify available family resources and how they can be used more effectively.

___A. Before
___B. During first year
___C. Not needed

103. Identify advantages and disadvantages of planning ahead.

___A. Before
___B. During first year
___C. Not needed

104. Change your lesson plans to suit the program family or individual.

___A. Before
___B. During first year
___C. Not needed

105. Describe the free lunch program available in schools.

___A. Before
___B. During first year
___C. Not needed

106. Explain to the unemployed how to get and keep a job.

___A. Before
___B. During first year
___C. Not needed

107. Identify family situations where family resource counseling is needed.

___A. Before
___B. During first year
___C. Not needed

108. Make the best use of available resources.

___A. Before
___B. During first year
___C. Not needed

109. Seek community help to find a vegetable garden space in the city.

___A. Before
___B. During first year
___C. Not needed

110. Provide emotional support, encouragement to program family members.

___A. Before
___B. During first year
___C. Not needed

111. Help families identify ways to overcome food and nutrition related problems.

___A. Before
___B. During first year
___C. Not needed

112. Identify types of family problems experienced by low-income families.

___A. Before
___B. During first year
___C. Not needed

113. Gain the confidence of families.

___A. Before
___B. During first year
___C. Not needed

114. Identify the individual needs of program family members.

___A. Before
___B. During first year
___C. Not needed

115. Let families solve their own problems.

___A. Before
___B. During first year
___C. Not needed

116. Evaluate children's behavior according to their age and stage of development.

___A. Before
___B. During first year
___C. Not needed

117. Figure (compute) cost per serving of food.

___A. Before
___B. During first year
___C. Not needed

118. Make simple kitchen repairs.

___A. Before
___B. During first year
___C. Not needed

119. Prepare lesson plans before meeting with small groups or individuals.

___A. Before
___B. During first year
___C. Not needed

120. Explain E.E.O., the Equal Employment Opportunity Act, and each person's rights because of it.

___A. Before
___B. During first year
___C. Not needed

121. Explain unit pricing.

___A. Before
___B. During first year
___C. Not needed

122. Use dried foods.

___A. Before
___B. During first year
___C. Not needed

123. Avoid impulse buying.

___A. Before
___B. During first year
___C. Not needed

124. Explain the printed information on food labels.

___A. Before
___B. During first year
___C. Not needed

125. Identify good quality fresh fruits and vegetables.

___A. Before
___B. During first year
___C. Not needed

126. Compare cost of groceries in health food or specialty stores with groceries in a regular grocery store.

___A. Before
___B. During first year
___C. Not needed

127. Locate professional help for program families during times of crisis.

___A. Before
___B. During first year
___C. Not needed

128. Discuss program family problems with Extension home economist so requests for help can be made.

___A. Before
___B. During first year
___C. Not needed

129. Describe "organic" foods and their role in the diet.

___A. Before
___B. During first year
___C. Not needed

130. Prepare a grocery list from a weekly menu; consider grocery store layout.

___A. Before
___B. During first year
___C. Not needed

131. Shop for non-perishable and perishable foods in proper order at the store.

___A. Before
___B. During first year
___C. Not needed

132. Compare costs of convenience and home-made foods.

___A. Before
___B. During first year
___C. Not needed

133. Plan a monthly grocery budget which provides for a well-balanced diet, including holiday, party, or company meals.

___A. Before
___B. During first year
___C. Not needed

134. Plan meals to provide a wider variety of foods for hurriedly prepared meals.

___A. Before
___B. During first year
___C. Not needed

135. Identify special services provided by stores, which may influence food prices.

___A. Before
___B. During first year
___C. Not needed

136. Identify foods included in each of the four food groups.

___A. Before
___B. During first year
___C. Not needed

137. Identify ways of preparing fruits and vegetables to retain nutrients.

___A. Before
___B. During first year
___C. Not needed

138. Identify dangers of careless use of insecticides.

___A. Before
___B. During first year
___C. Not needed

139. Identify the importance of talking to and listening to the ideas of youth and children as a basis for planning EFNEP activities.

___A. Before
___B. During first year
___C. Not needed

140. Praise small accomplishments to motivate the homemakers.

___A. Before
___B. During first year
___C. Not needed

141. Express feelings without fear of losing face.

___A. Before
___B. During first year
___C. Not needed

142. Plan nutritious packed or bag lunches.

___A. Before
___B. During first year
___C. Not needed

143. Give the family time to change their old patterns of eating.

___A. Before
___B. During first year
___C. Not needed

(Please double check statements 1 to 143. The computer will not accept <u>any</u> of your responses if even one question is not answered.)

APPENDIX E

DEMOGRAPHIC DATA

	Arizona		N. Mexico		N. Dakota	
	Aide	EHE	Aide	EHE	Aide	EHE
Location:						
Indian Res.	1	1	1	1	3	2
Rural	3	0	3	1	0	1
Urban	8	5	7	4	7	3
Education:						
8th	2	0	2	0	1	0
9th	0	0	1	0	0	0
10th	2	0	2	0	0	0
11th	0	0	1	0	0	0
12th	5	0	3	0	5	0
13 years	2	0	1	0	1	0
14	1	0	0	0	1	0
15	0	0	1	0	0	0
College Grad.	0	6	0	6	2	6
Total	12	6	11	6	10	6
Unit Size:						
1-5 Aides	5	4	3	2	10	6
6-10 Aides	2	0	1	0	0	0
11-20 Aides	5	2	7	4	0	0

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