

EVALUATION OF SELECTED OUTREACH PROGRAMS
IN NUTRITION EDUCATION

By

BARBARA GUTHRIE ALSUP

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Western Kentucky University

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Thesis Approved:

Margaret L. Callow

Thesis Adviser

Joan Baird

Elaine Jorgenson

Norman A. Durham

Dean of Graduate College

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This study is an evaluation of 12 selected outreach programs in nutrition education. Results will be utilized by the Oklahoma State Department of Vocational-Technical Education to report evidence of outreach as specified in the Education Amendments of 1976. The Department of Home Economics Education and Community Services at Oklahoma State University will use the results (1) to provide a general knowledge about outreach programs in nutrition education, and (2) to make recommendations for future outreach programs in nutrition education.

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CHAPTER I

INTRODUCTION

John Dewey (1916, p. 244), in Democracy and Education, stated that activities are "magnets for gathering and retaining an indefinitely wide scope of intellectual considerations," for these activities "provide vital centers for the reception and assimilation of information." Dewey also stated that "activity that is not checked by observation of what follows from it may be temporarily enjoyed. But intellectually it leads to nowhere" (1938, p. 87). In education, "evaluation is a way of measuring the results of educational activities" (Morgan, Holmes, and Bundy, 1976, p. 217). "The primary purpose of evaluation in education is to find out how much growth and change has taken place as a result of educational experiences" (Committee on Evaluation, 1952, p. 3). Evaluation, as stated by Tyler (1962, p. 68), "then becomes a process for finding out how far the learning experiences [activities] as developed and organized are actually producing the desired results."

With the passage of the Education Amendments of 1976 (PL 94-482), the States were charged by the U.S. Congress to include certain components in their educational programs. Funds were appropriated to State consumer and homemaking

education programs for ancillary services and educational programs in consumer and homemaking. These educational programs were to consist of instructional programs, services, and activities at all levels for the occupations of homemaking (U.S. Congress, 1976, 90 STAT. 2196). The Amendments encouraged certain components of the educational programs. Among these were: (1) consideration of societal needs in depressed areas; (2) development of outreach programs giving consideration to special needs; and (3) an emphasis on societal needs as they relate to consumer education, management of resources, promotion of nutritional knowledge and food use, and parenthood education (U.S. Congress, 1976).

The Education Amendments encouraged, but did not limit, the following as possible target groups for outreach programs in communities:

aged, young children, school-age parents, single parents, handicapped persons, educationally disadvantaged persons, programs connected with health care delivery systems, and programs providing services for courts and correctional institutions (U.S. Congress, 1976, 90 STAT. 2196).

In Oklahoma, the specific target groups that have been identified as being in need of nutrition education are low income families, senior citizen groups, Indian families, and teenage parents. Nutritional status of the low income population was confirmed in the Ten-State Nutrition Survey (TSNS) which reported that a significant portion of the population was malnourished and that there was increasing evidence of malnutrition as income levels decreased

(Highlights of the TSNS, 1972).

The TSNS included in its sample over 3600 elderly persons. The major dietary problems of the elderly were related to obesity and starvation (Schaefer, 1980). The physiological changes during aging, the role of nutrients and mental function, nutritional anemias, cardiovascular problems, osteoporosis, and drug-related malnutrition are areas identified by Schaefer (1980) as in need of attention to nutrition educators working with the elderly population.

Bass and Wakefield (1974), Bose and Welsh (1973), Latham (1973), and Bosely (1959) have identified the following as physical complications related to nutrition that are prevalent in the American Indian population: diabetes mellitus; alcoholism; lactose intolerance; nutritional anemia; significant underweight and obesity; gall bladder disease; respiratory infections (including tuberculosis); poor oral hygiene and dental disease; eye and visual problems; and mental, emotional, and behavioral diseases.

The TSNS reported that "adolescent girls between the ages of 10 and 16 had the highest prevalence of unsatisfactory nutritional status" (1972, p. 7). In the United States, "the incidence of teenage pregnancy has increased to one out of seven" teenage girls (Mitchell, 1980, p. 9). McGanity (1978) stated that girls who become pregnant during the four years after menarche are at biological risk because their bodies are still anatomically and physiologically immature. Major risks related to these teenage pregnancies

include low birth weight infants and dietary deficiencies of calcium, iron, Vitamin A, folacin, riboflavin and pyridoxine (B₆) (Carruth, 1980). Carruth stated that nutrition education emphasis should be placed on the value of a good diet during pregnancy and the modification of food choices to contribute to better postnatal health.

In May 1980, the Oklahoma State Department of Vocational-Technical Education (OSDVTE) and the Department of Home Economics Education and Community Services at Oklahoma State University sponsored a workshop to train consumer and homemaking teachers in nutrition education and outreach. The workshop combined three of the special emphasis areas in the vocational education portion of the Education Amendments of 1976, i.e., outreach programs in communities, consideration to disadvantaged populations, and nutrition as a subject area.

Workshop participants, as selected by the Oklahoma State Department of Vocational-Technical Education, were to develop a plan for outreach in their home communities utilizing the previously identified target groups. Activities related to the development of the outreach plan included an up-date on nutrition knowledge, research and synthesis of subject matter related to a specific target group, and evaluation and selection of resources to be used in respective projects. (Appendix A contains the workshop syllabus and subsequent outreach plans.)

In order to determine the status of the outreach programs that were developed by the participants of the nutrition education and outreach workshop a systematic evaluation was proposed. Evaluation results may be utilized: (1) to report program benefits, (2) to provide a basis for accountability, (3) to show program evidence, and (4) to make recommendations for future outreach programs.

Purpose

The purpose of this study was to evaluate the status of outreach programs that were developed by participants of the nutrition education and outreach workshop. This study accompanied a project sponsored by the Oklahoma State Department of Vocational-Technical Education. Results will be used to report evidence of outreach as specified in the Education Amendments of 1976 (PL 94-482), as well as provide general knowledge about outreach programs in nutrition education.

Objectives

The following objectives were set for the evaluation:

1. To evaluate the overall effectiveness of the outreach programs in areas such as:
 - a. student characteristics,
 - b. context characteristics,
 - c. characteristics of program implementation, and

d. program outcomes.

2. To develop instruments suitable for this evaluation that can be adapted for other outreach programs.

3. To cooperatively assist consumer and homemaking teachers in evaluation of their outreach programs.

4. To report results to the Oklahoma State Department of Vocational-Technical Education with evidence of program achievement.

5. To modify instruments and make recommendations for future outreach programs and evaluations.

Research Questions

From the objectives the following research questions were formulated:

1. What were the successes, problems, and future recommendations related to support functions?

2. What was the impact of the outreach effort on the target group?

3. What were the serendipity effects of the outreach project?

4. What were the program evidences documenting the need for future/further nutrition education outreach training or revisions in current programs?

Assumptions and Limitations

Accomplishment of the objectives of this study was based on the following assumptions:

1. Consumer and homemaking teachers have kept records sufficient to ensure precise project reporting.

2. Outreach populations will be representative of the specified target group.

3. Consumer and homemaking teachers will be able to honestly evaluate respective projects.

4. The instrument developed will be applicable to a variety of outreach projects.

The following limitations are acknowledged by the researcher:

1. The study is limited to self-selected teachers in Oklahoma.

2. Due to the small sample size, generalizations for more than the programs viewed may not be inferred.

Definitions

The following terms are defined as used in this research:

1. Case study--as defined by Anderson and Ball (1978)

refers to a wide range of methodologies that treat multiple variables and processes (either formally or informally), entail direct involvement of the evaluator (perhaps even in a participant role), and are concerned with one functioning unit at a time (p. 61).

2. Context characteristics--the framework of constraints within which a program must operate (Morris and Fitz-Gibbon, 1978, p. 20).

3. Evaluation--

a formal process by which an outcome of a program, or of one program component, is measured against

objectives in order to provide specific information which can be used in problem solving, decision making and improving future programming (Evaluating Service-Learning Programs: A Guide for Program Coordinators, 1978, p. 1).

4. Formative evaluation--requires collecting and sharing information for program improvement (Morris and Fitz-Gibbon, 1978, p. 8).

5. Nutrition education--

the process by which beliefs, attitudes, environmental influences, and understanding about food lead to practices that are scientifically sound, practical, and consistent with individual needs and available food resources (American Dietetic Association, 1978, p. 302).

6. Outreach project--those educational activities conducted off-campus or beyond the walls of the principal institution facility that involve services to special target populations (Ratcliff, 1979, p. 315).

7. Program evaluation--the collection of information about a program project in a manner that is credible enough to make it potentially useful (Morris and Fitz-Gibbon, 1978, p. 6).

8. Program implementation--the principal materials, activities, and administrative arrangements made to achieve the program's goals (Morris and Fitz-Gibbon, 1978, p. 20).

9. Program outcomes--measurement of the extent to which goals have been achieved (Morris and Fitz-Gibbon, 1978, p. 20).

10. Student characteristics--as stated by Morris and Fitz-Gibbon: a description of students which might include

such things as age, sex, socioeconomic status, language dominance, ability, attendance records, and attitudes (1978, p. 34).

11. Summative evaluation--assesses the overall effectiveness of an operating program (Anderson and Ball, 1978, p. 3).

12. Support functions--operationally defined as those ancillary services or activities which can facilitate the achievement of the objectives of a program. Examples of support functions include: recruitment, screening and placing, orientation, training, transportation, motivation and reward, evaluation, and community relations.

13. Target group--operationally defined as the population to which nutrition education efforts are focused. The target groups for this research were low income families, senior citizen groups, Indian families, and teenage parents.

14. Teacher--operationally defined as a consumer and homemaking instructor who attended the nutrition education and outreach workshop. A teacher may also be referred to as a project leader or workshop participant.

CHAPTER II

REVIEW OF LITERATURE

Introduction

"Today there is an increasing demand by legislators, policy-makers, and administrators that program effectiveness be demonstrated through formal evaluations" (Bennett, 1977, p. 3). Wasdyke (1978, p. 69) noted that the Education Amendments of 1976, PL 94-482, "placed considerable emphasis on evaluation, planning, and accountability" in vocational education. Evaluation data may aid funding agencies, educational institutions, instructors, program participants, and others in documentation of success and identification of future program planning needs.

The review has been analyzed and summarized into the following areas: the process of evaluation, program evaluation, evaluation in informal programs, and outreach evaluation.

The Process of Evaluation

Skager (1978, p. 23) stated that "educational evaluation incorporates a great many diverse activities and functions." Several authors have described evaluation as a process:

--a process by which an outcome of a program, or of one program component is measured against objectives in order to provide specific information (Evaluating Service-Learning Programs, 1978, p. 1).

--a process which determines the extent to which objectives have been achieved (Cross, 1973, p. 5).

--a process used by educators to determine the strength or value of their work (Morgan, Holmes, and Bundy, 1976, p. 217).

Skager (1978), in Lifelong Education and Evaluation Practice, described evaluation not as a process, but as a means by which individuals and groups constantly interpret their experiences. Skager also stated that:

Evaluation is the means by which participants in the learning/teaching process as well as concerned outsiders find out whether or not changes are needed, guide the development of means for dealing with those needs, and determine the overall effectiveness of the solutions that have evolved (p. 1).

Coles (1978, p. 95) added that "evaluation is, by definition, judgment, but is a specific kind of informed judgment, based on measurement and expertise and involving appraisal."

Morris and Fitz-Gibbon (1978) have cited several reasons for conducting an evaluation:

1. Evaluation can provide information needed for making specific decisions about a program.
2. Evaluation is often required by a program's funding agency.
3. Evaluation provides a basis of comparison from which to judge the relative quality of good practice.
4. Accumulated results from many evaluations can serve as basis for conclusions about what sorts of programs work best, in particular settings, and under particular conditions.

5. Evaluation is the best response to the ever-present assaults from fads and the hard-sell proponents of new-fangled materials and ideas.
6. Evaluation is an intelligent response to controversy.
7. Evaluation persuades people to pay attention to data about what the schools are doing.
8. Each time an evaluation is conducted, additional people require evaluation skills (pp. 14-15).

Many authors have expressed views about the purpose behind evaluation and the utilization of its results. Skager (1978) stated that the involvement of time and resources that might otherwise be directed to the teaching and learning process requires that evaluation must have a strongly utilitarian orientation. Anderson et al. (1975), stated that the primary purpose for evaluation in an education or training program is to provide information which might lead to decisions about the program. Skager (1978), Bennett (1977), and The Service-Learning Educator (1979) have stated that evaluation results may be used to document success, to identify future planning needs, to make decisions about continuation or termination of a program, to show exact services the program has provided, and to identify unintended consequences. Byrk (1978, p. 41) suggested that the information supplied to decision makers by evaluators should be "sufficiently broad to allow the decision maker to assess the desirability of alternative courses of action."

Four characteristics have been formulated to apply to all types of evaluation:

- (1) Evaluation in education always involves an appraisal of the desirability of events or conditions associated with learning and teaching. . . .
- (2) Evaluation is an experientially grounded activity carried out in a systematic and orderly manner. . . .
- (3) Evaluation is typically a field activity in that the information it utilizes is collected mainly in situations where learning activities occur in their natural settings. . . .
- (4) Evaluation is always undertaken in order to facilitate decision-making or policy formulation (Skager, 1978, pp. 24-26).

Program Evaluation

Scarvia Anderson (1978) stated that:

Program evaluation is not a new enterprise. It has been around for some time under such guises as operations research, institutional research, systems analysis, educational research, training evaluation, and policy studies (p. viii).

Knox (1979) considered program evaluation as an integral component of the overall process of program development.

Bennett (1977) included program evaluation in two steps of the program development process:

- (1) identifying problems and selecting long-range objectives;
- (2) specifying these objectives and the strategy, activities, and budget designed to achieve them;
- (3) conducting activities;
- (4) evaluating the program's strategy and impact; and
- (5) using this evaluation along with other information in subsequent program development (p. 3).

Knox (1979) suggested that a comprehensive program evaluation might include the consideration of certain elements - adult participation, instructors or resource persons, topics or content, and context or setting - in

relation to each of four program components - goals, designs, implementation and outcomes. He believed those dimensions would provide a classification scheme that would help in specification of evaluation questions and clarification of relations among the questions.

Anderson and Ball (1978), in The Profession and Practice of Program Evaluation, suggested six purposes that program evaluation can serve:

1. To contribute to decisions about program installation. . . .
2. To contribute to decisions about program continuation, expansion, or "certification". . . .
3. To contribute to decisions about program modification. . . .
4. To obtain evidence to rally support for a program. . . .
5. To obtain evidence to rally opposition to a program. . . .
6. To contribute to the understanding of basic psychological, social, and other processes (pp. 3-4).

Whatever the design or components involved in a program evaluation, Stufflebeam (1968, p. 7) stated that "the major purpose of program evaluation is to assist in reaching decisions on future direction, design, and funding of programs." Knox (1979) added that

in program evaluation it is desirable to focus the effort so that the benefits exceed the costs of evaluation, to obtain data from several sources to provide cross validation, and to increase commitment to the use of conclusions by involving in the evaluation process those who are to do so (p. 3).

Bennett indicated (1977, p. 3) that program evaluations might also suggest "reformulation of program objectives, strategy, delivery organization, educational methodology, and

intended audiences." However, research has concluded that all program evaluations are unique and that an evaluator will have to collect data to answer research questions relating to each particular situation (Forest and Marshall, 1979).

Knox (1979, p. 3) has stated that "all program evaluation typically entails description and judgment based on analysis of quantitative and qualitative data collected from records and from various categories of people associated with the program." Emphasis in program evaluation has been placed in two categories: formative and summative evaluation. These two components of program evaluation are interrelated. Knox (p. 2) stated that "formative evaluation typically occurs when people associated with the program make judgments about the satisfactoriness of the program and seek to use the conclusions for program improvement." Summative evaluation, on the other hand, may be utilized to assess the impact and benefits of the program for purposes of justification and support.

Formative Evaluation

Anderson and Ball (1978) stated that the purpose of formative evaluation is to develop a new program. According to Morris and Fitz-Gibbon (1978), formative evaluation takes place in the developmental phase of a program and requires the collecting and sharing of information for program improvement. In their Evaluator's Handbook, Morris and

Fitz-Gibbon have stated that the goal of bringing about modification for program improvement carries four subgoals with it:

- * To determine . . . what sorts of information about the program will be collected and shared and what decisions will be based on this information
- * To assure that the program's goals and objectives, and the major characteristics of its implementation, have been well thought out and carefully recorded
- * To collect data at program sites about what the program looks like in operation and about the program's effects on attitudes and achievement
- * To report this information clearly and to help the staff plan related program modifications (p. 24).

Results of formative evaluations may be used to make revisions in materials, activities, and organization of a program. Morris and Fitz-Gibbon (1978) stated that these adjustments could be made throughout the formative evaluation.

Summative Evaluation

Anderson and Ball (1978, p. 3) stated that "the purpose of summative evaluation is to assess the overall effectiveness of an operating program." It has been suggested by Bloom, Hastings, and Madaus (1971) that summative evaluation efforts may be directed toward a more general assessment of the degree to which larger outcomes have been attained over an entire course or substantial portion of it. These summative evaluation efforts involve a judgment made by a person or persons qualified to determine whether or not to

continue, expand, or recommend a program for use in similar situations (Morris and Fitz-Gibbon, 1978).

Morris and Fitz-Gibbon (1978) stated that summative evaluation occurs when a program has passed the developmental or formative stage and is functioning as intended. It looks at the total impact of a program. Morris and Fitz-Gibbon stress that there would be situations where there might be difficulty in producing objective summative evaluation:

- (1) The summative evaluator scrutinizes a program in which he may have developed a personal stake, and objectivity is lost.
- (2) An evaluator employed by an organization may hesitate to report negative findings.
- (3) Few sponsors funding programs take the hard line. Objectivity is often lost in summative evaluation because of fear of negative results (p. 9).

Morris and Fitz-Gibbon (1978) add that in a case where a program cannot be evaluated by contrasting it with competing programs 1) participants' performance might be compared with a group receiving no such program at all or with that of similar groups of students in previous programs and 2) the program's effects and costs might be contrasted with those produced by an alternative program that aims toward the same goals.

Role of the Evaluator in Program
Evaluation

When discussing "The Expanding Role of Program Evaluation," Anderson (1978) stated that evaluators consider their role much broader than that of determining program worth. Wise (1980) viewed the evaluator as a scientist, an assistant, and a judge. From the scientific view "evaluation is the study of the effects of programs, treatments, service delivery systems, and other sorts of manmade interventions into human events" (p. 13). Wise stated that the evaluator, in this instance, is concerned with 1) testing the relationship between the intervention and the outcome by measuring changes in the target population of the intervention, and 2) whether the intervention can be given credit for the changes. The evaluator is also concerned as to whether the relationship exists beyond the initial setting.

The "evaluator as an assistant" holds the current prevailing view of the evaluator's role today (Wise, 1980). Wise stated that the role of the evaluator in this view is "to assist a particular client in making choices. The evaluator helps to frame the decision to be made and then gathers and presents information necessary to make the decision" (p. 13). Wise added that in this case criteria that are to be applied in the evaluation and the information to be obtained are specified by the decision maker or decision making agency.

If "the purpose of evaluation is to assess the merits of a program, and the role of the evaluator is to determine what standards to set and then to award credit according to how well the program meets these standards" (Wise, 1980, pp. 13-14), then the evaluator as judge is above the program. In this case, methods of evaluation used to observe the program and make judgments may vary (Wise, 1980).

Experts have indicated that the evaluator's role in formative and summative evaluation may be delineated. Morris and Fitz-Gibbon (1978) described the formative evaluator as the

member of a program-planning-and-revision team who is charged with the task of collecting information about quality of implementation, attitudes, and achievement at various sites so that a program can be improved as it develops (p. 24).

They stated that the formative evaluator works to provide program planners and staff with information to help adjust the program to the setting and make necessary improvements. The formative evaluator may become directly involved in the program - working closely with program directors to develop the program to be as effective as possible in meeting its goals (Morris and Fitz-Gibbon, 1978).

Baker (1978) has provided four levels of evaluator functions in formative evaluation. At level one, the evaluator assists the developer in collecting, verifying, analyzing and reporting of results. Level two places the evaluator in the assistant role again in selecting evaluation measures and performing the tasks identified at level

one. The third level of evaluator function in formative evaluation is as a collaborator. At this level the evaluator performs tasks from the first two levels, generates indicators that may not be specified in program goals, and interprets any conflicts in data. At the fourth and highest level, the evaluator performs tasks from the first three levels, generates hypotheses, and makes recommendations for program revision.

Baker stated that evaluators in formative evaluation "do well to concentrate on careful description using the full range of technologies at their disposal to help people understand what has happened" (p. 66). Morris and Fitz-Gibbon (1978) concluded by saying:

The formative evaluator, therefore, not only helps to develop the program, but also to conceptualize what the program is and how it works. Since this conceptualization is an essential precondition for summative evaluation, formative evaluation lays the groundwork for summative (p. 9).

Morris and Fitz-Gibbon (1978) stated that since the summative evaluator represents the broad interests of the community and the sponsor, he should avoid interference with the program being evaluated. The summative evaluator functions "to collect data and write a summary report showing what the program looks like and what has been achieved" (p. 9). Morris and Fitz-Gibbon stated that in order for a summative evaluation to be credible, it is necessary for the summative evaluator to be free to report negative findings. "Summative evaluation emphasizes application of new learning

to modify role performance and indication of the societal benefits that result" (Knox, 1979, p. 2).

Evaluation in Informal Programs

Extension Evaluation

Bennett (1977), in Analyzing Impacts of Extension Programs, stated that many factors enter into the value judgments of a program. In Extension, programs are evaluated in relation to a hierarchy or "Chain of Events." The "Chain of Events" in Extension programs has seven levels:

- (1) INPUTS
- (2) ACTIVITIES
- (3) PEOPLE INVOLVEMENT
- (4) REACTIONS
- (5) KASA CHANGE
- (6) PRACTICE CHANGE
- (7) END RESULTS.

The "Inputs" are the various resources that are allocated to a program. Utilizing the inputs certain "Activities" are performed to disseminate educational content. The activities "Involve People" who will, as a result of activities, have certain "Reactions." Reaction to program activities may result in a change in participants' knowledge, attitudes, skills, and/or aspirations (KASA). Participants may then apply these changes to individual lifestyles. The "End Results" are attainment of the ultimate objectives of the Extension program.

Bennett suggested that there is an increased difficulty in measuring program outcomes as one climbs the hierarchy. Reasons for the increased difficulty in measuring outcomes may be related to one or more of the following:

(1) There is an increased difficulty in setting precise objectives for the attainment of program evidences.

(2) Sources of program evidence may be widely scattered.

(3) Evidence of practice changes and end results may appear long after completion of the Extension activities.

(4) There may be difficulty in separating Extension accomplishments from those brought about by other sources.

Certain guidelines, provided as means "to organize thinking about formal evaluation and to lead toward the accumulation of tested principles about evaluation itself" (Bennett, 1977, p. 8), have been incorporated in this publication. The guidelines are as follows:

Guide A: Evidence of program impact becomes stronger as the hierarchy is ascended.

Guide B: The difficulty and cost of obtaining evidence on program accomplishments generally increases as the hierarchy is ascended.

Guide C: Evaluations are strengthened by assessing Extension programs at several levels of the hierarchy including the input level.

Guide D: The higher the cluster of evidence from program evaluation, the more useful the evidence for making decisions on present and future programming.

Guide E: Evaluation is strengthened to the extent the specific criteria for evaluation are defined prior to conduct of the Extension programs.

Guide F: Evaluations are strengthened to the

- extent that validity of observations has been demonstrated.
- Guide G: The harder the evidence for evaluation, the more an evaluation may be relied upon in program decision-making.
- Guide H: The efficiency of program evaluation can be increased through studies which identify proxy measures.
- Guide I: A study's usefulness for program decision-making is enhanced to the extent that it can identify Extension's degree of contribution to achievement of program objectives (Bennett, 1977, pp. 8-15).

Bennett stressed the importance of assessing Extension programs at more than one level of the hierarchy because (1) questions are being asked about the relation of outputs (levels 2-7) to inputs in the hierarchy; (2) program effectiveness is increased as evidence of meeting program objectives, at the various levels, is presented; and (3) examination at more than one level may indicate the extent to which the program has proceeded toward advancement of its ultimate objectives. Bennett also noted that "evidence within lower levels of the hierarchy provides little indication of impact but is comparatively inexpensive and easily gathered" (p. 9).

Bennett stated that "case studies observe intensely one or only a few selected individuals, groups, or communities" (p. 20). These observations may include an examination of records, interviews, or participant observation. Bennett pointed out that case studies (1) seldom carry the rigor or formality of other research designs, (2) often use soft data and seldom employ statistical analysis, and (3) rarely make explicit comparisons. Evaluation utilizing the case study

offers the advantage of drawing together diverse pieces of information into an interpretation so unified that it may provide important evaluative insights.

Evaluation in Adult Education

Verner (1964) stated that "the pursuit of adequate evaluation is important to adult education in two very functional ways."

1. The growing size of the adult education enterprise. . . makes it essential that adult educators be able to defend their programs by knowing its achievements in very specific terms.
2. Evaluation provides the field and discipline of adult education with a way of determining the efficiency, effectiveness, and utility of its program planning, its processes, and its management of the instructional situation (p. 92).

The author also suggested four means of accomplishing administrative evaluation of programs in adult education.

1. Measure the program against a standard.
2. Measure the program against a hypothetical conception of what a "good" program should be.
3. Measure the program against what has been done by similar programs in comparable communities.
4. Measure program participation.

It was noted that "there is no general agreement among adult educators as to what constitutes a 'good' program. Any conception of goodness must fit the particular community in which the program operates" (Verner, 1964, p. 93). Findings from evaluation of technical training programs for

adults have shown that sophisticated research designs and statistics were not pre-requisites for feedback useful in program improvement (Anderson and Ball, 1978).

Outreach Evaluation

Outreach in Consumer Education

An Adult Consumer Education Outreach Program presented in Monongalia County, West Virginia, was designed (1) to help train specific target groups - the elderly, low income, fixed income, single parent and disadvantaged adult - in consumer skills and (2) to assess the feasibility of developing similar programs in other areas of West Virginia. For the purpose of the study, four research questions were formulated:

1. Will adults who need skills in solving consumer problems avail themselves of the program?
2. Will basic attitudes and behavior of adults be changed by participation in the mini-course?
3. Can a reliable method of evaluation be developed to measure learning of adults with widely diverse abilities and backgrounds?
4. How can the results obtained from the research project be utilized throughout the State? (Pitrolo, 1979, p. 4)

Pitrolo (1979) reported several successful methods of contacting individuals and organizing classes. Senior citizen groups were indicated "most approachable and cooperative" (p. 5). A brief introduction was presented to a group before they chose to become involved on a continuous basis. Pitrolo stated that "it was imperative that

individuals chose to become involved; otherwise, the results would have been meaningless" (p. 5). Many groups decided to participate and in two cases new groups resulted when a senior citizen from one session requested a presentation at another center.

Other positive contacts included club presidents, from Homemaker's Clubs and Parents Without Partners, and rural area ministers. In each case, group participants selected the time and location of the program. Presentations to several community adult classes resulted in a series of presentations to "Mother's Day Out" classes. Free child care was provided at this program.

The project leaders were challenged to include the rural population in the outreach programs. These individuals were identified through the local library and contacted by phone. This contact resulted in informal programs (often in individual homes) with interested parties.

Other methods employed to publicize the outreach program were: (1) posters in community buildings and business establishments; (2) brochures sent to civic, educational and social clubs; (3) personal contacts with people involved in communities; (4) postmasters and postmistresses; (5) principals of rural schools, (6) articles in newspapers, community publication, and college papers; (7) radio interviews and public service announcements; (8) fliers in local grade schools; and (9) personal letters to members of established groups.

As a result of the outreach effort, a program on selected consumer topics was presented to a group of senior students as requested by a cooperative education instructor. During the year several presentations were made to various organizations "primarily to publicize the programs and make contacts that could result in new groups."

Some of the significant findings, as reported by Pitrolo (1979), included:

1. Before any progress can be expected, a rapport must be established with the target group. Many people in the low-income, rural, or educationally disadvantaged population are often reluctant to accept an outsider.

2. In most instances, an informal atmosphere is most desirable.

3. It is important that the project leader express a personal interest in participants.

4. Serious considerations must be given to any special requests from participants.

5. As time passes, it becomes considerably less difficult to interest people in the program.

6. Definite patterns of topic selection are evident by various age groups.

7. All age groups displayed an interest in the topics of consumer rights, consumer responsibilities, frauds, and schemes.

Pitrolo also reported that evaluation techniques were a persistent problem. A pre- and post-questionnaire was

developed and administered but was discarded for several reasons:

1. It was too lengthy.
2. The people attending the program changed and many groups increased in size, necessitating administration of the questionnaire each session. This took time and attention away from the main purpose of the meeting.
3. Reading ability of participants varied greatly, both in comprehension and speed.
4. Men invariably handed the questionnaire to the "little woman" to fill out.
5. Response was very negative in some instances. Many objected to being asked to answer any questions, even though they were to remain anonymous (p. 7).

Pitrolo stated that although it contained many imperfections, the anonymous pencil and paper evaluation was most useful. She indicated that "the positive results obtained from the questionnaire proved valuable in assessing effectiveness of teaching methods and learning" (p. 13).

Certain factors, unrelated to the program, caused problems. These included weather, family illness, deaths, economic difficulties, and emotional problems. Pitrolo expressed frustration at not being able to reach the college group at all. "Sessions were organized and publicized, but to no avail" (p. 8).

A Descriptive Study of Consumer and Homemaking Programs in Minnesota

Rossman (1980) conducted a study of the Minnesota secondary school and adult consumer and homemaking programs. The purpose of the study was twofold. The first part was concerned with identification of subject matter, teachers,

and students. The second part of the study concerned identification of "special" consumer and homemaking programs.

Questionnaires were sent to 298 of 435 persons identified as teachers in an adult program. Responses included 270 out of 410 (66 percent) for secondary consumer and homemaking programs and 156 out of 298 (52 percent) adult consumer and homemaking teachers.

Case studies of ten selected "special" home economics programs were included in the report. The criteria for selection were based on the 1976 Vocational Amendments, which specify program emphases and populations to be reached.

The ten selected programs were visited for two days, at which time teacher interviews and program observations were noted. Other staff members and administrators were interviewed at this time. Records pertaining to the program were also reviewed. The following items were then incorporated into each case study: program history, goals, content, interactions, setting, evaluation, teacher concerns, and quotes from leaders, staff and program participants.

Of particular relevance to this review were those outreach programs concerned with "Educational Programs for Low-Income Homemakers" and "Nutrition Education for Seniors."

Educational Programs for Low-Income Homemakers. An adult vocational home economics instructor offered classes to homemakers in a low-income housing development. The goals of the program were to help

low-income homemakers help themselves in relation to their needs in the areas of food and nutrition; grooming; selection, construction and care of clothing; housing and home management; family living and parenthood; child development; guidance and consumer education (Rossman, 1980, p. 56).

The program participants were described as low-income, from various ethnic groups, and mostly mothers. The participants indicated that involvement in the program gave them a chance "to be out of the house," "to practice English," and "to learn to sew things" (Rossman, 1980, p. 57). The teacher viewed the course as a "kind of pre-readiness for when they go into the work world" (p. 57).

Program evidences were obtained primarily from informal feedback. The teacher reported that any other type of evaluation information would be difficult to obtain. However, she did indicate that the participants were able to work well together.

Specific concerns identified by the teacher included (1) jealousy among ethnic groups, (2) language barriers, (3) difficulty in finding responsible aides, (4) inconsistencies in attendance, (5) the complicated procedures for reimbursement, and (6) lack of participant interest in anything but sewing (Rossman, 1980). The teacher planned to initiate an advisory committee composed of representatives of the ethnic groups to deal with some of the problems. An interpreter was provided a half day per week to help with the language barrier.

Nutrition Education for Seniors. In this program, the

area Vocational-Technical Institute (AVTI) and the social service agency administering the congregate meal program worked together to provide nutrition education for participants in a nine county area. A total of 3700 people at 23 sites were reached in the program last year (duplicated count) at a cost of approximately \$200 per month (Rossman, 1980). Any remaining staff salaries and transportation costs were paid by the social service agency. The administrator at the AVTI provided the staff salaries and instructional materials for the nutrition education lessons.

The goal of this program was to

foster good eating habits among participants by making them aware of the relative nutritional values of food and their contribution to health and well-being, and to influence their food purchases, preparation or selection practices (p. 68).

Emphasis was placed on providing information with the decision to change habits left up to each individual. The nutrition education lessons were "coordinated around a theme with other professionals who do programs" (p. 69). Methods of disseminating information included slides, crossword puzzles, posters, exercise records, food models, and role playing.

Participants who were interviewed in the evaluation stage of the program were supportive of the congregate meal program and stressed its importance to them. However, the nutrition education portion of the program was received with mixed reactions. Other evaluation methods, as indicated by administrators and the teacher, were phone calls, informal

feedback, cost, and number served. Yearly evaluation sheets were generally filled with "positive comments" (p. 2).

Administrators and the teacher indicated that program participants were reluctant to report negative comments for fear of losing the congregate meal program. A survey of seniors following a lesson on calcium and milk revealed an increase in milk consumption. Constraints of time and money prevented the teacher and administrators from making program changes. However, they deemed it necessary to increase support to the program participants (Rossman, 1980).

Summary

A review of the literature revealed that no specific evaluation procedures have been identified as unique to outreach evaluation. An evaluator may find it necessary to combine the techniques used in program evaluation of adult education, Cooperative Extension, or other similar programs. The techniques identified should then be combined with evaluation methods reported as successful in outreach evaluation. Evaluations of more consumer and homemaking outreach programs will provide teachers, State department personnel, and legislators with documentation of program evidences.

CHAPTER III

RESEARCH DESIGN

This chapter describes the procedure used in conducting the evaluation of selected nutrition education outreach programs. Description of the type of research design, instrumentation procedure, population and sample, and method of data reporting used in the study are included in this chapter.

Type of Research Design

The type of research design selected for use in this study was descriptive. A descriptive study, as stated by Best (1977):

describes and interprets what is. It is concerned with conditions or relationships that exist, opinions that are held, processes that are going on, effects that are evident, or trends that are developing. It is primarily concerned with the present, although it often considers past events and influences as they relate to current conditions (p. 116).

Of the various classifications of research methods available for use in descriptive research, this study involved the case study method.

Best states that the case study is concerned with everything that is significant in the history or development of the case. He also stated that the case study method

"probes deeply, and intensely analyzes interaction between factors that produce change or growth" (p. 118-19). According to Anderson, Ball, Murphy, and Associates (1975) the case study method used in conjunction with evaluation and research strategies may (1) yield a sufficiently comprehensive picture to serve as the basis for judgments about the worth of the program, (2) be used as a prelude to larger, more formal evaluation studies, and (3) shed light on unexplained or unexpected findings. Bennett (1977) stated that case studies may be less formal than other evaluative designs. Bennett added that case studies "often use soft data and seldom employ statistical analysis" (p. 20). A project report form was developed to obtain case history data (Appendix B). The report form offered the advantage of providing the medium for recording those aspects of each outreach program which might be contrasted or compared.

Development of the Instrument

After formulating objectives, the researcher conducted an extensive search of the literature for instruments related to evaluation and outreach. An instrument entitled Outreach Project Evaluation was developed for use by teacher (Appendix B). Whenever possible, items were constructed in closed form for ease of tabulation and response. As recommended by Best (1977), an "other" category was provided to permit the respondent to indicate an answer the researcher had not anticipated. Those items specific to individual

evaluations and program outcomes were constructed in the open or unrestricted form. This type item allows for a free response in the words of the respondent.

The information section of the report form identified the teacher, school, target group, and topic(s). Research question number one, dealing with the successes, problems, and future recommendations relating to support functions was answered by items 1 through 18. Items 2, 8, 19, and 20 answered research question number two, dealing with the impact of the outreach effort on the target group. Serendipity effects of the outreach project, research question number three, were drawn from items 3, 20, 21, and 22. Research question number four, dealing with program evidences documenting the need for future/further nutrition education outreach training and program revisions was answered by items 19, 23, and 24.

Essential to the development of a research instrument is the pretesting. A pretest, as stated by Compton and Hall (1972, p. 141), helps "to determine whether it is easily understood and elicits the information desired."

The Outreach Project Evaluation used in this study was administered to a pretest group of graduate students and professors at Oklahoma State University. Information regarding clarity of questions, directions, and format was solicited at this time. All responses were considered in the revision of the instrument. Following revision, the researcher administered the instrument to home economics

graduate students with previous experience in evaluation and teaching home economics and members of the researcher's committee. Suggested comments were utilized in finalizing the instrument.

Selection of the Population

The population of the study consisted of the 14 Oklahoma consumer and homemaking teachers attending the nutrition education and outreach workshop. These teachers were contacted for attendance by the Oklahoma State Department of Vocational-Technical Education (OSDVTE). The teachers received a stipend from OSDVTE with the understanding that they would carry out the outreach programs in their communities after attending the nutrition education and outreach training workshop.

For the purpose of this study the sample used by the researcher consisted of the 12 consumer and homemaking teachers who were teaching in the 1980-81 school year. The teachers in the sample were from small rural towns in Oklahoma. Two of the workshop participants were not teaching and were therefore unable to complete outreach programs. (Appendix A contains the workshop syllabus and subsequent outreach plans.)

Collection of Data

The data gathering process in this study consisted of the instrument completed by consumer and homemaking teachers,

telephone calls, and observations by the researcher. All consumer and homemaking teachers were contacted by telephone to ascertain their willingness to participate in the evaluation and to set up dates for visiting respective outreach projects (Appendix C).

Initial phone calls revealed that (1) some consumer and homemaking teachers had not set dates for conducting their outreach projects and (2) some teachers had already conducted their outreach projects. This required the researcher to follow-up periodically with phone calls to ascertain the status of those outreach projects which had not been completed. Due to problems in scheduling the researcher was not able to visit some sites. Case history data for those cases not observed was obtained from outreach plans (Appendix A), the Outreach Project Evaluation (Appendix B), and phone calls.

The Outreach Project Evaluation was mailed November 14, 1980, to the 12 consumer and homemaking teachers participating in the study. An introductory letter and an optional session evaluation form were included at this time (Appendix D). A letter reminding teachers of the need to return the evaluation form was sent to those who had not responded as of February 2, 1981 (Appendix E).

Reporting the Data

Results of the Outreach Project Evaluations, observations, telephone calls and outreach plans were combined and

reported in two forms. Individual outreach programs were reported first as individual case studies. Use of the case study method "may point to particular characteristics of those units and the techniques they use that seem to contribute to their greater effectiveness" (Anderson and Ball, 1978, p. 60). Anderson and Ball (1978) added that results from a number of case studies may be aggregated to influence program decisions. Results were then reported as combined averages and frequencies in such a manner to answer the research questions.

CHAPTER IV

RESULTS

This study was designed to evaluate the status of outreach programs that were developed by participants of the nutrition education and outreach workshop. This chapter was organized in the following sequence: (1) description of sample; (2) reporting of case studies, and (3) discussion of research questions.

Sample

For this study the sample consisted of 12 consumer and homemaking teachers who attended the nutrition education and outreach workshop in May, 1980. Utilizing target groups identified as in need of nutrition education, workshop participants were to develop a plan for outreach in their home communities.

Reporting of Case Studies

Nutrition Education for the Elderly

Program A. This outreach program was a project of the Future Homemakers of America (FHA) and had senior citizens as its target group. The final objectives of the program, as stated by the teacher, were:

- a. Read and understand a label on a food product.
- b. Understand how to comparison shop.
- c. Observe a demonstration on how to cook with variety.
- d. Know how to comparison shop using a canned and frozen item.
- e. Understand how to make a grocery list in relation to the local grocery store.
- f. Observe weekly specials in the local store.
- g. Discuss buying seasonal foods.
- h. Know what are good buys for the Basic Four food groups.
- i. Use coupons in their shopping.
- j. Use the Basic Four food groups in meal planning.

The two outreach sessions were held from 6:30 to 7:30 p.m. at the senior citizens' center. The first session, with the topic of "Label Logic," was a FHA potluck dinner. Each FHA member prepared a potluck dish which had a label on it. After the meal, each FHA member gave a label to a senior citizen. The FHA members then discussed components of a label and how labels might help the participants save money and provide a more nutritious diet. Demonstrations with green beans and orange juice were used to discuss comparison shopping.

The second session was held two nights later. This time the senior citizens came to "Play Bingo with FHA." The FHA members provided senior citizens with grocery lists, followed by a discussion of weekly specials, seasonal foods, and good buys in the Basic Four food groups. Prizes were provided in the form of food donated by the local store.

The outreach sessions had an average attendance of 40 people. Of the 40 participants, the average female attendance was 21, while the male average attendance was 19. The consumer and homemaking teacher completing the form estimated

the average age of persons in the target group to be 70 years old. The senior citizens' center 1) was accessible by private car, 2) had available parking, and 3) was within walking distance of some program participants.

Table I illustrates the frequency and location of techniques used by the teacher to communicate with the public about the outreach program. To accomplish the objectives of the outreach program, the following teaching methods were used: demonstration, discussion, display, games, and poster boards. The teacher identified each method as being highly effective with the target group. Outreach program participants were recognized for their attendance by having names in a newspaper article, receiving take home materials, and receiving prizes for Nutrition Bingo games.

The only expense incurred was \$45.00 in FHA funds for food. A donation of \$5.00 was received from the school for the development of educational materials. A sack of groceries (to be used for prizes) valued at \$10.00 was donated by the local store. The Department of Human Services provided nutrition education handout materials for the outreach program.

This program used 20 student volunteers who each donated five hours of time. A formula, provided by Drotning-Miller and Hill (1976), which multiplies the number of hours students worked on the project times the minimum wage, was used to estimate the dollar value of the student efforts for the community. Utilizing a minimum wage of \$3.20 (State

Employment Service, 1981), the student effort for the community, in Program A, can be valued at \$320.00.

TABLE I
FREQUENCY AND LOCATION OF COMMUNICATION TECHNIQUES
USED IN PROGRAM A

Method	Number of Times	Location
Brochures, flyers	1	Local store, with pumpkin bread
In-person contact	2	Senior citizens' center
Posters	1	Local store
Presentation to community group	2	Senior citizens' center
Student youth groups (FHA)	1	Senior citizens' center

The volunteers in this outreach program were trained at a special training session. The teacher indicated that the most promising practice used with volunteers was rewarding them with FHA points for their work. (All volunteers were FHA members.) The advisory committee was not used in any capacity in this program.

The teacher used the sample session evaluation forms provided by the researcher. (See Appendix D.) Evaluations

showed that the most frequently listed method of learning about the outreach program was an announcement at the senior citizens' center. When asked why they came to the program, senior citizens' answers included: "to support, encourage, and help the girls"; "to eat"; "to listen to kids"; "to enjoy the evening"; "to get good food"; "interested and hungry"; "to get to know teacher and pupils"; "appreciation to FHA"; and other similar responses.

According to the senior citizens, the most important aspects of the sessions were: "the way the kids work together"; "the courtesy of the girls"; "the quietness and respect to senior citizens"; "the nutrition talk"; "all"; "the interest the girls had in their project"; "the tender ham"; "girls' training in food preparation and sewing" (a man); and "nice to see young people concerned about others". The most frequent response to the question about how their nutrition habits would change was "none". However, others indicated their nutrition habits would change for the better; they would be more selective; and that they would read labels. One responded by saying "My mother was a dietitian; I was brought up with it."

Most senior citizens responded to the question regarding the information that was least helpful by saying that "All was fine." Others lacked interest in caloric value of foods and can sizes. More information was requested on cost and selection of food and how to find prepared foods that cost less.

Twenty-one indicated that the sessions were helpful and informative; 18 that they were interesting and stimulating; and 10 that there was not enough time for questions and answers. When asked for comments and recommendations for improvements or future programs, the senior citizens responded:

I think it was wonderful, and I think the class should do it more often. We older people need to be around the younger ones.

It is especially gratifying to see that the young ladies themselves are learning about health and nutrition, etc. It is a good program and worthwhile; keep it up!

Please feel reassured that you are not imposing on us; we like what you are saying and doing, and we appreciate it. On a scale of 1 to 10, I would rate your performance a big 10 or 100 percent.

At the conclusion of the second session, the senior citizens provided thanks in the form of entertainment. Their "Dish Pan Band" played several songs before the group went home.

The teacher indicated that she hoped to receive feedback later regarding the use of the shopping lists and food coupons provided the senior citizens. She said, "It has all been great! The comments on the evaluation forms have been rewarding." After working with the senior citizens in the outreach program, the teacher noted that the senior citizens might need a larger center. Responding to the question about other contacts/programs that have developed as a result of the outreach program, the teacher responded that another program may be presented at lunch time in the

spring. The teacher, in the role of coordinator, felt that there was no difficult aspect of the program. She was most rewarded to see the senior citizens enjoying themselves and by receiving an invitation to do another program.

Program B. This outreach program also had the senior citizens as its target group. The final objectives of the program as stated by the teacher, were:

- a. To introduce the series of nutrition programs.
- b. To become acquainted with the people at the senior citizens' center and for them to become acquainted with me.
- c. To find out some of the elderly persons' eating habits.
- d. To identify reasons for weight gain.
- e. To identify health problems and hazards of weight gain.
- f. To learn the principles of weight control.
- g. To distinguish between low-calorie and high-calorie foods.
- h. To plan nutritious meals using low-calorie foods.
- i. To list nutritious snacks.
- j. To identify the Basic Four food groups.
- k. To know the recommended servings for each food group.
- l. To classify snacks into the Basic Four food groups.

Three outreach sessions, from 15 to 30 minutes in length, were held at noon at the senior citizens' center. For the first session the teacher developed a large Bingo card. Questions relating to food likes, dislikes, and habits were made to correspond with the squares. "Weight control" was the topic of the second session. The teacher used calorie comparison charts and food models to contrast the caloric content of foods. During the third session, "Snacks," the teacher discussed empty calorie snacks, the

Basic Four food groups, and items from the Basic Four that could be eaten as snacks. The teacher provided senior citizens with recipes relating to the topic in each session.

The outreach sessions had an average attendance of 36 persons. Of the 36 participants, the average female attendance was 21, while the average male participation was 15. It may be noted at this time that the teacher had a total of 15 in attendance at the first outreach session. The next two sessions were conducted 30 minutes later in the day and the average attendance was 47. The teacher estimated that the age range of the target group was from 62 to 80. The senior citizens' center 1) had available parking, 2) was accessible to the handicapped, 3) was accessible by senior citizen bus, and 4) was within walking distance of some program participants.

Table II illustrates the frequency and location of techniques used by the teacher to communicate with the public about the outreach program. To accomplish the objectives of the outreach program the following teaching methods were used: discussion, games, and use of food models. The teacher identified each method as being highly effective with the target group. Outreach program participants were recognized for their attendance by receiving take home materials.

The teacher indicated that no funding was necessary for the outreach program. Materials used were obtained from the nutrition education and outreach training workshop and the

local home economics department. The director of the senior citizens' center was the community resource person for this outreach program. The director served as a contact for the consumer and homemaking teacher to schedule the outreach sessions.

TABLE II
FREQUENCY AND LOCATION OF COMMUNICATION
TECHNIQUES USED IN PROGRAM B

Method	Number of Times	Location
In-person contact	3	Senior citizens' center
Announcements	3	Senior citizens' center

This program utilized three student volunteers each of whom donated seven hours of time. Using formula provided by Drotning-Miller and Hill (1976), and a minimum wage of \$3.20 (State Employment Service, 1981), the researcher was able to estimate the dollar value of student efforts for the community at \$67.20. The volunteers were trained in a class session. When asked for the most promising practices used, the teacher indicated that the students helped in preparation

of program materials and then were able to follow through by assisting with the program. The advisory committee was not used in any capacity in this program.

When asked about the effect of the outreach program on the target group, the teacher reported that the senior citizens were asked to recall all of the previous day's snacks for examination in relation to the Basic Four food groups. The teacher indicated that nearly all snacks eaten were nutritious and belonged in the Basic Four food groups. There had not been time for much feedback at the time the Outreach Project Evaluation was completed.

The teacher indicated that no specific community needs had come to her attention as a result of the outreach program. When asked about other programs/contacts that occurred as a result of the outreach program, the teacher indicated they would continue giving programs once or twice a month.

When asked about the most difficult aspect of the program, the teacher replied: "Getting started!" Commenting on the most rewarding aspect of the program the reply was: "I rather dreaded doing these programs, but once I got started I have enjoyed them. The people are so nice and friendly. I enjoy talking to them."

Program C. The consumer and homemaking teacher directing this outreach program also selected the senior citizens as the target group for nutrition education. The final objectives of the program, as stated by the teacher, were:

- a. To implement a class in order for senior citizens of the community to learn the value and develop some knowledge in learning to read a food label.
- b. To recruit the elderly by using Future Homemakers of America (FHA) members and posters.

One outreach session, four hours in length, was held in the school cafeteria and home economics department. The outreach session was one week before Thanksgiving in the school cafeteria with a turkey and dressing dinner served by the FHA. Following the dinner, the senior citizens moved to the new home economics building for the nutrition education lesson entitled "Label It Nutrition."

The senior citizens were welcomed by the superintendent of schools who thanked them for coming and reminded them that there were free passes to all basketball games for all senior citizens. The teacher introduced a reporter for the county paper who remained for the entire program.

The teacher then discussed label components and the importance of recognizing nutrient content to meet the Basic Four food groups and special dietary needs. This discussion was reinforced with a slide presentation on nutrition labeling.

After the slide presentation the senior citizens actively participated in a session of popping balloons and answering true-false questions about the slides. All who participated in the question and answer session received prizes. Upon completion of the nutrition education lesson, door prizes were awarded.

Forty-seven people attended the outreach session, 14 male and 33 female. Some participants were transported to the site by a van serving elderly citizens in this county area. The site was accessible to handicapped and parking was available.

Table III illustrates the frequency and location of techniques used by the teacher in communicating with the public about the outreach program. To accomplish the objectives of the outreach program, the following teaching methods were used: bulletin boards, discussion, displays, games, and slide series. The teacher indicated all methods were highly effective. Participants of the outreach program were recognized for their attendance by 1) receiving door prizes, 2) receiving favors, 3) having their names in a newspaper article, and 4) a newspaper picture.

TABLE III
FREQUENCY AND LOCATION OF COMMUNICATION TECHNIQUES
USED IN PROGRAM C

Method	Number of Times	Location
Brochures, flyers	5	Local business
Exhibits	1	Local business
In-person	15	Within community
Telephone	numerous	School

The instructor indicated no expenses were incurred in the outreach program. However, numerous donations - in the form of gift certificates, food, merchandise, etc. were awarded as door prizes by the FHA and local merchants. The school cafeteria furnished the dinner, and school supplies were utilized in the development of educational materials. No dollar amount was placed on any of the above donations.

In this outreach program the teacher used the driver of the Community Action van as a resource person in transporting some of the senior citizens. Three advisory committee members, 17 students, and three members of the Young Homemakers of Oklahoma group (YHO), each volunteered one, four, and four hours respectively, to the program. Using the formula provided by Drotning-Miller and Hill (1976) and a minimum wage of \$3.20 (State Employment Service, 1981) the student effort for the community was valued at \$217.60. Volunteers were trained individually and at FHA meetings. The advisory committee was used for planning.

When asked about the effect of the outreach program on the target group, the teacher reported that the participants answered questions about the slide presentation "very well." Observation of the outreach program showed that participants were attentive, satisfied, and appreciative of the outreach effort. Feedback from the community was reported to be very favorable, with the teacher indicating she wished she could conduct a similar program at Christmas.

When asked about community needs that have come to her attention as a result of the outreach program, the teacher reported that no activities were available to the elderly in the widespread rural community. The most difficult aspect of the program, as indicated by the teacher, was finding time in the midst of a very busy schedule. She indicated that the students enjoyed the intergenerational contact with the senior citizens. The most rewarding aspect of the outreach program for the teacher was "to see the joy and pleasure it gave the senior citizens."

Program D. This outreach program served the participants attending the County Elderly Nutrition Program. The final objectives of the program, as stated by the teacher, were:

- a. To learn Basic Four for the elderly.
- b. To try new foods and "old" foods prepared in new ways.
- c. To recognize the importance of fiber in the diet.
- d. To select food items from labeling information.

Six outreach sessions were held. Five were fifteen minutes in length and one was an hour in length. The sessions were held at noon following the congregate meal. The theme of the outreach program was "Nutrition for the Elderly." Topics of the individual outreach sessions included: (1) Information and Dietary Recall, (2) Classification of Foods in the Basic Four Food Groups, (3) Identifying Label Information, (4) Fiber, (5) Sampling Party, and (6) Conclusion and Dietary Recall. At the "Sampling Party," the

home economics department (students) prepared sweet potatoes in a variety of forms, to be sampled by congregate meal participants.

There was an average of 96 participants at each outreach session. The teacher estimated participants were 60 percent female (58) and 40 percent male (38). Age range of the participants was estimated by the teacher to be "65+". The site of the outreach program, the high-school, (1) had parking available, (2) was accessible primarily by car, and (3) was accessible to handicapped.

Recruitment was not an apparent problem in Program D as the senior citizens were already at the site. However, Table IV illustrates the frequency and location of techniques that were used by the teacher to communicate with the public about the outreach program. To accomplish the objectives of the outreach program, the following teaching methods were used: bulletin board, demonstrations, display, and a sampling party. The demonstration and sampling party were rated highly effective, while the bulletin board and display were rated effective. A traveling microphone was used by the teacher in sessions as she circulated among participants. Recognition was given to the senior citizens attending the program in the form of food samples and take home materials.

The cost of the outreach program was \$25.00, with \$20.00 for food purchased from the home economics department budget and \$5.00 of the teacher's personal funds used for

the development of educational materials. Nutrition bulletins were donated by the senior citizens' center and the U.S.D.A. People contacted as resources in this program included the senior citizens' center secretary, a nutritionist, and the local health department.

TABLE IV
FREQUENCY AND LOCATION OF COMMUNICATION TECHNIQUES
USED IN PROGRAM D

Method	Number of Times	Location
In-person contact	1	Congregate meal site
Presentation to high school students	2	Classroom
Presentation to community groups	1	Congregate meal site

This program utilized 45 student volunteers who each donated four hours of time. Using the formula provided by Drotning-Miller and Hill (1976) and a minimum wage of \$3.20 (State Employment Service, 1981), the dollar value of student efforts for the community was \$576.00. The volunteers were trained in class sessions. When asked for the most promising practices used with volunteers the teacher indicated that the students were given the opportunity to

prepare the sweet potato dishes served at the sampling party. The advisory committee was not used in this program.

When asked about the effect of the outreach program on the target group, the teacher responded,

the timing was poor Senior Citizens come to the congregate meals to eat and visit and not listen to information. They were happy to listen as long as we were passing out goodies or providing food samples. The food samples should have been served at the last session. Everything was down hill from there.

The teacher added that she received very little feedback about the program.

When asked about the community needs that have come to the attention of the public as a result of the program, the teacher indicated that another location was needed for the congregate meals. As a result of the outreach program the teacher was approached by one of the senior citizens who was interested in giving peanut brittle making demonstrations to the home economics classes. Even though the program was completed, the teacher provided the elderly with some free information on turkey before Thanksgiving.

When asked the most difficult aspect of the program the teacher said, "taking classroom time to present information, time to plan, report, and initiate the program." The most rewarding aspect of the program from the teacher's viewpoint was "to see high school students begin to socialize with senior citizens on a friendly basis rather than a grandparent or a child/authoritarian basis."

Program E. This program had the elderly as its target group. The final objectives of the program, as stated by the teacher, were:

- a. To provide a place for socialization during the meal.
- b. To demonstrate food techniques and equipment.
- c. To recall healthful eating behaviors.
- d. To demonstrate how to prepare large quantities and still not eat left-overs.
- e. To provide recognition by allowing the elderly to share ethnic food ideas.
- f. To demonstrate how one food can be mixed into several new food ideas and to introduce new ideas for snacks.

Five outreach sessions had been held at the time of this writing. The sessions were held at the school multi-purpose room (one), the senior citizens' center (two), and at local churches (two). The four sessions held at the noon hour lasted approximately 30 minutes, while the evening session (a dinner meeting) was an hour in length. Some of the activities included in this outreach program were: (1) a senior citizens' dinner sponsored by the YHO, (2) skits on types of cookware by the Home Economics IV class, (3) skits on vegetable cookery (written and performed by boys), and (5) games of "Wheels" and "Bingo."

The average attendance was 43, nineteen percent male and 81 percent female. No estimated age range was provided. When asked about the site of the outreach program, the teacher indicated that none of the programs had been more than eight blocks from the school. The sites had available parking accessible primarily by private car and were accessible to the handicapped.

Table V illustrates the frequency and location of techniques used by the teacher to communicate with the public about the outreach program. To accomplish the objectives of the outreach program the following teaching methods were used: demonstration, discussion, games, skits and plays, and slide series. The teacher rated the techniques of demonstration, discussion, and use of a slide series as highly effective. Skits, plays and games were rated effective.

A total of \$70.00 was spent on food in this outreach program from the Future Homemakers of America (FHA) organization and the YHO (Young Homemakers of Oklahoma). The teacher reported that the Lions Club donated food valued at \$25.00. Other food donations, in the form of dishes for a meal, were privately donated. Recognitions to those attending the outreach sessions were door prizes, take home materials (recipes), and a newspaper story.

The volunteers in this program included 6 advisory committee members, 18 students (FHA), and 18 YHO members with each group donating one, two, and two hours of time, respectively. Using the Drotning-Miller and Hill (1976) formula and a minimum wage of \$3.20 (State Employment Service, 1981), the value of the student efforts for the community in Program E, can be estimated at \$415.20. The volunteers were trained in class sessions, FHA meetings, and other group meetings. The teacher indicated that the YHO was used in a motivational role at the senior citizens'

dinner. The advisory committee met informally with the teacher for program ideas and on locating people for the senior citizens' dinner.

TABLE V
FREQUENCY AND LOCATION OF COMMUNICATION TECHNIQUES
USED IN PROGRAM E

Method	Number of Times	Location
Newspaper stories	2	Two local newspapers
Posters	1	Grocery store
Presentation to high school students	2	Classroom
Student youth groups	1	Classroom
Telephone	6 6	Senior citizen presidents Ministers
Young Homemakers Organization	2	Meeting (classroom)

When asked about the most promising practices used with volunteers, the teacher reported that the volunteers helped in the brainstorming sessions seeking creative ideas. When asked about the effect of the outreach program on the target group, the teacher reported that "posttest results indicated an increase in new trends in food preparation and food

ideas." There was also an increase in the nutritional content of foods.

Feedback about the outreach program has been very encouraging. The teacher wrote about the senior citizens' dinner, "Everyone is looking forward to the dinner next year." The teacher said that the senior citizens' were always anxious to know what program was going to be presented the following month. Some indirect feedback reported by the teacher included such things as:

(1) The senior citizens really dressed up for dinner, some came an hour early. Perhaps this could give one an idea of the importance of the event to them. (2) After skit presentations on cookware and vegetable cookery, seniors asked several questions. (3) During the 'Wheels' or 'Bingo' game a senior citizen was overheard saying, 'I did not know a sweet potato had that nutrient in it.'

When asked about the community needs that have come to the teacher's attention as a result of the work with the outreach program, the teacher responded that the senior citizens were in need of a permanent meeting place. Observation of a later outreach session (conducted after the form was completed) revealed that a building had been donated to the senior citizens by the Lions Club. The teacher also indicated a need for funding for the demonstrations given to the elderly. As a result of the outreach program, the teacher has presented two nutrition education lessons to the YHO and one to a civic group.

The most difficult aspect of the program for the coordinator was "finding the time with other school activities to

develop programs. In our school there is an activity every night of the week and many on Saturday." When asked about the most rewarding aspect of the outreach program, the teacher responded, "The appreciation expressed by the group concerning the new facts they have learned, the praise the students received, the public relations, the idea they (the senior citizens) belong to the school community, too, and an increase in their importance to society."

Program F. This outreach program had the elderly as its target group. The final objectives of the program, as stated by the teacher were:

- a. clients will be able to distinguish between food facts and fallacies concerning the use of milk in adult diets;
- b. identify sources and functions of calcium.

Four sessions, each one hour in length, were conducted, three held at noon and one in the afternoon. Calcium and Vitamin C were the topics selected for the nutrition education effort. An average of 22 persons was in attendance, of which, 2 were male, and 20 were female.

The outreach sessions were conducted at the senior citizens' center and the site of the new congregate meal program. Both sites were characterized as having parking available, being accessible to the handicapped, served by public transportation (bus for elderly), within walking distance, and accessible by school bus.

Table VI illustrates the frequency and location of techniques used by the teacher to communicate with the public about the outreach program. To accomplish the objectives of the outreach program, the following teaching methods were used: bulletin boards, discussion, and learning centers. The teacher rated all methods as effective. Outreach program participants were recognized for attendance with door prizes and take home materials.

TABLE VI
FREQUENCY AND LOCATION OF COMMUNICATON TECHNIQUES
USED IN PROGRAM F

Method	Number of Times	Location
Exhibits (learning centers)	4	Senior citizens' center
In-person contact	25	Senior citizens' center
Posters	4	Senior citizens' center
Telephone	3	Director of senior citizens' center

The teacher reported that no expenses were incurred in the program. Donations received included food from the school lunch program (valued at \$10.00) and the teacher's personal supplies (valued at \$5.00) for development of

educational materials. The teacher reported that the director of the community feeding program for elderly was instrumental in encouraging her to work with the group.

The program utilized thirteen student volunteers who each donated one hour of time. The formula provided by Drotning-Miller and Hill (1976) and a minimum wage of \$3.20 (State Employment Service, 1981) were used to determine the dollar value of student efforts for the community. In Program F, the value of student efforts for the community was \$41.60. The volunteers were trained during class sessions.

When asked about the effect of the outreach program on the target group, the teacher reported:

Only four of the eleven taking the pretest knew the number of milk servings needed daily. Nine felt calcium was needed for bones and/or teeth. Five named cheese as a good source of calcium while three did not know any other good sources. Eight have one or two servings of milk daily, while three did not include milk in their diet. Seven of the eleven do not use non-fat dry milk. The majority of the target group had some general ideas about the sources and functions of calcium in their diet, but some clarification could be given, especially concerning prevention of osteoporosis. Other sessions could compare cost and taste of whole milk, skim milk, and non-fat dry milk.

When asked about the feedback that had been received from the community about the outreach program, the teacher indicated that she was encouraged to continue with any other area of nutritional information. Through the work with elderly in this outreach program, the teacher felt that the elderly received a type of psychological lift from their participation in the elderly feeding program.

When asked about other contacts/programs that have developed as a result of the outreach program, the teacher reported that 1) she was asked to provide a short ten-minute nutrition lesson for the elderly feeding program monthly, and 2) the ninth grade class was planning to present a puppet show on Vitamin C to the elderly.

The teacher indicated that the most difficult aspect of the program was that of simplifying information for one-to-one presentation. The teacher responded to the question about the most rewarding aspect of the outreach program for the teacher, the students, the school, and the target group in following words:

The target group knew the difference between facts and fallacies concerning the use of milk. They are a polite, kind group to work with. They seemed to appreciate most of the recipes and take home snacks. It is almost as if they do not want to be encumbered with too many facts. The best reward would be improved eating practices in needed areas.

Program G. This outreach program was directed toward the elderly populaton. The final objectives, as stated by the teacher, were:

- a. be able to identify foods from the Basic Four,
- b. be able to identify nutrients, and
- c. be able to select nutritious foods for the diet and prepare them.

Three afternoon outreach sessions were held. The programs were two hours in length. The outreach sessions had an average attendance of 16 people, 12 female and 4 male. The teacher estimated the age of the target group to be from 60-70 years. The outreach program took place in the

classroom which offered available parking (primarily by private car) and accessibility to the handicapped.

Table VII illustrates the frequency and location of techniques used by the teacher to communicate with the public about the outreach program. To accomplish the objectives of the outreach program, the following techniques were used: bulletin board, demonstration, discussion, and games. The teacher rated the demonstration as highly effective. Use of bulletin boards, discussion, and displays was rated effective. No form of recognition was given to those who attended.

This program used 25 student volunteers who donated six hours of time each. The dollar value of student efforts for the community was determined using the Drotning-Miller and Hill (1976) formula and a minimum wage of \$3.20 (State Employment Service, 1981), to be \$180.00. The volunteers were trained in a class session.

The home economics fund incurred a cost of \$45.00 for food. No donations were indicated by the teacher. There were no community resource people involved. The teacher did not report any promising practices used with volunteers.

When asked about the effect of the outreach program on the target group, the teacher reported that the senior citizens were interested in the subject and wanted more sessions. Informal feedback revealed "that they enjoyed it very much."

TABLE VII
 FREQUENCY AND LOCATION OF COMMUNICATION TECHNIQUES
 USED IN PROGRAM G

Method	Number of Times	Location
In-person contact	5	In town
Presentation to high school students	2	Classroom
TV and/or radio spots	1	Neighboring towns
Telephone	1	In town

As a result of the outreach program the teacher was asked to (1) give a presentation to the sub-district consumer and homemaking teachers at a professional improvement (PI) meeting, and (2) set up a display at the Mid-Winter Vocational-Technical Conference (January 1981).

The teacher stated that the most difficult aspect of the program was "finding a time to have the classes because of other school activities." The most rewarding aspect of the program for the teacher was "being able to interact with the older people and see how much they enjoyed getting out and having others interested in them."

Nutrition Education for Low Income

Program H. The consumer and homemaking teacher selected the low income population as the target group for this outreach program. The final objectives of this program, as stated by the teacher, were:

- a. Students will be able to distinguish between guidelines for good nutrition, in reference to restricted calories.
- b. Students will be able to name factors which influence over-eating in personal food habits.
- c. Students will evaluate personal food habits in regard to over-eating.

A total of 456 persons were reached in this outreach program including students (grades 1-6), teachers, and staff at the elementary school. The first session, presented to the fifth grade, included a slide series on nutrition and labeling. The second session was conducted in the morning at the elementary school. Home economics students presented a play, "Don't Say 4-4-3-2 to Pooh," to all the elementary students. In the play Winnie-the-Pooh learns the importance of including foods from all the Basic Four food groups in his diet. The home economics students constructed props and wore animal costumes for the play.

Table VIII illustrates the frequency and location of techniques used by the teacher to communicate with the public about the outreach program. To accomplish the objectives the following methods were used and deemed highly effective: bulletin boards, demonstration, displays, games, learning centers, skits and plays, slide series, and transparencies. Outreach participants were recognized for

attendance by certificates, names in newspaper article, and a newspaper picture.

TABLE VIII
FREQUENCY AND LOCATION OF COMMUNICATION TECHNIQUES
USED IN PROGRAM H

Method	Number of Times	Location
Brochures, flyers	2	Main Street parking areas
Exhibits	2	Business windows, school
Newspaper stories	2	Town newsletter
In-person	17	Local people
Posters	4	Business windows, school
Telephone	numerous	Town residents

The teacher did not indicate that there were any expenses associated with the outreach program. The school speech department donated the costumes for the play. The County Extension office provided nutrition fact sheets. The school donated supplies used for development of educational materials.

This program used 3 advisory committee members, 1 community resource person, 12 parents, and 12 students as volunteers. The amount of time donated by each was reported as follows: advisory committee members-1 hour, community resource person-1 hour, parents-1 hour, and students-1 hours. Utilizing the Drotning-Miller and Hill formula (1976) and a minimum wage of \$3.20 (State Employment Service, 1981) the student efforts for the community can be valued at \$38.40. The volunteers were trained in class and FHA meetings. The teacher indicated that one-to-one contact was the most promising practice used with volunteers. The advisory committee served as an information source.

When asked about the effect of the outreach program on the target group, the teacher reported the range of scores on the pre- and posttests used with the fifth grade class to be 0-84 on the pretest and 52-100 on the posttest. During the play, "Don't Say 4-4-3-2 to Pooh," students displayed genuine interest and enjoyment.

When asked about feedback received from the community, the teacher replied that comments such as: "Excellent!," "This is a great program!," "You have donated a lot of your time and energies.," had been received. As a result of the outreach program the teacher has become aware that more nutrition education is needed to prevent children from skipping meals and eating junk food.

As a result of the outreach program in nutrition education, this teacher has developed several contacts. The FHA

girls set up nutritious slides two times one afternoon at the ONG building in town. The teacher reported:

Headstart is interested in the program. Additional information has been requested. Teachers have incorporated learning centers in their classroom activities. Teachers are showing the slides, 'Label It Nutrition,' to their students. Teachers are teaching more classes in regard to nutrition.

Coping with student time, schedules, and student accidents was the most difficult aspect of the program for the teacher to deal with. When asked about the most rewarding aspect of the outreach program, the teacher responded as follows:

The most rewarding aspect of the outreach program was the feeling of accomplishment. Through all of the schedule deadlines (papers, etc.), the feeling of finally getting everyone together and agreeing upon a time, date, and participation from the students, was the most challenging experience. The feeling of victory is always fantastic! The students, school, and target group were impressed and received educational information that they had not known.

Program I. This outreach program had low income families as its target group, Headstart children and parents. The final objectives of this program, as stated by the teacher, were:

- a. To improve snacking habits of children and teenagers.
- b. To encourage better food buying practices.

To accomplish these objectives, two nutrition education outreach sessions were held. The sessions, one morning and one afternoon, were each two hours in length. The topics of the sessions were "Food Purchasing" and "Snacking for

Health." The initial session was presented to parents with 18 women attending. The estimated age range was 20 to 30 years. The second session was presented to 46 preschool children, ages 3-5; 21 boys and 25 girls. The teacher used the school classroom, school cafeteria, and the Headstart building as sites for the outreach program. Program sites were accessible by car, bus, and handicapped and had available parking.

Table IX illustrates the frequency and location of techniques used by the teacher to communicate with the public about the outreach program. To accomplish the objectives of the outreach program the following teaching methods were used: bulletin board, demonstration, games, laboratory session, learning centers, and skits and plays. Games, laboratory sessions, and skits and plays were rated as highly effective, while learning centers, demonstrations, and bulletins boards were rated as effective. Outreach program participants were recognized for their attendance by favors, a newspaper picture, and take home materials.

Funds were provided by the school for food (\$25.00) and the development of educational materials (\$10.00). The teacher utilized two community resource persons. These two resource persons were accompanied by 18 parents and 52 students in volunteering to help with the outreach program. Each volunteer donated two hours of time. Using the Drotning-Miller and Hill formula and a minimum wage of \$3.20 (State Employment Service, 1981) the student efforts for the

community can be valued at \$332.80. The most promising practices used with volunteers was community involvement. The advisory committee was used as an information source.

TABLE IX
FREQUENCY AND LOCATION OF COMMUNICATION TECHNIQUES
USED IN PROGRAM I

Method	Number of Times	Location
Brochures, flyers	2	School
Exhibits	2	School
Newspaper stories	1	Nearby town
In-person	12	Community
Presentation to high school students	5	School
Presentation to community groups	1	Cafeteria
Student or youth clubs	1	School

When asked about the effect of the outreach program on the target group, the teacher indicated that the adult participants reported using more effective shopping techniques. The community feedback has been very supportive of any program that benefits the children. Through her work in the outreach program, the teacher has realized that the only public meeting place available was the school.

When asked what other contacts/programs have developed as a result of the outreach program, the teacher stated that "one of my classes is having their grandmothers in for lunch this week. We plan on having a short nutrition program for them." The teacher plans to expand the program next year to include grades K-6.

The most difficult aspect of the program was taking the time to do it and the paper work. The most rewarding aspect of the outreach program was the appreciation of the parents.

Nutrition Education for Teenage Parents

Program J. The target group of this outreach effort was teenage parents. The final objectives of the program, as stated by the teacher, were:

- a. Know and use the Basic Four food groups.
- b. Know the problems that obesity can cause in adults and children.

The teacher indicated that she was able to reach eight people three different times, two homebound students and six high school students. The ages of these girls ranged from 14-22 years. These sessions were held in the school classroom and in private homes at morning, noon, and evening times.

Table X illustrates the frequency and location of techniques used to communicate with the public about the outreach program for teenage parents. In order to

accomplish the objectives of the program, the following teaching methods were used: bulletin boards, discussion, display, and learning centers. The teacher rated each method as effective.

Program expenses were \$2.00 for development of educational materials. No source was indicated. The teacher indicated that the school lunch program donated items such as peanut butter, dry milk, peanuts, milk, butter, and cheese for the preparation of snacks. No dollar amount was placed on this donation. Program participants were recognized for their attendance by receiving take home materials.

Three parents, two members of the target group, and one student served in a volunteer capacity in this outreach program each donating one, two, and five hours of time, respectively. Utilizing the Drotning-Miller and Hill (1976) formula and a minimum wage of \$3.20 (State Employment Service, 1981), the student effort for the community was valued at \$16.00. No specific training was provided the volunteers and no promising practices were reported. The advisory committee was not used.

When asked about the effect of the outreach program on the community, the teacher reported that she gave a pretest to some participants, but since she did not give a posttest, she would be unable to measure any change in knowledge. No report of community feedback or community needs were indicated. When asked what other contacts/programs had developed as a result of the work in the outreach program, the

teacher responded that she and the junior high teacher (also a participant in this study) hoped to make presentations to the Women's Club and Headstart.

TABLE X
FREQUENCY AND LOCATION OF COMMUNICATION TECHNIQUES
USED IN PROGRAM J

Method	Number of Times	Location
Exhibits	5	Classroom
In-person contact	3	Classroom and private homes
Posters	2	Classroom
Postal occupant mailings	1	Invitation to nutrition workshop
Presentation to high school students	3	School
Presentation to home bound (pregnant) students	3	In homes

The most difficult aspect in working with teenage parents in this outreach program was getting the students to come to the workshop, especially at night. When the teacher realized that this group did not want to come back to school at night, she made plans to go to individual homes or have them come to her classroom. When asked about the most rewarding aspect of the program, the teacher indicated that

most of the girls were particularly interested in the problems of overweight.

Program K. (As this teacher did not return the Outreach Project Evaluation, this information is based on phone calls.) The teacher obtained a list of pregnant teenagers in the area from the Health Department but was unable to recruit them to a program. Then she discussed her project with a physician to enlist his aid in recruiting, but he was not interested. Then she announced the program to classes and faculty.

After announcing the program to a number of groups, the teacher set up a session for a Saturday from 10-12 a.m. Even though some people had tentatively planned to come, no one did. The teacher felt that she was probably not persistent enough and more one-to-one contact would have been advisable. She indicated that an outreach program is a "full-time, part-time job."

Program L. (As this teacher did not return the Outreach Project Evaluation, this information is based on phone calls.) This teacher presented an outreach program to six teenage parents at an all-day Saturday session. All participants were high school students. The main method used was learning centers that were prepared in the summer workshop. The girls were given numerous pamphlets, bulletins, and samples that were obtained from the March of Dimes, Cooperative Extension, and Proctor and Gamble. The

teacher and girls prepared lunch using recipes from nutritious foods as obtained from the summer workshop.

The teacher reported that the all day session seemed long, but the girls were more attentive to information than they had been in regular classes. Recruitment was through personal contact.

Response to Research Questions

The Successes, Problems, and Future Recommendations Regarding Support Functions

Recruitment. Various communication techniques were used by the teachers to elicit support and attendance for the outreach programs. Ten teachers used in-person contact to communicate with the public. Six teachers used exhibits and posters; while five used brochures/flyers, presentations to high school students, and presentations to community groups. The telephone was used by four teachers. Student or youth clubs and newspaper stories were used in two outreach programs. The following methods were each used by one teacher in communicating with the public about the outreach program: announcements, Young Homemakers of Oklahoma, TV/radio spots, postal occupant mailings, and presentations to homebound students.

Persons frequently contacted in-person or by telephone were: community members, school personnel, ministers, persons at congregate meal sites, senior citizens' center

directors, local residents in town and in private homes, and doctors. Program publicity materials were located at local businesses, including grocery stores; parking areas; senior citizens' centers (program sites); school classrooms and cafeterias; and newspapers and newsletters.

Training. Student volunteers used in the outreach programs were trained in class sessions, FHA meetings, and individually. Seven teachers used class sessions for training, four used FHA meetings, and one each used individualized instruction, a special session and group meetings for training sessions.

Motivation and Reward. Some of the most promising practices used with volunteers were 1) rewarding them with FHA points for their contribution, 2) having them prepare food and materials to be used in the program, and 3) allowing them to assist with the program (community involvement). On the other hand, participants were rewarded for their attendance and/or completion of the program in several ways. Seven teachers provided participants with take home materials, predominantly recipes. Favors were used by four teachers. Newspaper articles, pictures, and/or stories were used on seven occasions. One outreach program gave prizes for Bingo and one used door prizes. Certificates and food samples were also used once as a method of reward. One teacher did not provide participants with any form of recognition or reward.

Community Relations. Teachers used a variety of community members as resource persons in their outreach programs. In three programs teachers contacted an officer of the senior citizens' center or congregate meal program. Cooperative Extension agents and Health Departments were used twice as community contacts. The following contacts were each used in one program: local businesses, Community Action Agencies, school personnel, parents, Department of Human Services, doctors, March of Dimes, and Proctor and Gamble. Students, in the role of volunteers, donated a total of 689 hours to their respective communities. Using the Drotning-Miller and Hill formula (1976) and a minimum wage of \$3.20 (Statement Employment Service, 1981), the value of student effort for the communities involved can be placed at \$2204.80. The consumer and homemaking teachers also presented seven nutrition education programs to community groups other than the target population.

Evaluation Techniques. Many of the teachers based their evaluations on informal feedback from program participants and members of the community. Some teachers also attempted a pretest posttest design. However, most found difficulty in getting participants' cooperation because of lack of interest and/or understanding of the test. One teacher was able to use a pretest posttest design with a fifth grade class. Use of dietary recalls was reported by two teachers. The information obtained from these was suitable only in determining general dietary content.

Two teachers used the sample session evaluation forms provided by the researcher (Appendix D). These forms seemed to be very indicative of program satisfaction with outreach efforts. The sample session evaluation forms could yield information that many of the teachers attempted to obtain with their pretest posttest designs.

These findings support Pitrolo (1979) who reported that pre- and post- questionnaires were discarded for reasons which included: length, changing group members, and varying participant reading skills. Pitrolo concluded that the anonymous paper and pencil evaluation was the most useful with outreach programs.

Teaching Methods. Various teaching methods were used by consumer and homemaking teachers in their outreach programs. Eight teachers used discussion; seven used bulletin boards and games; six used demonstrations; five used displays/posters; five used learning centers; three used skits and plays and slide series; two used laboratory sessions; and one each used transparencies, sampling parties, and food models. The laboratory session and sampling party were rated highly effective. The remaining methods were all rated from effective to highly effective.

Impact of the Outreach Effort on the Target Group

The 12 teachers presented 31 outreach sessions to their target groups as a result of the training received at the

nutrition education and outreach workshop. Three teachers held four, five and six outreach sessions; three teachers each held two sessions; and one teacher held only one session.

Teachers chose a variety of methods to evaluate their programs. Two teachers used the sample session evaluation forms provided by the researcher. One teacher administered a pre-/post- test to a group of fifth grade students. The ranges on these tests were 0-84 on the pretest and 52-100 on the posttest, thus indicating an increase in nutrition knowledge as a result of the outreach effort. Other teachers attempted some sort of pre- and posttest design, however, they were not always able to complete both tests. Some of the reported results were:

Pretest results show over 25 percent were ignorant of food sources of calcium, other than milk. Some participants drank no milk at all.

Posttest results indicate an increase in new trends in food preparation and food ideas. There is also an increase in the nutritional content of foods.

Low income adults who received instruction on food purchasing were reported to be using more effective shopping techniques.

Many teachers reported that the community and participant feedback had been excellent. Outreach program participants were eager to know about future programs. The teachers were encouraged to continue their efforts, with one teacher being asked to give monthly ten minute programs.

The teachers also reported that there was "lots of favorable talk in the community" and that "the community was very supportive of programs for children." One teacher reported that very little feedback had been received, while 3 indicated that they had not had enough time to receive any feedback yet.

It seems that the informal feedback received by the teacher was more easily obtainable than other more complicated evaluation methods. Rossman (1980) reported that program evidences were obtained from informal feedback. Teachers participating in that study (Rossman, 1980) stated that any other type of evaluation information was difficult to obtain.

Serendipity Effects of the Outreach Programs

As a result of the outreach programs, consumer and homemaking teachers have made contacts and presented nutrition education information to many others. Teachers reported that they have:

- presented two programs to Young Homemakers Organizations;
- presented one program to a civic group;
- made a presentation to home economics teachers in sub-district professional improvement meeting;
- provided the elderly with information on turkey before Thanksgiving;

- been contacted by a senior citizen who wanted to give peanut brittle demonstrations to her classes;
- set up a display at the Mid-Winter Vo-Tech conference;
- incorporated learning centers in classroom activities; and
- been contacted for additional nutrition information.

One teacher reported that other teachers in the school had adopted her methods and were also emphasizing nutrition in their classes. As a result of their participation in the nutrition education and outreach workshop and subsequent outreach effort, teachers have also placed an increased emphasis on nutrition education in the home economics classroom. The teachers also reported that eight other nutrition education presentations are planned for target groups.

Program Evidences Documenting the Need
for Future/Further Nutrition Education
Outreach Training or Revisions in
Current Programs

Total Participants. As a result of training in nutrition education and outreach 12 consumer and homemaking teachers conducted 31 outreach sessions. These session reached 834 persons with their nutrition education efforts. Of the total target population, approximatley 15 percent were adult male, 35 percent were adult female, and 50 percent were elementary children. Although the Indian

population was not chosen as the target group by any of the teachers, three teachers indicated that their target groups included members of the Indian population.

Future Outreach Training. Training of consumer and homemaking teachers has provided teachers, students, and target groups with a variety of experiences as well as an increased exposure to nutrition education. For reasons identified in Chapter One the target groups identified for use in Oklahoma are especially in need of nutrition education. Evaluation of selected programs has revealed that the outreach effort also: (1) provides important intergenerational contact for the elderly; (2) provides a means of communicating with the public about the activities in the home economics departments; (3) produces a number of serendipity effects; and (4) promotes good nutrition.

The workshops offer the teachers training to meet the outreach requirements as specified in the Education Amendments of 1976.

Program Revisions. For future workshops the researcher recommends that the teacher(s) share with the workshop participants examples of nutrition education outreach programs. This would include information obtained as a result of this study. The program should continue use of Outreach Plans 1, 2, and 3 (Appendix A) in order to monitor program progress. The workshop participants should also receive the Outreach Project Evaluation, in revised form (Appendix E),

and sample session evaluation forms with instructions for their use.

CHAPTER V

SUMMARY, IMPACT AND RECOMMENDATIONS

The purpose of this study was to evaluate the status of outreach programs that were developed by participants in the nutrition education and outreach workshop, held in May 1980. Results of this study may be used to report evidence of outreach and to provide general knowledge about outreach programs in nutrition education. Four research questions were addressed in this study:

1. What were the successes, problems, and future recommendations related to support functions?
2. What was the impact of the outreach effort on the target group?
3. What were the serendipity effects of the outreach project?
4. What were the program evidences documenting the need for future/further nutrition education outreach training or revisions in current programs?

A review of related literature was conducted to gain an understanding of the process of evaluation, program evaluation, and outreach evaluation. Methods of data collection were also reviewed.

A descriptive type of research using the case study method was selected for use in this study. An Outreach Project Evaluation was mailed to 12 consumer and homemaking teachers who attended the nutrition education and outreach workshop. Data were also derived from on-site observations, telephone calls, and outreach plans. The researcher visited five programs with two visits to one program. Teachers who were not visited had completed their programs and/or programs were held at a time that staff could not visit. In some cases programs scheduled for visits were cancelled. Results were reported as (1) case studies and (2) combined averages and frequencies in response to the research questions.

Results and Effectiveness of Programs

Nutrition Education for Senior Citizens

Seven of the 12 teachers directed their nutrition education efforts to the elderly. They conducted 24 outreach sessions which reached approximately 300 elderly persons. Five of the teachers presented their programs at the senior citizens' center and/or the site of the congregate meal program. The remaining two teachers invited the senior citizens to the school. Teachers most frequently used announcements at the senior citizens' centers, telephone calls, and in-person contact to recruit the elderly.

Topics of the outreach sessions included, but were not limited to, nutrition labeling, weight control, nutritious

snacking, the Basic Four food groups, fiber, vegetable cookery, and calcium. Teachers and members of the target group suggested the following as possible future topics of nutrition education sessions: (1) the cost and selection of food, (2) how to prepare foods that cost less, (3) the sources and functions of calcium, (4) the prevention of osteoporosis, and (5) the cost and taste comparison of whole, skim, and nonfat dry milk.

In order to accomplish the objectives of the outreach programs, teachers reported using a variety of teaching methods and activities. One teacher had a "sampling party" at the congregate meal site where the elderly could sample common foods prepared new ways. Nutrition Bingo was used to reinforce the Basic Four food groups. Another teacher reported using a traveling microphone during presentations. The Future Homemakers of America sponsored two events - a potluck dinner and a Thanksgiving dinner. The YHO also sponsored an evening meal at the local school.

All teachers used students in their programs. Students worked as volunteers in aiding the teachers in brainstorming new ideas, preparing educational materials, and presenting nutrition education information. One outreach program was the FHA's project of the month.

Nearly all teachers reported that the intergenerational contact between students and the elderly was the most rewarding aspect of the outreach program. Target group members indicated that social interaction and, in one instance,

FHA support played an important role in their attendance. The teachers were encouraged to continue the programs throughout the year.

Nutrition Education for Low Income

Two teachers chose the low income population as the target group for their nutrition education efforts. In one program high school home economics students presented a play "Don't Say 4-4-3-2 to Pooh!" to approximately 450 students, faculty and staff at the elementary school (predominantly low income). The other teacher reached 46 Headstart children and 18 parents with sessions on food purchasing and snacking for health.

Both teachers were encouraged by the community feedback they received. The teacher that worked with Headstart indicated that the community was supportive of any program to help the children. She plans to expand her nutrition education efforts next year to include grades K-6. The other teacher received comments such as "You have given a lot of your time and efforts!" Her future programs will include Headstart children and their parents.

Nutrition Education for Teenage Parents

Three teachers directed their nutrition education efforts to teenage parents. In two instances, the initial meeting resulted in no participants. However, one of these teachers was able to reach eight students through the home-

bound teacher and school classes. The third teacher was able to recruit six girls on her first attempt by telling them about the time and place the session would be held. One teacher reported that the girls were more attentive than they had been in regular classes.

One teacher who had been in the community for a long time had no difficulty in recruiting. One component of this teacher's all day Saturday session was involving students in preparation of nutritious foods. The teacher indicated, however, that an all day session was too long.

The teacher who was unable to reach any teenage parents felt that she would have been more successful had she been more persistent in one-to-one contact.

Overall Impact

Of the 12 teachers who planned programs, 7 presented outreach programs to the elderly, 2 to low income persons, and 3 for teenage parents. Teachers were very successful in reaching older persons - predominantly in organized groups at senior citizens' centers and congregate meal sites. Teenage parents were the most difficult to recruit.

None of the teachers chose to work specifically with Indian families, one of the target groups. However, three of the programs did reach Indian families. The 12 teachers held 31 sessions reaching an estimated 834 persons. As a result of their nutrition work, teachers presented seven additional programs to other groups. Eight future programs are planned for target groups.

Most of the teachers used student volunteers in planning and presenting programs. The students donated a total of 689 hours to their respective communities. By using the Drotning-Miller and Hill formula (1976) the students' efforts can be valued at \$2204.80. Many of the reported successes were a result of interaction among students and members of the target groups. YHO members and community volunteers also assisted in programs. Three teachers involved their advisory committee members in planning and making community contacts.

Teachers used a variety of resource persons from their communities. They included personnel from senior citizens' centers, Health Department, Community Action Agencies, Cooperative Extension Service, Department of Human Services, the school system, and the March of Dimes. Officers of senior citizens' groups and students' parents were very helpful. Many local businesses cooperated by furnishing prizes and gift certificates. Civic groups donated money for expenses.

From visits to schools, it was obvious that teachers had increased their emphasis on nutrition education in the classroom. Teachers were using methods recommended in the workshop as well as the materials they had purchased. Several teachers had prepared learning centers. One reported that other teachers in the school had adopted her methods and were also emphasizing nutrition in their classes.

Teachers were consistently pleased with their outreach programs and the training and assistance they had received. Their main problem seemed to be finding time to prepare for the programs.

Data summary has revealed that possibly the most valuable outcome of the outreach programs in nutrition education has been the interaction between students, teachers and target group members. Informal feedback from program participants and members of the community proved to be the most useful method for obtaining evidence of program success.

Not only has nutrition education emphasis in the classrooms increased as a result of the outreach programs, but there is also an increased awareness of nutrition in respective communities. The outreach programs have also provided the teachers with a method of building community support for the home economics department and the school system.

Recommendations

After reviewing the literature, conducting the research and reporting the data, the following recommendations are made:

1. Future outreach workshops should include a session on evaluation as a component. The session would include a discussion of evaluation techniques most applicable to outreach. Teachers should also receive the Outreach Project Evaluatin forms at this time.

2. Either additional funding be made available to contractors that have outreach programs so that they can evaluate and give assistance during the academic year, or, this responsibility be assigned to district supervisors or other State department personnel. Consumer and homemaking teachers need help and encouragement during the year - not just at the workshop. Much of this assistance can be given by phone.

3. Follow-up in the form of phone calls and visits will be necessary to obtain and verify information. Supervisors should attend outreach sessions whenever possible.

4. The Oklahoma State Department of Vocational-Technical Education should include evaluation as a component in its proposal requests. OSDVTE could then furnish contractors with an Outreach Project Evaluation, in revised form (Appendix E), or a similar instrument for use in reporting program evidences.

5. Workshops and outreach programs should continue focusing on the nutritional needs of the specified target groups.

6. Consumer and homemaking teachers should consider integrating outreach activities in long range department goals. In this study teachers successfully used home economics students, the Future Homemakers of America, and the Young Homemakers of Oklahoma in implementing outreach activities. They were involved in program planning, developing educational materials, assisting teachers, and presenting information.

7. Teachers planning outreach programs should utilize advisory committees as a resource.

8. In this study teachers were successful in recruiting and working with organized groups such as senior citizens. Teachers working with teenage parents should utilize the homebound teacher as a resource in recruiting and dissemination of materials. Community education directors might also be valuable in recruiting.

Summary

John Dewey (1916, p. 255) stated that "new receptiveness follows upon new curiosity, and new curiosity upon new information gained." This evaluation provides information about the successes, problems, impacts, side effects and recommendations relating to selected outreach programs in nutrition education. The information gained should stimulate others to provide program evidences about outreach in consumer and homemaking programs.

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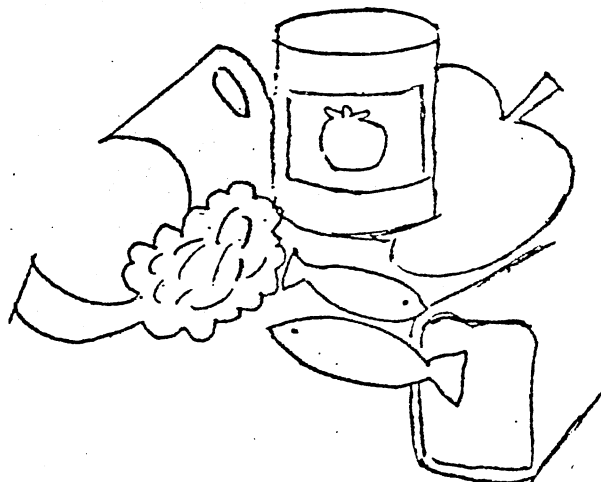
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APPENDIX A

NUTRITION EDUCATION AND OUTREACH WORKSHOP
SYLLABUS AND OUTREACH PLANS

SYLLABUS

NUTRITION EDUCATION OUTREACH
PROGRAMS FOR TARGET GROUPSOklahoma State University
May 27-30, 1980

Sponsored by:

Oklahoma State Department of
Vocational Technical Education
and
The Department of Home Economics
Education and Community Services,
OSU

Staff:

Joan Baird, Ed.D.,
Workshop Coordinator

Barbara Alsup,
Graduate Assistant

Julie Huber,
Special Assistant

Course credit if desired HEED 5750 and HEED 4750

OVERVIEW OF THE WORKSHOP

Background

This workshop attends to three of the special emphasis areas in the vocational education portion of the education amendments of 1976, i.e., nutrition as a subject area, disadvantaged populations, and outreach from the regular school setting.

Four target groups were identified by OSDVTE for this workshop - low income families, Indian families, senior citizens, and teenage parents. Teenage parents have many needs in common with other low income families. However, attention will be focused on special nutrition needs in teenage pregnancy. The course will focus on both desirable food habits and ways to achieve adequate nutrition with a limited budget.

As a result of the workshop each teacher will plan and conduct an outreach program for one of the target groups in her local community.

Procedures

Classes will be held from 8:00 - 12:00 and 1:00 - 5:00 from May 27-30. Participants are expected to be present the entire time. Some outside work will also be necessary. Much of the learning in this course will be on an independent basis.

Each participant is expected to evaluate her own progress toward meeting each objective and to check off the objective when she considers it to be met.

Objectives may be met by the following means:

- 1) Classroom meetings with lecture, discussion, speakers.
Check schedule for topics.
- 2) Readings in text
- 3) Learning centers
- 4) Reading from class resources
- 5) Videotapes, films, filmstrips

Assignments:

All participants will complete assignments whether or not the course is taken for university credit.

1. Outreach plan. Each participant will develop an outreach plan according to the format given. The plan outline is to be submitted May 30. The complete plan in duplicate in preliminary form is to be submitted by July 15. A final plan in detail is to be submitted in duplicate by October 15. One copy of these plans will be submitted to the State Supervisor at OSVTE. Much of the planning should be completed during this class.

2. Each participant will complete a pre- and post-test on nutrition.
3. Each participant will pursue one in-depth topic for her own target group and be prepared to discuss her findings on Friday for 5-10 min.
4. Each participant will plan and develop materials for one learning activity for her own target group to discuss or display on Friday. This may be only in plan stage to be completed later.
5. Each participant will keep a record of the activities she completed to achieve her objectives and hand in worksheets.
6. Each participant will examine resources and select \$50 worth of materials she wishes to order to use with her target group. An order form will be provided. Orders must be submitted by 5:00 Friday, May 30.

Course Credit

- (1) Students may earn 1 hour of credit, Summer 1980 HEED 5750 (Section 3) "Workshop in Home Economics Education" by completing the requirements of this workshop. If students wish to complete or revise any assignments after May 30, these must be planned on contract with the instructor and sent in by July 15 with the preliminary outreach plan.

Grades will be assigned on the following basis:

Plan outline and preliminary plan	35%
Nutrition post-test	20%
5-10 min. oral presentation or discussion on special topic (#4)	15%
Self-developed learning activity	15%
Class contributions and participation	15%

- (2) Students may earn 1 hour of credit in HEED 4750 (Section 1), "Independent Study in Home Economics Education" Fall 1980 by:

1. Sending in final, completed plan by October 15.
2. Writing an evaluation of her outreach program when it is completed. A reporting form will be furnished.
3. Writing a 5-10 page paper with at least 8 sources on the topic chosen for in-depth study in class. Criteria for the paper will be given to the enrollees.

These activities will be evaluated at 33 1/3 % each in establishing a grade.

Terminal Objectives

Participants will:

- Develop a plan for outreach to a target group.
- Evaluate and select resources for their programs.
- Integrate general nutrition knowledge and apply it to programs.
- Analyze and synthesize information on one nutrition topic related to target group (in-depth study).
- Analyze all materials and information according to their applications to the secondary consumer and homemaking core curriculum.

Enabling Objectives

In order to accomplish the terminal objectives, participants will need to be able to achieve the following objectives (by content).
(Please check when you feel you have accomplished the objective.)

ACCOMPLISHED

- | | |
|---|--|
| 1) Nutrition principles especially as related to the target groups. | |
| (Review) | |
| Identify and state the three functions of food. | |
| Identify the 6 nutrient groups and their basic functions. | |
| Identify sources and functions of vitamins A, D, C, thiamin, niacin, riboflavin, B ₁₂ | |
| Identify sources and functions of the minerals calcium, iron, sodium, fluoride, potassium. | |
| Distinguish between food facts and fallacies. | |
| (New Objectives) | |
| Use the Basic 4 to plan daily food intakes for teenagers, pregnant teenagers, adults in general, and aging adults | |
| Identify principles of effective weight control for adults. | |
| Identify etiology and treatment of adult onset diabetes | |
| Identify diet principles in pregnancy and lactation. | |
| Identify nutrition problems that are alcohol related. | |
| Identify special nutrient problems of the target groups: | |
| low income families, including teenage parents | |
| Indian families | |
| Senior citizens | |
| pregnant teenagers. | |
| Identify relationships of diet to arteriosclerosis, heart disease, hypertension, diabetes, obesity. | |
| Distinguish among saturated, monounsaturated, and polyunsaturated fats, their sources, their effects | |
| Identify nutrition principles and methods related to secondary classroom instruction. | |

	ACCOMPLISHED
2) Resource management	
Identify successful programs that are applicable to your target group.	
Identify principles to use in reaching your target groups so that they may wisely use scarce dollars for maximum nutritional benefits	
3) Programs involved with target groups.	
Identify programs related to the target groups including a) sponsorship, b) goals and objectives, c) methods of reaching the groups.	
Determine ways to interact and cooperate with applicable groups in your community.	
4) Change through outreach programs.	
State appropriate methods of making change.	
Write a problem statement	
Prepare a plan appropriate to your target group that is based on principles of change.	
5) Materials	
Select materials appropriate to your own target groups.	
Prepare materials for your own groups	
Identify materials appropriate to consumer and homemaking instruction.	

Schedule

Tuesday, May 27

- 8:00 - 8:30 Get acquainted, registration, etc.
- 8:30 - 9:30 Introduction to course, syllabus, welcomes.
Introduction and charge from OSVTE, Joyce Thompson,
Acting State Supervisor, Home Economics
- 9:30 - 10:15 Pretest
- 10:15 - 10:45 Look Before You Eat - Film
- 10:45 - 11:30 Nutrition Principles -
Working with Outreach Groups - J. Baird
- 11:30 - 12:00 Enrollment
- 1:00 - 2:00 Consumer Education Materials - Gail Montgomery,
Program Director, Oklahoma Dairy Council
- 2:00 - 2:30 Nutrition Break - Calcium-rich foods - Julie Huber
- 2:30 - 5:00 Center for Consumer Services - Group I.
Independent study toward objectives. Learning
centers, filmstrips, videotapes, written materials, etc.

Wednesday, May 28

- 8:00 - 9:00 Independent work with materials
- 9:00 - 10:00 Topic - Theories of Change
Filmstrip: How To Move Mountains
Discussion and group work
- 10:00 - 10:30 Nutrition Break - More calcium-rich foods
- 10:30 - 11:30 Topic - Developing plans for change.
Entire class work with sample problem statement.
- 11:30 - 12:00 Participants work on individual problem statements
for use in their own communities.
- 1:00 - 2:15 Topic - Nutrition programs of Cooperative Extension -
EFNEP - Irma Manning, State Leader
- 2:15 - 2:30 Break
- 2:30 - 3:30 Topic - Nutrition Programs for the Aging -
Bernice Kopel, Associate Professor, FNIA
- 3:30 - 5:00 Center for Consumer Services - Group II.
Materials available for independent work on plans,
learning centers, materials previews.

Thursday, May 29

- 8:00 - 9:30 Nutrition Facts & Fancies - J. Baird
Special emphasis on fats as related to heart disease, products, labels, etc. Questions from participants. Discussions of problems from pretest.
- 9:30 - 10:00 Nutrition Break - Encouraging use of raw vegetables in the diets of adults - Barbara Alsup
- 10:00 - 12:00 Topic - Nutrition Problems of Indian Families - Helen Morgan, Nutritionist, Indian Health Service, and tribal guest.
- 1:00 - 2:00 Independent work.
Videotape - Foodsense - will be shown.
- 2:00 - 3:15 Topic - Problems of At-Risk Pregnant Women and Children - Elizabeth Hensler, Director, Nutrition Division, Oklahoma State Health Department.
- 3:15 - 3:45 Nutrition Break - Alternative Protein Foods - Joan Baird
- 3:45 - 5:00 Center for Consumer Services - Group III.
Independent work on plans, learning centers, materials previews.

Resource rooms open until 9:00 p.m. for independent work.

Friday, May 30

- 8:00 - 9:00 Work with materials - Complete list of orders.
Videotape - Foodsense - will be run.
- 9:00 - 10:00 Nutrition Programs of Cooperative Extension - Diana Lewis, FNIA Specialist.
- 10:00 - 11:00 Nutrition Programs of Department of Human Services - Belinda Pfeiffer, Outreach Specialist.
- 11:00 - 11:30 Discussion
- 11:30 - 12:30 Lunch
- 12:30 - 1:15 Post-test
- 1:15 - 5:00 Wind-up including individual plans, special reports, etc.

OUTREACH PLAN - Version 1

To be submitted before leaving workshop, Friday, May 30.

Name _____

School _____

- A. Write your problem statement below:
- B. Who are you planning to serve with your outreach program?
- C. What are your preliminary objectives?
- D. What are your preliminary plans for structure and arrangements?
- E. How do you plan to recruit your clientele?
- F. What arrangements, checking, etc., do you need to complete before July 15? What persons or groups do you need to contact for cooperation?
- G. Please make any comments about your plan.

OUTREACH PLAN - Version 2

To be submitted in duplicate by July 15. One copy will be sent to the state supervisor. All of these items should appear in more detail than in Version 1.

Name _____

School _____

- A. Write your problem statement below. Revise it from Version 1 according to any new information you may have.
- B. Who are you planning to serve with your outreach program?
- C. What objectives have you defined for the program?
- D. What are your plans for structure and arrangements? (place, time, etc.)
- E. How do you plan to recruit your clientele?
- F. What arrangements, checking, etc., have you done? What persons or groups have you contacted? Whom do you need to contact before the program?
- G. What learning activities, resources, etc., have you completed? What remains to be done?
- H. How do you plan to evaluate your program? Evaluation needs to be based on the objectives.
- I. What funds will be needed? How will they be obtained? Are you planning to request adult education funds for this program?
- J. Please make any comments about your plan.

OUTREACH PLAN - Version 3 - Final

To be submitted in duplicate by October 15. One copy will be submitted to the state supervisor. All items in the plan should now be complete.

Name _____

School _____

- A. Write your problem statement below. You should have all needed information about the situation.
- B. Describe your clientele including number of persons you plan to serve.
- C. Please attach your syllabus or class plan including time, place, objectives, and teaching plan.
- D. What have you done to recruit your clientele? What recruitment remains to be completed?
- E. What arrangements have been made? What remains to be done?
- F. What persons have you contacted for cooperation and information? How will you be complimenting their programs?
- G. What are your evaluation plans?
- H. What is your final funding plan?
- I. How will you use resources purchased or furnished through the workshop?
- J. Please make any comments about your program.

APPENDIX B
PROJECT REPORT FORM

OUTREACH PROJECT EVALUATION

NAME _____ SCHOOL _____ DATE _____

TARGET GROUP _____

TOPIC(S) _____

1. How many nutrition education outreach sessions did you have for your selected target group?
2. How long was each session? _____ hour(s)
3. What time of the day were the sessions held? (Indicate by placing a check in the appropriate blank.)
 Morning Afternoon Weekend
 Noon Evening Other, please specify _____
4. Please record (with numbers) the following information about each session:
 (Use the back of this sheet to include information about additional sessions.)

	Session 1	Session 2	Session 3
Attendance			
Sex ^M _____ _F _____			
Estimated Age Range			
Race ^{Minority} _____ _{Majority} _____			

5. Where did your program take place?
 Private home School cafeteria Other, please specify _____
 School classroom Sr. citizen's center _____
6. Check all the characteristics below that describe the site of your outreach program.
 Parking available
 Accessible to handicapped
 Served by public transportation
 Within walking distance to project location
 Accessible primarily by private car
 Accessible by other transportation, specify type _____

2

7. Indicate the frequency and location of the following techniques used to communicate with the public about your outreach program:

Method	# of times	Location
Brochures, flyers		
Exhibits		
Newsletters		
Newspaper stories		
In-person contact		
Posters		
Postal occupant mailings		
Presentation to high school students		
Presentations to community groups		
Student or youth clubs		
TV and/or radio spots		
Telephone		
Other		

8. List the final objectives of your outreach program and briefly describe how each objective was met.

OBJECTIVES	IMPLEMENTATION

3

9. Using the chart below:

- Place a check in column A to indicate teaching methods used in your outreach program, and
- Rate the effectiveness of each method used by circling a number from 1-5 in column B (1-Ineffective, 3-Effective, 5-Highly Effective).

A Methods		B Effectiveness				
Bulletin Board	_____	1	2	3	4	5
Demonstration	_____	1	2	3	4	5
Discussion	_____	1	2	3	4	5
Display	_____	1	2	3	4	5
Games	_____	1	2	3	4	5
Laboratory Session	_____	1	2	3	4	5
Learning Centers	_____	1	2	3	4	5
Mobile	_____	1	2	3	4	5
Skits and Plays	_____	1	2	3	4	5
Slide Series	_____	1	2	3	4	5
Transparencies	_____	1	2	3	4	5
Other, _____	_____	1	2	3	4	5
_____	_____	1	2	3	4	5

10. Indicate the source and amount of money used in the following areas of your outreach program:

	Source	Amount
Child care		
Food		
Development of educational materials		
Other, please specify		

11. Indicate the source and amount of donations used in the following areas of your outreach program:

	Source	Amount
Child care		
Food		
Development of educational materials		
Other, please specify		

12. What recognition was given to those who attended and/or completed the program? (Check all that apply.)

- | | |
|--|--|
| <input type="checkbox"/> Certificate | <input type="checkbox"/> Plaque |
| <input type="checkbox"/> Door prizes | <input type="checkbox"/> Radio publicity |
| <input type="checkbox"/> Favors | <input type="checkbox"/> Take home material |
| <input type="checkbox"/> Name in newspaper article | <input type="checkbox"/> None |
| <input type="checkbox"/> Newspaper picture | <input type="checkbox"/> Other, please specify |
| | _____ |

13. Was an advisory committee utilized during your outreach program? If so, in what capacity?

14. Indicate the number of volunteers used in your outreach program by placing a number in the respective blank.

- | | |
|---|--|
| <input type="checkbox"/> Advisory committee members | <input type="checkbox"/> Parents |
| <input type="checkbox"/> Community resource persons | <input type="checkbox"/> Students |
| <input type="checkbox"/> Members of target group | <input type="checkbox"/> Other, please specify |
| | _____ |

15. Indicate the approximate number of hours donated by each of the following:

- | | |
|---|--|
| <input type="checkbox"/> Advisory committee members | <input type="checkbox"/> Parents |
| <input type="checkbox"/> Community resource persons | <input type="checkbox"/> Students |
| <input type="checkbox"/> Members of target group | <input type="checkbox"/> Other, please specify |
| | _____ |

16. How were volunteers trained/oriented?

- | | |
|---|---|
| <input type="checkbox"/> Class session(s) | <input type="checkbox"/> special training session |
| <input type="checkbox"/> FHA meeting(s) | <input type="checkbox"/> Other, please specify |
| <input type="checkbox"/> No training provided | _____ |

17. What were the most promising practices used with volunteers?

18. Please list below your community resource people and indicate the role of each in your outreach program:

Name, Organization	Role in Program

5

19. What was the effect of your outreach program on the target group? Report your evaluation results here.

Example: Pretest-Posttest results indicate an increase in nutrition knowledge.

20. What feedback about the outreach program have you received from your community?

21. What community needs have come to your attention through your work in the outreach program? (Mention needs even if they do not relate directly to your program.)

Example: No public transportation is available for the elderly.

22. What other contacts/programs have developed as a result of your outreach program? (Who else has contacted you for information? What other presentations have you made in the community?)

23. As a coordinator, what was the most difficult aspect of the program?

24. What was the most rewarding aspect of the outreach program for you, your students, your school, and the target group?

(Use additional pages as needed.)

APPENDIX C

TELEPHONE CONVERSATION

TELEPHONE CONVERSATION

Hello _____:

This is Barbara Alsup calling from the Home Economics Department at Oklahoma State University. I worked with Dr. Baird on the nutrition education and outreach workshop you attended in May.

I am calling to see how far you have progressed in the development of your outreach program.

Is there any way that we can help you?

This fall we plan to work with the State Department on an evaluation of the workshop. As part of this evaluation I would like to visit your outreach program. Have you set a date?

If yes, arrangements were made to visit.

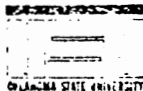
If no - If you schedule your program in the next two weeks, please call me at 405-624-5047. If I haven't heard from you in two weeks, I will call again.

Thank you for your time and cooperation.

APPENDIX D

LETTER AND SAMPLE SESSION

EVALUATION FORMS



MEMORANDUM

DATE November 11, 1980

TO Nutrition Outreach Class Members

FROM Joan Baird and Barbara Alsup

SUBJECT

We hope that all of your fall plans are progressing well and your outreach programs are well underway.

Since Barbara's conversation with each of you, we have progressed in our evaluation plans. We were unable to write anything definitive until now because we were uncertain about our involvement in the evaluation process.

In cooperation with OSDVTE we have planned some tools that you may use to evaluate your programs. Barbara hopes to visit with each of you and will be phoning you soon.

The evaluation can help you demonstrate your program's effectiveness and accountability. We hope to refine these forms (with your help) so that future outreach workshop participants in all subject areas can be provided an evaluation tool. In any summary of this process, you or your school will not be identified. OSDVTE will, however, need reports on each school for their accountability record.

For other outreach follow up, requirements vary according to whether you are signed up for full credit in HEECS 5520 as follows:

All: Final plans in duplicate so that OSDVTE may have a copy. Those plans not turned in are still needed, even though the October 15 deadline has passed.

Evaluation of completed project. As stated above, we'll help you on this.

Credit Participants: Write a 5-10 page paper with at least 8 academic sources on the nutrition topic you chose for in-depth study in class. Criteria sheets for the paper are enclosed. Assignments need to be in our hands by December 8 in order to have credit for this semester.

We hope all of your tuition problems have been solved. We have been working with the bursar's office.

If any of you have difficulties with any of these items, please let me know. Work phone (405) 624-5047, home phone (405) 372-6484. Barbara will be calling you very soon.

Evaluation Sheet

Date _____

Session 1 2 3 4 5 6
Special

Please respond on the basis of the personal value of each part of the program. You do not need to sign your name. Thank you.

1. How did you hear about this program?
2. Why did you come?
3. What were the two most important aspects of this program to you?
4. What/How will your nutrition habits change as a result of this program?
5. What information was the LEAST helpful to you?
6. Which of the topics would you like to know more about?
7. Check below any statement you feel generally describes this program:
 - helpful & informative
 - interesting & stimulating
 - too much information at once
 - of little or no use
 - uncomfortable, waste of time
 - not enough time for questions & answers
8. Your comments and recommendations for improvements or for future programs.

Evaluation Sheet

Date _____

Session 1 2 3 4 5 6
Special

Please respond on the basis of the personal value of each part of the session. You do not need to sign your name. Thank you.

1. What were the two most important points of this session for you?
2. List two ways you can use this information in your daily life.
3. What information was the LEAST helpful to you?
4. Which of today's topics would you like to know more about?
5. Check below any statement you feel generally describes today's session:
 - helpful & informative
 - interesting and stimulating
 - too much information at once
 - of little or no use
 - uncomfortable, waste of time
 - not enough time for questions & answers
6. Your comments and recommendations for improvements for future sessions:

APPENDIX E

OUTREACH PROJECT EVALUATION IN
REVISED FORM

OUTREACH PROJECT EVALUATION

NAME _____ SCHOOL _____ DATE _____

TARGET GROUP _____

TOPIC(S) _____

1. How many outreach sessions did you have for your target group? _____
2. How long was each session? _____ hour(s)
3. What time of the day were the sessions held? (Indicate by placing a check in the appropriate blank, or if you did more than one session use a number)

Morning Afternoon Weekend
 Noon Evening Other, please specify _____

4. Please record (with numbers) the following information about each session: (Use the back of this sheet to include information about additional sessions.)

	Session 1	Session 2	Session 3
Total Attendance			
Sex			
M			
F			
Estimated Age Range			
Number of:			
Blacks			
Race American Indian			
Caucasian			
Other			

5. Where did your program take place?

Private home School cafeteria
 School classroom Sr. citizens' center
 Other, please specify _____

6. Indicate the frequency and location of the following techniques used to communicate with the public about your outreach program:

Method	# of times	Location	Was the method effective?
Brochures, flyers			
Exhibits			
Newsletters			
Newspaper stories			
In-person contact			
Posters			
Postal occupant mailings			
Presentation to high school students			
Presentations to community groups			
Student or youth clubs			
TV and/or radio spots			
Telephone			
Other			

7. List the final objectives of your outreach program and briefly describe how each objective was met.

OBJECTIVES

IMPLEMENTATION

--	--

8. Using the chart below:

- a. Place a check in column A to indicate teaching methods used in your outreach program, and
- b. Rate the effectiveness of each method used by checking in column B.

A		B			C
Methods (please check)		Not Eff.	Eff.	Very Eff.	Comments
Bulletin Board	___	___	___	___	
Demonstration	___	___	___	___	
Discussion	___	___	___	___	
Display	___	___	___	___	
Games	___	___	___	___	
Laboratory Session	___	___	___	___	
Learning Centers	___	___	___	___	
Mobile	___	___	___	___	
Skits and Plays	___	___	___	___	
Slide Series	___	___	___	___	
Transparencies	___	___	___	___	
Other _____	___	___	___	___	

9. Indicate the source and amount of money used in the following areas of your outreach program:

	Source	Amount
Child Care		
Food		
Development of Educational Materials		
Other, please specify		

10. Indicate the source and amount of donations used in the following areas of your outreach program:

	Source	Amount
Child Care		
Food		
Development of Educational Materials		
Other, please specify		

11. What recognition was given to those who attended and/or completed the program? (Check all that apply.)

<input type="checkbox"/> Certificate	<input type="checkbox"/> Plaque
<input type="checkbox"/> Door prizes	<input type="checkbox"/> Radio publicity
<input type="checkbox"/> Favors	<input type="checkbox"/> Take home materials
<input type="checkbox"/> Name in newspaper article	<input type="checkbox"/> None
<input type="checkbox"/> Newspaper picture	<input type="checkbox"/> Other, please specify

12. Was an advisory committee utilized during your outreach program? If so, in what capacity?

13. Indicate the number of volunteers used in your outreach program by placing a number in the respective blank.

<input type="checkbox"/> Advisory committee members	<input type="checkbox"/> Parents
<input type="checkbox"/> Community resource persons	<input type="checkbox"/> Students
<input type="checkbox"/> Members of target group	<input type="checkbox"/> Other, please specify

14. Indicate the approximate number of hours donated by each of the following:

<input type="checkbox"/> Advisory committee members	<input type="checkbox"/> Parents
<input type="checkbox"/> Community resource persons	<input type="checkbox"/> Students
<input type="checkbox"/> Members of target group	<input type="checkbox"/> Other, please specify

15. Please list below your community resource people and indicate the role of each in your outreach program:

Name, Organization	Role in Program

16. How were volunteers trained/oriented?

Class session(s)
 FHA meeting(s)
 Special training session

No training provided
 Other, please specify _____

17. What were the most promising practices used with volunteers?

(Use additional pages as needed for these questions)

18. What was the effect of your outreach program on the target group?

Example: Pretest-Posttest results indicate an increase in nutrition knowledge.

19. What feedback about the outreach program have you received from your community?

20. What community needs have come to your attention through your work in the outreach program? (Mention needs even if they do not relate directly to your program.)

Example: No public transportation is available for the elderly.

21. What other contacts/programs have developed as a result of your outreach program? (Who else has contacted you for information? What other presentations have you made in the community?)

22. As a coordinator, what was the most difficult aspect of the program?

23. What was the most rewarding aspect of the outreach program for you, your students, your school, and the target group?

24. What workshop materials were especially helpful to you?

/
VITA

Barbara Guthrie Alsup

Candidate for the Degree of

Master of Science

Thesis: EVALUATION OF SELECTED OUTREACH PROGRAMS IN
NUTRITION EDUCATION

Major Field: Home Economics Education

Biographical:

Personal Data: Born in Indianapolis, Indiana, December 7, 1953, the daughter of Mr. and Mrs. Robert W. Guthrie. Married Robert F. Alsup, Jr., February 23, 1979.

Education: Graduated from Pike High School, Indianapolis, Indiana, in June, 1972; received a Bachelor of Science degree in Home Economics from Western Kentucky University, May, 1976; completed requirements for the Master of Science degree at Oklahoma State University in May, 1981.

Professional Experience: Junior high school science teacher and Food Service director, Burgin Independent Schools, Burgin, Kentucky, 1976-1978; Vocational Home Economics teacher, Crittenden County Schools, Marion, Kentucky, 1978-1979; Graduate Research and Teaching Assistant, College of Home Economics, Oklahoma State University, Stillwater, Oklahoma, 1979-1981.