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To the Graduate Council:

I am submitting herewith a thesis written by Lois Naomi Oliver entitled "A Study of the Teaching Methods Reported As Having Been Used by Home Economics Teachers in Vocational Classes of the High Schools in the Roanoke District of Virginia, 1949-50." I recommend that it be accepted for nine quarter hours of credit in partial fulfillment of the requirements for the degree of Master of Science, with a major in Home Economics Education.

Jane Cozine
Major Professor

We have read this thesis and
recommend its acceptance:

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Christine Brasley

Accepted for the Council:

E. H. Waters
Dean of the Graduate School

A STUDY OF THE TEACHING METHODS REPORTED AS HAVING BEEN USED
BY HOME ECONOMICS TEACHERS IN VOCATIONAL CLASSES OF THE
HIGH SCHOOLS IN THE ROANOKE DISTRICT OF VIRGINIA,
1949-50

A THESIS

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of
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for the degree of
Master of Science

by

Lois Naomi Oliver

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L.N.O.

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CHAPTER I

PURPOSE AND PLAN OF STUDY

A study of the teaching methods reported as having been used by home economics teachers in vocational classes of the high schools in the Roanoke District of Virginia (1949-50).

The major purposes of this study were:

1. To find out what teaching methods were used most frequently by teachers in the various areas of home economics.
2. To find out whether teaching methods used seemed to produce satisfying results in terms of (a) pupil's liking for a subject matter area and (b) pupil's achievement.

Assumptions

1. The effectiveness of teaching methods being used by teachers of vocational home economics may be reflected in the liking developed by both pupils and teachers in regard to the various areas of work.
2. The results of the study may be of value to teacher educators (pre-service and in-service) in helping teachers choose more effective methods.
3. The study should provide material which will be helpful to home economics teachers in setting up more satisfying learning experiences for the pupils with whom they work.

Limitations

This study was concerned with the teaching methods reported as having been used by 35 of the teachers of vocational home economics classes in public high schools in the Roanoke District of Virginia during the school year of 1949-50. The Roanoke District is composed of Amherst, Appomattox, Bedford, Botetourt, Campbell, Craig, Giles and Roanoke Counties and Roanoke City.

The 35 teachers who reported the teaching methods they had used taught in programs which would seem to be representative of those found in high schools throughout the State. That is, there were teachers reporting from both large and small high schools; teachers who taught in rural areas and others who taught in urban communities; teachers who taught in agricultural sections and others who taught in industrial areas; teachers who had the usual three-year vocational program, others who had only junior high school classes, a few who taught only senior high school home economics classes, and a few who had a four-year home economics program; teachers who were responsible for all three years of the vocational program and others who were working with one or two other home economics teachers in the same school.

Twenty-four of the 35 teachers participating in the study had the entire responsibility for a three-year vocational home economics program; three were responsible for a four-year vocational program; five teachers, three in one school and two in another, had the joint responsibility for a three-year home economics program; two taught in a junior high school

where only the first year of the vocational course was offered; and one teacher had the first year of the vocational course in the junior high and also a second year of the vocational course (overflow group from the senior high school).

Teachers were given the choice of reporting on work done by their home economics pupils in any one, two, or all three years of their vocational program. Those few teachers who had a four-year program were asked not to report on work done in the fourth year.

Procedure

Williamson and Lyle's definition of a teaching method was used for the purpose of this study. "A teaching method is a technique for developing pupil learning, which under our present interpretation of learning, takes place most effectively when it occurs through self-purposed and self-directed experiences."¹

Thirty different teaching methods which are generally used in home economics teaching were listed and defined. A mimeographed copy of this material (see Appendix) was given to each of the 43 teachers of vocational home economics in the Roanoke District of Virginia to be used in making a report of the teaching methods she had used (1949-50).

The writer discussed with each of the teachers the purpose of the study and the way in which she would secure the information for filling out the necessary forms (see Appendix).

¹Maude Williamson and Mary Lyle, Homemaking Education in the High School (New York: D. Appleton-Century Company, 1941), p. 146.

The data were recorded by the teachers as pupils worked on problems in various areas of homemaking during the year. At the end of the school year, each pupil and each teacher checked an evaluation sheet (see Appendix). The data on the pupils' evaluation sheets were compiled by the teachers.

Thirty-five reports were completed during the school year and returned to the writer at the close of the 1949-50 school session.

The writer tabulated all of the data from the reports submitted by the 35 teachers and started setting up tables. It was at this point that the enormous, almost prohibitive (from the standpoint of time), task of writing up all the material became quite apparent. The decision was then made to select four areas, two in which the greatest number of teachers reported work done (food and clothing) and two in which the smallest number reported work done (health and family relations), to serve as the basis for the present study.

The objectives were studied and grouped into categories according to the statements "to learn", "to improve", or "to develop." The teaching methods used by the teachers in working toward the objectives in the four areas of home economics were tabulated. The outcomes of instruction as reported were grouped under three headings: (a) knowledge acquired, (b) appreciations developed and (c) skills and abilities developed. Pupil reactions and teacher reactions to the four areas of work were also tabulated.

General information concerning the pupil: grade, age, socio-economic group, intelligence quotient, and records of academic standing

in all courses and in home economics was tabulated. The number of achievement tests and other test results reported were so few in number that they were considered to be of no value in the over-all study.

It was felt that it would be helpful to tabulate information concerning the training, experience, and rating of the teachers and the type of department and space and equipment used by the teachers. These tabulations were made from the teachers' qualification sheets and from the reports of the individual program evaluations made during the spring of 1950. These records were available in the writer's office.

A review was made of literature and studies pertaining to teaching methods for the past ten-year period. Data were analyzed and interpretations made in light of this reading and the thinking of the writer.

CHAPTER II

REVIEW OF LITERATURE

History of Teaching Methods

Teaching methods change as our philosophy of education changes.

As Schorling¹ says:

Yesterday's teacher taught subject matter, and factual knowledge was given undue emphasis; the teacher of today is interested in the social and personal development of the individual pupil. In grandfather's time instruction was an end; today it is a means to an end—the end being the acquisition of desirable habits, attitudes, and skills on the part of pupils.

.
In 1900 the faith of the school people lay in the Herbartian steps; in 1905, in the cycle plan; in 1910, in the problem method; in 1915, teachers were excited about supervised study; in 1920, the project method promised to solve all our difficulties; in 1925, we had individualized instruction with many different models; in 1930, we became enthusiastic about the child-centered school; in 1935, we had great faith in the social studies as the core of the curriculum and, in 1940, adjustment of personality.

The discerning critic of public education will see in this shifting terminology a persistent stream of thought making for educational reform which threatens every five years to break through the stubborn obstacles. There is good reason for believing that the exponents of the problem method, the project method, supervised study, and all the rest aimed at one and the same goal: a greater amount of reflective thinking; and that these seemingly unrelated reforms represent a groping to design an education for adjustment and, specifically, an unconscious striving for a greater amount of transfer. By transfer of training we mean that a person will adjust more quickly and effectively to situation B because he has experienced situation A.

¹Raleigh Schorling, Student Teaching (New York: McGraw-Hill Book Company, Inc., 1940), pp. 89, 121-22.

Our educational practices have also been affected by our ability to understand something about the way in which learning takes place.

In many places, for example, the course of study movement of the 1920's based upon earlier beliefs about learning, has given way to the development of teaching guides which permit flexibility in classroom procedure. Similarly, exclusive emphasis upon paper and pencil tests of 'knowledge', resting on the psychological assumption that to know is to do, has been replaced by recognition of the need for a great variety of testing procedures and situations to measure growth in many dimensions. Highly directive teaching, with pupils making few if any important decisions about their own learning, is less widespread. In its place has come increased emphasis upon providing boys and girls with practice in making, following through, and evaluating their own plans.²

Let us now look more closely at specific teaching methods. The laboratory method of teaching which shall be considered first is not new. In fact Forbes³ tells us:

The laboratory method came into teaching through the physical sciences, with the central technique the experiment with apparatus and materials. Germany pioneered through the work of such men as Franche at the University of Halle in 1695 and Hecker in the Realschule of Berlin in 1747. At first the teaching was by demonstration, performed by the professor. Laboratory work was performed by students under Liebig at Giessen in 1826. In the middle of the century the Realschulen included in the curriculum physics, chemistry, mineralogy, and physical geography, with laboratory work as part of the instruction. The focus of attention was on the use of scientific materials in industry. In the United States, laboratory experiments were performed by students in the universities after 1850. Near the close of the century this method was adopted by the high schools. Dewey's work, The School and Society, was

²Chandos Reid, "Instructional Materials and Problem-Centered Teaching," Teachers College Record, 52:24, October 1950.

³William C. Forbes, "Purpose in Laboratory Experiences," Teachers College Record, 49:423, March 1948.

published in 1896. Its philosophy of 'we learn to do by doing', gave impetus to the laboratory method.

The laboratory method as a concept has been used freely. It has been applied to any work involving observation. Various adaptations are used in the social sciences, mathematics, and vocational and commercial subjects.

Prior to the introduction of the laboratory method, students learned by reading and listening. Determining the solution to a problem commonly meant finding it in a book. In the laboratory method, materials in question were manipulated and observed. Firsthand experiences answered many questions which verbal descriptions did not, and resulted in more definite associations between materials and concepts.

Visual education, though among those teaching methods considered relatively recent in use, is not a new device.

We are told that Pythagoras drew geometric figures in the sand when making his demonstrations. The first illustrated textbook appeared shortly after the invention of the printing press. Reading was taught in the early New England schools with the aid of pictures. The good teacher has long used maps, charts, globes, diagrams, models, flat pictures, dramatizations, the blackboard, the bulletin board, collections of specimens, exhibits, cartoons, posters, and a variety of laboratory equipment. The school excursion has been used, probably as long as schools have been organized, although in more recent years it has come to play a more prominent role as a carefully planned event and a form of overt teaching.

The thing that is new about this type of education is that the number of visual and auditory aids in teaching has increased tremendously in recent years as new developments in electrical engineering have opened up greater possibilities for their use, and as research studies of learning have suggested that these supplementary aids not only are useful to enrich and vitalize teaching but probably improve its effectiveness.

Within the last few years new forms of visual and auditory aids have appeared, each one having a definite educational value. Among these are the silent and sound motion picture, radio, phonograph, school museum, stereograph and stereoscope, lantern slides, film strips, opaque projector, and sound slide film.⁴

⁴Schorling, op. cit., pp. 184-85.

During the early days of radio, its potentialities as an instrument of education were widely heralded; however, many difficulties not at first seen limited its use and value as a means of classroom teaching.

For fifteen years the Columbia Broadcasting System prepared and broadcast five half-hour programs a week for use in the classrooms of our elementary and high schools. In 1945, CBS decided that school boards would never put radios in classrooms, and that if they did teachers would never use them. As a result of this decision, the American School of the Air became a home listening series.

The coming of FM (frequency modulation) is, as Mr. Charles Siepmann has expressed it in the title of his highly stimulating book, Radio's Second Chance. It is also education's second chance.

.
The growing interest in radio as a supplementary instrument of instruction in the public school classroom was attested recently to a greater degree than ever before, at the 1946 School Broadcast conference in Chicago.⁵

In their progress report of 1946-49, the program of school experimentation cooperatively carried out by the Battle Creek, Michigan, Public Schools and the Horace Mann-Lincoln Institute of School Experimentation, recognized the importance of problem solving and group work. They stated that:

The term, 'problem-centered group activities' is one of convenience and is used to designate an educational process by which teachers and students work cooperatively to solve problems related to the experience, interests, and concerns of young people.

.
The problems of young people have their source in situations where individual and group adaptive behavior are inadequate. For example, patterns of behavior learned in the

⁵James F. Macendrew, "Education Re-examines Radio," Teachers College Record, 48:156-57, December 1946.

elementary school with respect to the peer group and to teachers are more than likely to prove inadequate in the junior and senior high school where multi-group membership is encountered and several teachers are met daily.⁶

Studies of Teaching Methods in the Area of Home Economics

Hatcher guided a graduate class in curriculum study at Michigan State College in the compilation of a list of objectives which were common to large groups of students in home economics at different age levels and which should be useful to teachers in any part of the country. Wampler⁷ selected some of the more intangible objectives from this list and developed them. The objectives were concerned with personal and family relations on the junior high and senior high school levels.

Wampler stated each objective in simple terms, diagnosed each objective as to the specific behavior showing evidence of attainment by the student, and stated generalizations, facts, and concepts related to it. She compiled and included under each objective appropriate learning experiences and informal methods of evaluation.

⁶Hubert M. Evans, Editor, and others, "Cooperative Research and Curriculum Improvement Progress Report of an Experimental General Education Project, Battle Creek, Michigan, Schools and the Horace Mann-Lincoln Institute of School Experimentation, III The Problem-Centered Group and Personal-Social Problems of Young People," Teachers College Record, 51:438, April 1950.

⁷Gloria Mase Wampler, "Techniques for Teaching and Evaluating Certain of The More Intangible Objectives in Personal and Family Relations on The Junior and Senior High School Levels," Master's Thesis, The Pennsylvania State College, State College, Pennsylvania (1950).

Eight objectives were completed and submitted to 45 teachers of home economics in the United States and Canada for experimental use in actual classroom situations. Each objective was tested in a minimum of ten classroom situations.

The majority of the teachers using newer teaching techniques, the sociodrama, buzz session, anecdotal record, and the sociograph, found them effective. For example, of the 18 teachers who used simple dramatization in helping students work on the objective, "to know how to make friends that are good for me and how to keep them", 15 considered the technique effective, two believed it ineffective, and one was undecided. In working on this same objective, five teachers used the buzz session. Three of the teachers regarded this technique as effective, one rated it ineffective, and one teacher found her class preferred to write out their questions.

The MIATA ("My Ideas About Teaching Adults") was developed by Rhodes⁸ as a tool to secure from teachers of adults in homemaking education information concerning their choices of objectives and methods. The three styles of leadership or methods employed were classified as being "democratic", "authoritarian", and "laissez-faire." The objectives were either task or learner centered. She secured information from 130 homemaking teachers whose experience in teaching adults ranged from less than one year to more than ten years.

⁸Kathleen Rhodes, "A Study of Teachers' Choices of Objectives and Methods for Teaching Adults in Homemaking," Doctoral Dissertation, Cornell University, Ithaca, New York, June 1950.

One of the most evident findings from the study is the confusion of thought shown by many people in their choice of objectives and methods. The choice of objective varied according to the situation and the choice of method varied with the emphasis put upon each objective.

.....
It appears that method and objective are governed by what is being taught rather than by the person to whom it is being taught.

.....
Many respondents who chose learner centered objectives and who chose democratic methods upon a first examination of the situation seemed to believe it necessary to choose an authoritarian method in order to teach principles of subject matter most effectively. It might be that this arises from lack of familiarity with and confidence in democratic methods of learning.⁹

.....
In the situation concerned with teaching Foods, many people considered the task centered objective as important as or more so than the learner centered objective. This was significantly different from the choice of objective in Clothing and Child Study where the majority believed the learner centered objective to be the most important. Possible reasons for this may lie in the emphasis put upon the importance of a knowledge of nutrition and food preparation *per se* rather than upon the meaning of this knowledge to the welfare of the individual. A recent study at the Pennsylvania State College gave evidence that people were not as well fed as would be expected in spite of sufficient money and the easy availability of information concerning the choice and preparation of adequate diets. Might it be that professional preparation for foods and nutrition teaching, though excellent in providing the prospective teacher with factual information, has been less effective in indicating the importance of the learner as the gateway to the implementation of improved food practices?

Interestingly enough, the biggest number of choices for a democratic method in any situation were made in the Foods situation. This is probably due to the fact that the physical set up in teaching Foods has favored group methods of working far more than has either Clothing or Child Care.¹⁰

⁹Ibid., p. 162.

¹⁰Ibid., pp. 163-64.

Rhodes found that those teachers who were reared in a democratic home, who had been taught in democratic school situations, and who were allowed freedom of choice with wise guidance while growing up were the ones who most frequently chose learner centered objectives and democratic methods. These same teachers had acquired a mastery of subject matter which gave them confidence in their teaching and contributed to their expressed enjoyment of teaching. The enjoyment of teaching seemed to go hand in hand with the use of democratic methods of teaching.

Jones,¹¹ a teacher at West Virginia University, made a study of methods used in teaching her college classes in family living. She and the students shared equally in planning the course. The sources of material for the course were books, magazines, outside speakers, and personal experiences. The instructor did not give rules for procedure, pass her opinion, or give direct advice in teaching the course. Her major purpose was to stimulate the students' thinking, provide opportunities for them to enlarge upon their experiences, and help them to see ways in which they could avoid or solve problems. In explaining the purpose of the course and the methods used, she said that:

It is not the desire of the author that the students should complete this course with definite ideas for conquering life, but rather that they gain some ideas of common problems encountered in living, possible solutions, and the consequences of probable solution.

¹¹Mary Rose Taylor Jones, "A Suggested Procedure for Teaching Family Living," Master's Thesis, West Virginia University, Morgantown, West Virginia, 1946, pp. 19-29.

It seems important to stress the positive side of living—the joys and happiness in family life, the rewards of service, and the thrill of loving. This is not done by avoiding thoughts of difficulties, but by realizing that hardships are minimized by comparison with the happiness and contentment involved; by realizing that conflict is always with us, (we are not peculiar or unadjusted because we have a problem), and can be settled agreeably if we so desire; and by emphasizing that freedom and responsibility go hand in hand.

It is hoped that students who finish the course will realize that a happy and worthwhile life is not based on youth and beauty, (as we stress here in the United States), but on a well-adjusted, broadminded serviceable method of living.

Methods Employed in Teaching This Course in Family Living.

- A. Discussion
- B. Student Reports
- C. Book Reviews by Instructor
- D. Quizzes and Questionnaires
- E. Research Paper
- F. Mid-semester Check-up
- G. Outside Discussion
- H. Panel Discussion
- I. Book Reports by Students
- J. Description of a Family
- K. Grades

Discussion:

Discussion was the most favored method used in this course. It was our desire to have students speak freely and frankly at all times. We wanted all inhibitions removed. Each student has had experience in this field but hesitated to discuss it because it was so personal.

.....

Various techniques were employed by the author to promote repartee. The beginning class periods encouraged informality. The instructor became a part of the class itself instead of a separate entity. We tried to create a desire, on the part of each individual, to talk and relate experiences.

If no more is accomplished the first few periods, than establishing desirable attitudes, and responses, that is enough. Learning takes place on four levels: intellectual, neuromuscular, emotional and social. Miss Flora Thurston, of Cornell University, says that it's wise to begin always with the emotional element in teaching or learning. Students must accept themselves, each other, and the instructor. The success of the whole semester depends upon the atmosphere developed in the beginning periods.

.....

Student reports:

A student report improves personality and develops poise and assurance in the individual and is well worth the time spent.

Book reviews by instructor:

Book reviews were used for one or more of the following reasons:

1. To bring a new subject into discussion.
2. To introduce a new book.
3. To rebuild interest and enthusiasm.
4. To give detailed study to a pertinent problem.
5. To add variety to the class.
6. To let the class know that the instructor is also doing research.
7. To build a foundation for the two book reports the students are asked to make.
8. To prevent an awkward lull in discussion.

Important data were given the class and yet a desire was usually created for one or more students to read the book.

Quizzes and questionnaires:

There are many questionnaires and personal quizzes available in this particular field. We found the ones on personality especially stimulating.

Research paper:

A pupil selected a subject in which he was particularly interested or in an effort to gain help in solving some problem which he had encountered or anticipated. The instructor was consulted concerning the topics selected and gave help in obtaining material.

The second half of the semester, the material gleaned from the research was presented to the other members of the class.

Mid-semester check up and plan for second half of semester:

Instead of the usual mid-semester quiz, the following questions were asked this class:

1. Which of the subjects discussed in this class has been most helpful to you? Why?
2. Which of the subjects discussed in this class has been least helpful to you? Why?
3. Which of the subjects discussed in this class has been repetition for you? Where have you had them before?

4. What subjects would you like to study the second half of this semester?

5. What changes would you like to make in class procedure?

.....
It has proven true, each time the class has been taught, that the topics which the class wished to cover the second half of the semester were the topics selected for special research during the first half.

.....
Question five of the mid-semester check-up offered suggestions for class procedure. Discussion has always been the most popular method employed. Students, however, were hesitant about leading discussions even though they participated in them willingly. Other methods of class procedure (as suggested by the class) were lectures, debates, panel discussions and outside speakers.

.....
Outside speakers:

Doctors, ministers, youth workers, homemakers, nursery school directors and business men were the most popular professions represented.

We have found people very willing to cooperate with us in this course, and many interesting class periods have developed from these visits.

.....
Panel discussion:

Planned panel discussions added variety to the class. They were especially feasible when three or more students had studied the same or closely related topics. Sometimes the material obtained could be divided among the participating students and given in this manner. Other times a debate could be planned giving two sides to a question, and then allowing the whole class to participate. As an illustration of the possibilities of this procedure, we had a debate between a Catholic and a Protestant on inter-marriage between two persons of different religions.

Often these programs could be successfully presented to Women's Clubs, etc. Such an experience proved beneficial to both the students and club members.

.....
Book reports by students:

Each student read two books during the second half of the semester.

The student summarized the book, gave his opinion of its value and told for whom he would recommend it.

Description of a family:

The instructor also asked early in the second half of the semester for a written detailed description of some family which the student knew intimately. . . .

The purpose of such a description was to afford an opportunity for applying principles which had been discussed during the semester. We felt it valuable to develop powers of observation and in turn to show how one may learn or benefit from the experience of others. An opportunity was afforded for discovering actual problems which existed in a specific family and stimulated students to think out methods of dealing with them. The description was very detailed and helped the student to recognize the many areas in which management was involved and good management necessary for happy family life.

.
Grades:

Because of a lack of means of evaluating personality development and change of attitudes, grades were based on their papers, discussion, and class attendance. "This method is not too satisfactory, but seems to be as desirable as any with the limited information available."

Jones felt that her procedure for teaching the course in family living was successful. She recommended individual conferences and smaller groups (there were 30 to 35 pupils in her classes). Jones also stated that the comments of the students were favorable to her teaching methods.

Kelly¹² worked with three homemaking teachers at Pennsylvania State College High School to see if some habits which the teachers had found difficult to establish at the high school level could be established. The objectives around which Kelly centered her study were:

¹²Wilma Kathleen Kelly, "Techniques for Teaching Certain Practices Considered Important but Difficult to Establish by Homemaking Teachers," Master's Thesis, The Pennsylvania State College, State College, Pennsylvania (1949).

1. To dress appropriately for foods work
2. To keep the range clean
3. To keep the kitchen cabinet in order
4. To choose the appropriate utensils for cooking
5. To talk so as not to disturb others
6. To know when and where to eat and chew gum
7. To introduce people in a pleasing manner when necessary
8. To be more considerate of others
9. To have good posture when sewing
10. To use a thimble while sewing

The first six practices were worked on in foods classes and the last four in clothing. The study was carried out with seventh, ninth, and eleventh grade home economics classes. Kelly developed, used, and evaluated instructional devices for each objective and for each level.

The pupil, teacher, and other classmates evaluated each pupil's practices before the work on each objective began. Devices in the form of check lists, diaries, logs, and games were then used by the pupils to record their observations and progress in working toward each objective. At the end of their study, pupils again evaluated themselves to determine the amount of progress they had made.

The teacher-pupil planning and the pre-evaluation gave the pupils an incentive to establish the practices set forth in the study. According to the teachers who worked with the pupils, 50 to 85 per cent of the seventh graders improved in the six food objectives; 50 to 75 per cent of the ninth grade pupils improved; and 67 to 83 per cent of the eleventh graders who participated in the study improved. Fifty to 65 per cent of the pupils improved in their posture; 45 to 65 per cent improved in the use of the thimble; and although no numerical scores were given, there were indications of much improvement on the part of the class members in the other objectives set up.

Pupils enjoyed those teaching devices which were original ideas of the teacher making this study but indicated that all the devices were helpful. They liked group competition rather than competition on an individual basis.

During the school year of 1946-47, Yauger¹³ made a study of two groups of 30 ninth grade home economics students in Lancaster, Ohio, High School to determine the effect of movies integrated with nutrition teaching on the improvement of their food habits and their knowledge of nutrition. The two groups of students were comparable in age, intelligence quotient and home background. Each group received the same instruction in foods and nutrition through the same experiences, except that movies were used to serve as the motivating factor with the experimental group.

The food habits of both groups improved significantly in respect to the consumption of milk, green and yellow vegetables, and citrus fruits. The improvement in food habits was significantly greater when movies were used as visual aids than when students experienced the usual home economics teaching. The goal-seeking and self-evaluation method of teaching, based on the newer philosophy of education together with group planning and preparation of meals in the foods laboratory were also important factors in food habit changes as shown by improvements in the food habits of the students in the control group.

¹³Ruth Jane Yauger, "The Value of Movies and Film Strips As Devices to Motivate Ninth Grade Home Economics Students to Improve Their Food Habits," Master's Thesis, The Ohio State University, Columbus, Ohio (1948).

Field trips, teacher demonstrations of food techniques, nutrition charts and food models were methods which helped to motivate the students who did not see the movies to improve their food habits. The girls who saw the movies were influenced to include breakfast in their meal patterns to a greater extent than those in the control group.

More skill in food preparation techniques was shown by the girls who were given demonstrations by the teacher rather than instruction by movie or film strip.

Yeiser¹⁴ made a study in 1949, the major purposes of which were:

1. to ascertain what audio-visual equipment was available in the high schools studied;
2. to determine what use was being made by the homemaking teachers of the audio-visual equipment that was available in these schools; and
3. to secure the evaluation by the homemaking teachers of a selected group of films and filmstrips.

Eighty homemaking teachers in Areas V and VI in the State of Texas participated in the audio-visual aids study. The use of the following audio-visual aids was studied: film, filmstrip, slide, radio, record player, and the recorder. Seventy-five films and filmstrips on the secondary age level and produced since 1940, were listed to be rated by the homemaking teachers participating in the study.

The following findings from the Yeiser study seem to be significant:

¹⁴Alta Frances Yeiser, "A Survey of the Use of Audio-Visual Aids in Homemaking Education in the Public Schools of Areas V and VI in Texas," Master's thesis, The University of Texas, Austin, Texas, May 1949, pp. 61-69.

1. Of the seventy-five secondary schools represented in this study seventy-three or 91 per cent were senior, junior, or junior-senior combinations. Of this number, fifty-three or 66 per cent were senior high schools.
2. The total enrollment of homemaking students in the senior, junior, or junior-senior combination classes was 5,497.
3. Ninety-one per cent of the schools owned a sound motion picture projector. Eighteen per cent of the schools had a silent motion picture projector, and some of the teachers reported that their schools had both types of projectors. Almost one-half of the schools owned either a 2x2 or a 3 $\frac{1}{2}$ x4 slide projector and a sound or silent film-strip projector. More than 75 per cent of the schools owned a screen. Over 50 per cent of the schools had a public address system and 25 per cent had a radio in the homemaking department. Less than one-half of the schools had record players, and only about one-fourth had any type of recorder. Of the recorders available, the wire recorder was the most popular type.

As a whole, the findings indicated that the majority of teachers had a motion picture projector and a screen available to them. More than one-half of the teachers used sound motion pictures either frequently or occasionally. Other types of equipment were limited and were not being used to any great extent.

4. Various rooms in the homemaking department were checked fifty-seven times as places where audio-visual aids were used. Rooms outside of the departments were checked sixty-seven times. Thirty-five per cent of the teachers used the auditoriums, while 24 per cent used special projection rooms. Other rooms, not listed on the check list but given by the teachers, were the following: bedroom, library, gymnasium, study hall, and vocational agriculture building.
5. While approximately one-half of the teachers considered the darkening and seating arrangements of the room in which audio-visual aids were used as only fair, the ventilation and acoustics were considered even less desirable.
6. More than one-half of the teachers reporting stated that their superintendent or principal was responsible for audio-visual aids in their schools. Only 14 per cent of the teachers had a full time coordinator. Others that help to direct the program included teachers of science, agriculture, manual drawing, English, Chemistry, Spanish, mathematics, art and civics, and librarians.
7. Seventy-one per cent of the schools had definite appropriations for audio-visual aids. In one-fourth of the schools these aids were financed in various ways--by the

Parent-Teacher Association, Future Homemakers of America, and from sales and charge programs, donations from the Senior Class, sales from the coke and candy machines, and local maintenance.

8. Eighty teachers reported using audio-visual aids a total of 736 times during the past semester. Films and filmstrips were used more times than the other types of aids.

9. The majority of films and filmstrips were obtained from the State Film Library, Visual Instruction Bureau of The University of Texas, and from commercial companies.
10. In the preparation for the use of slides, films and filmstrips, about half of the teachers checked that they acquainted themselves with audio-visual aids by reading a description in a catalog, magazine, or producer's announcement, or by previewing.
11. Thirty-four teachers gave no answer to the question pertaining to the preparation for use of records and radio. Seventeen reported that they prepare themselves by listening to the record or program before class, while sixteen reported that they used a manual or guide.
12. The chief preparation that the students had prior to the use of audio-visual aids was instruction to "listen" or "look" for information. A few teachers required library assignments prior to the use of audio-visual aids.
13. The most frequent ways in which audio-visual aids were used as a teaching device by those answering this question were (1) to supplement information; (2) to introduce a subject; and (3) to summarize or review.
14. The follow-up activities that took place most frequently after showing of films, filmstrips and slides were: discussions, evaluations, test or quiz, individual or committee reports, and experiments. Other activities that took place less frequently included making own slides, films or filmstrips, or seeing a film, slide or filmstrip similar to the one seen.
 A large per cent of the teachers did not answer the question pertaining to the follow-up activities for records or radio. The majority of those that did reply gave discussions or evaluations. Other teachers reported that they listened to other radio programs and records similar to the one heard or repeated the record that was presented.
15. Eighty-three per cent of the teachers did not answer the question pertaining to the use of the recorder. Four of the teachers reporting having recorders available did not use them.

Yeiser made the following recommendations:

1. It is recommended that homemaking teachers familiarize themselves with audio-visual materials so that they may use this new aid effectively.
2. It is recommended that homemaking teachers do all that they can to promote better building facilities for audio-visual aids—such as making dark curtains or shades, or any other way that might promote the use of these aids.
3. It is recommended that homemaking teachers do all they can to promote a better audio-visual program within the school system.

Summary

Teaching methods change as our philosophy of education changes.

The teacher of today places emphasis on the social and personal development of the individual; whereas, the teacher of a few years ago was emphasizing subject matter. The instruction is not considered an end within itself but rather a means which helps to develop on the part of pupils desirable habits, attitudes, appreciations and skills.

It is important that the teacher understands how learning takes place. His understanding influences the selection of methods he employs in his teaching.

The laboratory method, which involves manipulating materials and making observations, was a step forward from the reading and listening that had so long taken place in the classroom. The use of the laboratory method resulted in more definite association between materials and concepts.

Visual aids, though not new as a teaching method, have taken many new forms and are more widely used in our schools of today. They help to enrich and vitalize teaching and probably have improved its effectiveness.

The value of the problem solving method and group work, which was recognized in the 1946-49 progress report of the Battle Creek, Michigan, Public Schools and the Horace Mann-Lincoln Institute of School Experimentation, is today recognized by leading educators throughout the country.

Newer teaching techniques, the sociodrama, buzz session, anecdotal record, and the sociograph, have been found by teachers to be effective. Pupils also enjoy original teaching techniques and devices.

Class discussion has seemed to be a favored teaching method. Student reports, questionnaires, research papers, outside speakers, panel discussions, field trips, teacher-pupil planning and evaluation have seemed to be other effective teaching methods.

It has been found that those teachers who were reared in a democratic home, who had been taught in democratic school situations, and who were allowed freedom of choice with wise guidance while growing up were the ones who most frequently chose learner centered objectives and democratic methods of teaching.

CHAPTER III

GENERAL DESCRIPTION OF THE TEACHING SITUATION FOR 35 HOME ECONOMICS TEACHERS IN THE ROANOKE DISTRICT OF VIRGINIA, 1949-50

Teachers

Training

The 35 home economics teachers in the Roanoke District of Virginia in 1949-50, with the exception of one, had completed four years of college training and held the degree of Bachelor of Science. Two had completed the work for the Master's degree (Table I). The percentage of qualified home economics teachers may have been considered high in view of the fact that of 16,418 white teachers in Virginia in 1949-50, only 58.1 per cent held a baccalaureate or higher degree.¹ However, these home economics teachers were employed to teach in high schools where teachers are more likely to be required to hold a Bachelor of Science degree or its equivalent.

All except two of the 35 home economics teachers reporting held special certificates which qualified them for teaching in vocational schools and classes (Table I).

¹Bulletin, State Board of Education, Annual Report of the Superintendent of Public Instruction of the Commonwealth of Virginia, School Year 1949-50 (Richmond: Commonwealth of Virginia, Division of Purchase and Printing, September 1950), Vol. XXXIII, No. 3, p. 153.

TABLE I

SUMMARY OF FORMAL TRAINING, YEARS EXPERIENCE TEACHING HOME
ECONOMICS, AND RATING OF 35 HOME ECONOMICS TEACHERS IN
THE ROANOKE DISTRICT OF VIRGINIA, 1949-50

Training, Experience and Rating	Number	Per Cent
<u>Degree Held</u>		
None	1	2.9
B. A.	1	2.9
B. S.	31	88.6
M. A.	1	2.9
M. S.	1	2.9
<u>Hold Vocational Certificate</u>		
No	2	5.7
Yes	33	94.3
<u>Years of Teaching Home Economics</u>		
0 - 2	9	25.7
3 - 5	14	40.0
6 - 9	6	17.1
10 - 15	3	8.6
16 - 25	3	8.6
<u>Rating by Professional Group</u>		
Poor	0	0.0
Fair	2	5.7
Average	19	54.3
Good	9	25.7
Excellent	5	14.3

Experience

The turnover among home economics teachers in the nation has been considered unusually high, but only 26 per cent of the home economics teachers who participated in this study had taught less than three years (Table I). This was a somewhat smaller number than was reported in the study of Factors Affecting the Satisfaction of Home Economics Teachers in 1948.² The teachers in the Roanoke District, then, tended to be a more experienced group than might have been expected. On the other hand, there were only half as many in the Roanoke group with ten or more years of teaching experience as in the nation as a whole in 1948.³

Since three-fourths of the Roanoke group had taught more than three years but less than one-fifth had taught ten years or more, it might be assumed that the teachers had the advantage of having had fairly recent training. It may have helped to account for the fact that so few of the teachers held a Master's degree.

Rating

Since 1944, all home economics teachers in Virginia have been rated each year. Their ratings are based on evaluative criteria which were worked out by a representative group of home economics teachers and the entire home economics supervisory staff of Virginia. These criteria

²AVA Research Bulletin No. 3, Factors Affecting the Satisfaction of Home Economics Teachers (Washington, D. C.: Committee on Research and Publications, American Vocational Association, Inc., May 1948), p. 95.

³Loc. cit.

are used by administrators, teachers, supervisors and others concerned as a guide for program planning and program evaluation. They pertain to the extent to which the home economics teacher is making the program a comprehensive one; the extent to which the program is planned on the basis of needs of individuals and families in the community; techniques the teacher uses in guiding the growth and development of pupils in information, understanding, appreciation and skills; program and accomplishments of the Future Homemakers' Chapter; wise use of time; efforts to improve and use space, equipment, reference and illustrative materials; efforts to keep an efficient, attractive department; and the promptness with which the teacher's work is done and reports submitted to the proper persons.

At the end of the school year, an evaluation conference is held at each school with each teacher, principal, supervisor and sometimes the superintendent and/or the director of instruction participating. An over-all rating is then decided upon for the home economics teacher. At the end of the school year 1949-50, 19 of the teachers were rated as average. Only two were rated as fair; nine were rated as good; five were rated as excellent (Table I). The ratings arrived at through these conferences were used in this study.

Considering the professional training of the teachers and the number of years they had taught in relation to the rating they received, it would seem that more teachers might have been expected to rate above average. This would seem to indicate a need for strengthening the

in-service teacher education program. On the other hand, it may have been an indication of very high standards of rating.

Departments and Equipment

Type of Department

The 35 home economics teachers reporting for this study taught in 33 departments. Twenty-one of the teachers taught in home economics cottages having a living room, dining room, kitchen, bedroom and bath. The other 14 teachers taught in departments, ranging from one to five rooms in number, within the main school building (Table II). The type of department within itself would seem to have had little or no effect on the job done by the teacher though the space and equipment which we shall discuss next, would seem to have had a very decided effect.

Rating of Space and Equipment

The same procedure was followed in rating the space and equipment of homemaking departments as was used in the rating of teachers. (See section on teacher rating.) Twenty-six of the 33 departments rated average or above (Table II). This meant that the departments were not only adequate in space for the number of home economics pupils being taught but that they were also equipped for providing experiences in almost all areas of home living. For the most part, the equipment for providing experiences in the areas of food and clothing was adequate. Equipment for teaching first aid, home care of the sick, child care, and

TABLE II

SUMMARY OF THE TYPES AND SPACE AND EQUIPMENT RATINGS OF
THE 33 HOME ECONOMICS DEPARTMENTS IN WHICH 35 TEACHERS
IN THE ROANOKE DISTRICT OF VIRGINIA TAUGHT, 1949-50

Space and Equipment	Number	Per Cent
Type of Department		
Cottage	21	63.6
Department in Main School Building	12*	36.4
Space and Equipment Ratings		
Poor	0	0.0
Fair	7	21.2
Average	21*	63.6
Good	4	12.1
Excellent	1	3.0

*Three teachers taught in one of the departments within the main school building. The department in which they taught was rated average.

home laundering was not always adequate. However, the equipment for the 33 home economics departments seemed to be much more nearly adequate than that of the departments throughout the United States in 1948.⁴

It was found in the study of Factors Affecting the Satisfaction of Home Economics Teachers that:

Those teachers in departments equipped for teaching all phases of home economics had significantly higher job satisfaction scores than those who had less complete equipment such as that for teaching foods and/or clothing only.

.

It was surprising to find over 50 per cent of the teachers reporting their departments were equipped for teaching only foods and/or clothing. . . . It was not surprising that teachers tended to be less satisfied with teaching when they did not have equipment for teaching the various phases of the subject and no improvement was being made in the department.⁵

Pupils

Age Range

The class groups included in the study tended to be heterogeneous rather than homogeneous in regard to age. A total of 80 class groups was reported by the 35 teachers (Figure 1). The age range of pupils in any one class group was more likely to be from three to five years than from one to three years. There was an age range of four years in more than one-third of the class groups.

The age range of the pupils in the first year of the vocational home economics program (first year of high school) was 12 through 18 years

⁴AVA Research Bulletin, op. cit., p. 11.

⁵Ibid., pp. 10-11.

with a median age of 15 and an average age of 14.23 for the group. The age range for second year pupils was 14 through 20 with a median age of 16 and an average age of 16.22. In the third year, the age range of the pupils was 14 through 20 with a median age of 17 and an average age of 16.71 (Figure 1).

Fourteen is the age at which pupils may enroll in vocational home economics; however, if the majority in a class were 14, other pupils in that year of high school were also allowed to enroll. The average age of the first year home economics pupils was only slightly above 14. The average age of the second year pupils was one year higher than might have been expected. This may have been due to the fact that pupils often fail to take the first, second, and third years of their home economics work in consecutive years. The average age of the third year girls seemed to be consistent with what might have been expected; however, it is usually true that a much smaller number of girls take home economics for the third year than take it for their first or second year.

The age range of the home economics pupils reported in this study was consistent with the age-grade distribution for Virginia during the school year 1949-50. Decidedly the larger number of first year pupils in the State were 14 years of age; second year pupils, 15 years of age; and third year pupils, 16 years of age.⁶

⁶Bulletin, State Board of Education, op. cit., p. 300.

Socio-Economic Level

The majority of home economics pupils reported on in all three years of the homemaking course came largely within three of the socio-economic levels: farmers (owners and tenants), factory and building construction laborers, and semi-skilled workers in manufacturing (Table III). The majority of the male white employed workers in both the United States and Virginia in 1940, came within the following groups: semi-skilled workers, farmers (owners and tenants), skilled workers and foremen, and clerks and kindred workers.⁷ The percentage of parents employed as skilled workers and foremen, and clerks and kindred workers was higher for workers of the State and the United States than for the fathers of the home economics pupils in the Roanoke District of Virginia.

That the socio-economic status of the family may be somewhat related to the progress pupils make in school is borne out by a study made by Brunner.⁸ He found:

. . . that the proportion of children who are retarded decreases as the economic status of their families, measured by rental paid, increases. Conversely, the higher the rental the higher the proportion of children who are accelerated.

While it was not possible to determine the rental paid by the families of these pupils, occupation is generally conceded to be a determining

⁷Dr. Alba M. Edwards, Sixteenth Census of the United States: 1940 Population, Comparative Occupation Statistics for the United States, 1870-1940 (Washington, D. C.: United States Government Printing Office, 1943), p. 198.

⁸Edmund DeS. Brunner, "Educational Attainment and Economic Status," Teachers College Record, 49:242-49, January 1948.

TABLE III

SOCIO-ECONOMIC LEVELS OF HOME ECONOMICS PUPILS IN 35 SCHOOLS
IN THE ROANOKE DISTRICT OF VIRGINIA, 1949-50

Socio-Economic Groups	First Year (500 pupils)		Second Year (282 pupils)		Third Year (344 pupils)	
	No.	Per Cent	No.	Per Cent	No.	Per Cent
Professional persons	9	1.8	6	2.1	6	1.7
Proprietors, managers and officials:	223	44.6	111	39.4	133	38.7
Farmers (owners, tenants)	181	36.2	100	35.5	111	32.3
Wholesale and retail dealers	29	5.8	7	2.5	16	4.7
Other proprietors, managers and officials	13	2.6	4	1.4	6	1.7
Clerks and kindred workers	15	3.0	7	2.5	20	5.8
Skilled workers and foremen	25	5.0	17	6.0	39	11.3
Semi-skilled workers:	70	14.0	49	17.4	34	9.9
Semi-skilled workers in manufacturing	69	13.8	48	17.0	34	9.9
Other semi-skilled workers	1	0.2	1	0.4	0	0.0
Unskilled workers:	138	27.6	86	30.5	101	29.4
Farm laborers	0	0.0	0	0.0	0	0.0
Factory and building construction laborers	115	23.0	65	23.1	72	20.9
Other laborers	23	4.6	21	7.5	29	8.4
Servant classes	0	0.0	0	0.0	0	0.0
Not employed	6	1.2	2	0.7	1	0.3
Deceased	14	2.8	4	1.4	10	2.9

factor in the amount of money available for housing the family. Hence, the majority of pupils in this study might have been expected to be in the average income bracket.

Intelligence Quotient

Weschler⁹ says:

Intelligence is the aggregate or global capacity of the individual to act purposefully, to think rationally and to deal effectively with his environment.

The most universally used of all indices of intelligence is the intelligence quotient (I.Q.) which is generally calculated by dividing a person's mental age (M.A.) by his chronological age (C.A.).

The Intelligence Quotient (I.Q.), being a ratio, and fairly constant, indicates the degree of ability that the individual has in comparison with others of his age. It is a convenient measure for use in considering the relative ability of a person in relation to the average (indicated by I.Q. 100).

However, measures of capacity or intelligence should never be used alone, but should be considered in relation to other factors. One should not attempt to predict individual achievement from mental test data alone . . .¹⁰

According to established norms, the median ninth grade I.Q. is 101.5; the median tenth grade I.Q. is 103.0; the median eleventh grade I.Q. is 104.0.¹¹ The median I.Q. range for the home economics pupils

⁹David Weschler, Measurement of Adult Intelligence (Baltimore: Williams and Wilkins Company, 1944, Third Edition), p. 3.

¹⁰Percentile and Decile Norms for use with California Test of Mental Maturity, New California Short-Form Test of Mental Maturity, California Capacity Questionnaire.

¹¹Ibid., p. 11.

reported on in all three years in this study was 90-99 (Table IV). This fell from five to 14 points below the percentile and decile norms, and fell into the low average classification. Only 35 per cent of the typical population are included in this classification.¹²

The intelligence quotient range for the pupils reported on ranged from below 70 (very inferior) to 130 and over (very superior). Not more than 1.4 per cent of the pupils in any one year of the course fell into the very inferior classification.

The correlation or relationship between measurements of intelligence and academic success is far from perfect; in some subjects it is only 25 to 30 percent better than chance. Although students with higher I.Q.'s will in general do better than those with lower I.Q.'s, if they are about the same age, the teacher should always remember that other factors such as health, previously learned study habits, opportunity, persistence, encouragement, and the like play a large part in achievement.¹³

Academic Achievement

The largest percentage of home economics pupils in all three years came within the group who achieved an average grade of 80 to 89 in all courses. This was likewise true for the pupils' averages in home economics. A higher percentage of the pupils achieved an average of 90 to 100 in home economics than came within this same average range for all courses. The percentage of pupils who averaged below 70 was lower for home economics than for all courses (Table V).

¹²Ibid., p. 5.

¹³Ibid., p. 6.

TABLE IV

INTELLIGENCE QUOTIENTS OF HOME ECONOMICS PUPILS IN 35 SCHOOLS
IN THE ROANOKE DISTRICT OF VIRGINIA, 1949-50

I. Q. Test Results of Pupils	First Year (500 pupils)		Second Year (282 pupils)		Third Year (344 pupils)	
	No.	Per Cent	No.	Per Cent	No.	Per Cent
40 - 49	0	0.0	0	0.0	1	0.3
50 - 59	1	0.2	0	0.0	0	0.0
60 - 69	5	1.0	4	1.4	2	0.6
70 - 79	26	5.2	10	3.6	13	3.8
80 - 89	77	15.4	50	17.7	52	15.1
90 - 99	99	19.8	80	28.4	95	27.6
100 - 109	95	19.0	62	21.9	54	15.7
110 - 119	31	6.2	11	3.9	14	4.1
120 - 129	4	0.8	0	0.0	1	0.3
130 - 139	1	0.2	0	0.0	0	0.0
Not reported	161	32.2	65	23.1	112	32.6

TABLE V

ACADEMIC STANDING OF HOME ECONOMICS PUPILS IN 35 SCHOOLS
IN THE ROANOKE DISTRICT OF VIRGINIA, 1949-50

Year of Home Economics	Number Pupils by Year	Summary of Academic Standing															
		Average in All Courses								Average in Home Economics							
		- 69		70 - 79		80 - 89		90 - 100		- 69		70 - 79		80 - 89		90 - 100	
		No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
I	500	26	5.2	146	29.2	226	45.2	102	20.4	18	3.6	107	21.4	244	48.8	131	26.2
II	282	4	1.4	58	20.6	136	48.2	84	29.8	2	0.7	40	14.2	129	45.7	111	39.4
III	344	6	1.8	88	25.6	160	46.5	90	26.2	0	0.0	41	11.9	168	48.8	135	39.2

The difference between the grade average for home economics and the grade average for all courses may have been due to home economics being an elective subject. It is generally conceded that interest is a powerful motivating factor and it seems reasonable to assume that students who elect a subject are especially interested in the subject.

Summary

The training, years of experience, and rating of the teachers together with ratings indicating that the home economics departments seemed to be relatively well equipped would seem to indicate that a rather effective job of teaching might be done in the Roanoke District of Virginia.

The pupils whom the teachers taught were very near the average age-grade distribution for the State. The socio-economic status of the families might be considered near the average. The I.Q. average of the pupils seemed to be a little below national norms; however, since the I.Q. tests given were not specified, and different I.Q. test scores do vary, the writer may not have made a just comparison. The academic achievement of the pupils studied seemed to indicate that they were progressing normally.

CHAPTER IV

INTERPRETATION OF THE OBJECTIVES OF THE VOCATIONAL HOME ECONOMICS PROGRAMS AS REPORTED BY 35 TEACHERS IN THE ROANOKE DISTRICT OF VIRGINIA, 1949-50

General Over-All Objectives of Home Economics

The seven aims of education as stated by the Commission on Reorganization of Secondary Education of the National Education Association in 1918 were: (1) use of fundamental processes, (2) citizenship, (3) use of leisure time, (4) ethical character, (5) health, (6) worthy home membership and (7) vocational efficiency.

. . . worthy home membership as a goal of education has been very widely accepted. With this latter goal home-economics education is especially concerned though it also contributes to better health, to citizenship, to use of leisure time, the development of character, and to earning one's living.

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The best thought in general education today looks upon home economics as education for home and family life. Likewise the best thinkers in the field consider homemaking education as education in home living.¹

In another publication,² it is stated that:

. . . home and family living is used . . . to designate that part of a total education which equips individuals for

¹Maude Williamson and Mary Lyle, Homemaking Education in the High School (New York: D. Appleton-Century Company, 1941), p. 33.

²Federal Security Agency—U. S. Office of Education, Vocational Education in the Years Ahead (Washington, D. C.: United States Government Printing Office, 1945), p. 191.

effective membership in the family so that each contributes to home and community life according to his capacity.

The 35 home economics teachers in the Roanoke District of Virginia reported their general over-all objectives of home economics for the year of 1949-50 (Table VI). Some of the teachers reported only one objective; however, many of them reported two or more objectives.

The objective, "To help girls become better prepared to promote good home and community life", was reported 22 times and, therefore, constituted 31.4 per cent of the total number of objectives reported. Thirty-four of the other 48 objectives were stated in terms of helping the pupil to become an individual equipped for worthy home membership. Only 14 of the objectives were stated in such general terms that they may not have been interpreted as applying directly to homemaking; however, they did apply to the development of the individual personality which is after all the basis for worthy home membership.

In view of these findings, it seems that the homemaking teachers in the Roanoke District of Virginia had set up for their programs objectives which, for the most part, were well in line with the best thinking in both general education and vocational education today.

Objectives in Four Areas of Home Economics

Homemaking education, as generally conceived, is concerned with helping the individual live a more useful and satisfying personal and family life. It is, therefore, important that the homemaking program be

TABLE VI

SUMMARY OF GENERAL OVER-ALL OBJECTIVES IN HOME ECONOMICS AS
REPORTED BY 35 TEACHERS IN THE ROANOKE
DISTRICT OF VIRGINIA, 1949-50

Number of Times Objective Was Reported	Objectives Reported
22	To help girls become better prepared to promote good home and community life
12	To help girls acquire knowledge and develop skills necessary to carry out homemaking responsibilities
9	To help girls develop an interest in and an appreciation for homemaking
6	To help girls raise their standards and ideals
6	To help girls develop well rounded personalities in order that they may be worthy home and community members
5	To help girls become willing to accept responsibil- ity in the home
3	To help girls meet their needs
2	To help girls recognize their needs
2	To help girls become interested in seeking informa- tion they need
2	To help girls develop pride and confidence in them- selves and their ability to make contributions to good family living
1	To help girls develop a respect for the sacredness of parenthood
70 (Total)	

family centered. Though the home, school and community should work cooperatively in helping individuals develop desirable personality traits, it must be recognized that the home is the most influential force in the development of the individual. The home economics teacher especially should deal with the adolescent as a member of the family group. She should have some understanding of how the pupil functions in family living and what family living means to the pupil. The extent to which any individual attains a satisfying personal and family life is dependent to a considerable degree upon the kind of personality he develops.

Personality development is now regarded as being dependent upon the manner in which, and the degree to which, one is able to meet the developmental tasks of life.

A developmental task is a task which arises at or about a certain period in the life of the individual, successful achievement of which leads to his happiness and to success with later tasks, while failure leads to unhappiness in the individual, disapproval by the society, and difficulty with later tasks.³

Havighurst outlines the following nine developmental tasks as being significant at the adolescent stage:

1. Accepting one's physique and accepting a masculine or feminine role.

.....

2. New relations with age-mates of both sexes.

.....

³Robert J. Havighurst, Developmental Tasks and Education (Chicago: The University of Chicago Press, 1948), p. 34.

3. Emotional independence of parents and other adults.
.....
4. Achieving assurance of economic independence.
.....
5. Selecting and preparing for an occupation.
.....
6. Developing intellectual skills and concepts necessary for
civic competence.
.....
7. Desiring and achieving socially responsible behavior.
.....
8. Preparing for marriage and family life.
.....
9. Building conscious values in harmony with an adequate
scientific world picture.⁴

Objectives in the area of home economics, then, should be directed toward helping pupils achieve these developmental tasks.

This study was concerned primarily with the kind and variety of methods of instruction used by a group of home economics teachers. It was important to find out first, then, what teachers and pupils were trying to accomplish.

The specific objectives in the four areas of home economics selected for study as reported by 35 home economics teachers in the Roanoke District of Virginia, 1949-50, were summarized in Table VII. As will be noted from this table not all of the 35 home economics teachers reported on all of the work in every area. The teachers making the study were at liberty to report on their first, second, and/or third year classes' work in all of the areas of work which the pupils took during the school session of 1949-50. The writer felt that this free response method of reporting would give an adequate sampling of the work

⁴Ibid., pp. 30-63.

TABLE VII

SUMMARY OF OBJECTIVES IN FOUR AREAS OF HOME ECONOMICS AS REPORTED BY 35 TEACHERS

Area and Year of Home Economics		Teachers Reporting		To learn:				Number of Objectives Reported for							
		Per		Per		Per		Per		Per		Per		Per	
		No.	Cent	No.	Cent	No.	Cent	No.	Cent	No.	Cent	No.	Cent	No.	Cent
				<u>Standards</u>		<u>Prevention of Accidents</u>		<u>Rules of Sanitation</u>		<u>Symptoms of Disease</u>		<u>Health Services</u>		<u>Financial Importance</u>	
Health	I	13	37.1	24	58.5	4	9.8	4	9.8	6	14.6	2	4.9	0	
	II	9	25.7	6	42.9	1	7.1	0	0.0	3	21.4	2	14.3	0	
	III	2	5.7	1	25.0	0	0.0	0	0.0	1	25.0	0	0.0	1	2
				<u>Menu Planning</u>		<u>Food Preparation</u>		<u>Meal Service</u>		<u>Correct Table Manners</u>		<u>Food Preservation</u>		<u>Use and of Equipment</u>	
Food	I	16	45.7	10	11.5	23	26.4	17	19.5	5	5.8	1	1.2	1	
	II	11	31.4	10	19.6	14	27.5	8	15.7	0	0.0	1	2.0	1	
	III	10	28.6	8	16.0	15	30.0	5	10.0	0	0.0	3	6.0	1	
				<u>Clothing Construction</u>		<u>Clothing Selection</u>		<u>Care of Clothing</u>		<u>Selection, Use, Care of Equipment</u>		<u>Repair and Remodeling</u>		<u>Clothing Needs</u>	
Clothing	I	16	45.7	19	24.4	24	30.8	11	14.1	7	9.0	4	5.1	4	
	II	14	40.0	18	27.3	8	12.1	16	24.2	3	4.5	6	9.1	4	
	III	7	20.0	12	34.3	7	20.0	8	22.9	1	2.9	3	8.6	2	
				<u>Recognition of Individual Differences</u>		<u>Importance of Good Relations</u>		<u>Home Management</u>							
Family Relations	I	6	17.1	4	28.6	1	7.1	0	0.0						
	II	7	20.0	5	31.3	2	12.5	0	0.0						
	III	14	40.0	5	12.2	1	2.4	3	7.4						

TABLE VII

REPORTED BY 35 TEACHERS IN THE ROANOKE DISTRICT OF VIRGINIA, 1949-50

of Objectives Reported for Specific Areas								To improve:		To develop:		Total Number Objectives for the Year
No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	
<u>Health Services</u>		<u>Financial Importance</u>		<u>Career Interest</u>		<u>Rules of First Aid</u>				<u>Mental Health</u>		41 14 4
2	4.9	0	0.0	0	0.0	0	0.0			1	2.4	
2	14.3	0	0.0	0	0.0	1	7.1			1	7.1	
0	0.0	1	25.0	1	25.0	0	0.0			0	0.0	
<u>Food Preservation</u>		<u>Use and Care of Equipment</u>		<u>Food Economy</u>				<u>Food Habits</u>		<u>Good Work Habits</u>		87 51 50
1	1.2	1	1.2	0	0.0			24	27.6	5	5.7	
1	2.0	1	2.0	5	9.8			10	19.6	2	3.9	
3	6.0	1	2.0	6	12.0			7	14.0	4	8.0	
<u>Repair and Remodeling</u>		<u>Clothing Needs</u>		<u>Clothing Economy</u>						<u>Good Work Habits</u>		78 66 35
4	5.1	4	5.1	1	1.3					7	9.0	
6	9.1	4	6.1	6	9.1					4	6.1	
3	8.6	2	5.7	1	2.9					0	0.0	
								<u>Worthy Home Membership</u>		<u>Appreciation of Family Life</u>		14 16 41
								8	57.1	1	7.1	
								8	50.0	1	6.3	
								29	70.7	3	7.4	

in the district in order for her to study the teaching methods employed by the instructors.

A course of study for homemaking education in Virginia public schools was developed by home economics teachers and supervisors in the State in 1943 and has been used by the teachers as a guide for program planning. This course of study was predicated upon problems which were found to be common to a large number of individuals and families in the State; it sets up some possible objectives, pupil experiences and references, and gives some evidences of pupil growth which might be expected as a result of the pupils' work on the problems.

In a discussion on how the teachers should use this course of study, the following statements are made:

Selection of the general problems and the specific problems on which work will be centered should be governed by the needs of pupils as recognized by the teacher and by them. Some ways by which these needs may be determined are:

Group discussion of home responsibilities which the pupil assumes

Teacher and pupil analysis of the pupil's adjustment to home, school and community life

Discussion of pupil needs with parents

Simple surveys made by teachers and pupils of living practices in the home and the community

Teacher observation of pupil behavior at school and at home

Teacher observation of home living practices

Examination of studies made of State and National living practices

Examination of this course of study which is developed around recognized problems of individuals and families.⁵

⁵State Board of Education, A Course of Study for Homemaking Education in Virginia Public Schools (Richmond, Virginia: Division of Purchase and Printing, January 1943), p. 17.

The 35 homemaking teachers who participated in this study planned their programs of work following the suggestions given in the course of study.

This chapter is concerned with the relationship of the objectives reported to the nine developmental tasks mentioned earlier.

Accepting One's Physique and Accepting a Masculine or Feminine Role

In studying the teacher-pupil objectives of the homemaking program in the Roanoke District of Virginia, it was found that a number of the teachers reported having placed direct emphasis upon health. This emphasis was more likely to be given during the first year of the program than during the second or third year. Emphasis, regardless of the year in which health problems were studied, tended to be concentrated upon health standards. This emphasis seems to be consistent with Havighurst's statement:

Since we teach boys and girls to evaluate themselves so largely on the basis of their physical development, we must expect this to be a source of interest, pride, assurance, doubt, worry, or inferiority--feeling depending upon the accident of the individual's particular physique and pattern of growth.⁶

There is considerable evidence that girls, during their early adolescence, are vitally concerned about the normality of their physical development. It would seem, then, that work on problems of mental health and happiness would be important. This objective, mental health, was mentioned only once in each of the first and second years. Consideration of this fact would lead one to wonder whether the girls are exceptionally

⁶Havighurst, op. cit., p. 32.

well adjusted emotionally or whether sufficiently extensive attempts have been made to discover the emotional needs of the students.

Girls who were taught by the 35 teachers who participated in this study were given opportunities to recognize their health needs and to plan experiences which would assist them in meeting these needs. Experiences were provided in the areas of health, food, and clothing not only to help girls solve vital health problems but also to help them recognize the importance of health in relation to various phases of home living.

New Relations with Age-Mates of Both Sexes

In considering the developmental task, new relation with age-mates of both sexes, it becomes necessary for us to consider some adolescent characteristics.

From the age of 13 or 14, most boys and girls are pre-occupied with social activities and social experimentation. This is their most important business. They make the school their social laboratory. Within their own sex they learn to behave as adults among adults: to organize their athletics and social activities, to choose their leaders, and to create on a small scale the society of their elders.

With the other sex they learn the adult social skills: how to converse, to dance, and to play social games. As they become older they become skillful enough to drop out of the large, mixed play-group which is characteristic of ages 14 to 16, and to form foursomes and twosomes for a more intimate kind of comradeship, leading to courtship and marriage.

The most potent single influence during the adolescent years is the power of group approval. The youth becomes a slave to the conventions of his age-group. He must wear only the clothes that are worn by others, follow the same hair style, and use the same slang. Yet this conformity seems limited to the externals of life. In their inner life, adolescent boys and girls are still individuals, and sometimes individualistic to an extreme.⁷

⁷Ibid., p. 34.

The 35 teachers who participated in this study reported objectives on clothing selection throughout the three years of the home economics program. Almost one-third of the objectives reported in the first year of clothing were related to clothing selection (Table VII). It is characteristic of the adolescent girl to wish to dress in a manner acceptable to her group and to like to be comfortable and happy in the clothing she wears.

Emotional Independence of Parents and Other Adults

The task of becoming emotionally independent of parents and other adults is one that is frequently difficult for both parents and children. Parents want to see their children mature normally, and at the same time, have a reluctant feeling toward their approaching independence. Adolescents want to appear more adult-like, more independent, and yet like the security which their home and parents provide. Almost one-third (28.6 per cent) of the teachers reporting in the first year, approximately one-third (31.3 per cent) of the teachers reporting in the second year, and one-eighth (12.2 per cent) of those reporting in the third year of the course gave objectives related to helping pupils understand themselves and other members of their families as individuals (Table VII). Only by recognizing the individual worth of each person and by realizing that regardless of age all individuals have certain basic needs which must be met can students work on a sound basis in promoting a happy and wholesome home life.

The largest number of objectives reported by teachers in all three years of the homemaking course was directed toward the development of oneself as a worthy home member: 57.1 per cent in first year, 50.0 per cent in second year, 70.7 per cent in third year (Table VII). Girls in the third year of the homemaking course were more interested in their role in their own future home, and in learning how to manage a home of their own.

Achieving Assurance of Economic Independence and Selecting and Preparing for an Occupation

Achieving assurance of economic independence is a task that may have at one time been considered primarily for boys; however, most of us realize that it is of increasing importance to girls.

A limited home economics education can prepare one for many occupations. There is homemaking, for example, which though non-wage earning, makes a contribution of real importance to the individual, the family, and the community.

Homemaking demands a wide variety of skills. The homemaker must have the ability to create a comfortable, useful home. She must be able to work with her husband in establishing wholesome parent-child relationships. She must have the skill to plan and serve well-balanced, attractive meals and to entertain graciously. She must be a competent purchasing agent.

There is also a variety of wage-earning opportunities to which a limited home economics training makes some contribution. For some of these, home economics gives preparation for part of the job by developing special skills. For others it serves to make the individual more employable by helping her with personal appearance, health, and money management.

Employment opportunities for which individual instruction in the high school home economics department might be suitable include: preparing specific foods such as pies, cakes, cookies, lunch boxes, canned fruits or vegetables on a small-order scale; planning, preparing, and serving guest

meals in homes in the community; managing a tourist house; working in a small restaurant, grocery, or bakery; repairing and renovating clothes on a small-order scale; constructing clothes to order.⁸

Girls who live in small communities may also be given preparation through high school home economics for work in a store, selling clothing, or altering clothing in a dress shop. Many opportunities for employment in the care of children may be developed for those who have had work in child development. Girls who are trained to good work in home care will find employment opportunities in most communities.

.....
Home economics courses sometimes serve as preparation for occupations requiring some home economics understandings and skills.

.....
Many opportunities for employment are open to the college-trained home economist.⁹

It seems to become our responsibility, then, to acquaint girls with career opportunities, and to encourage those who have interest and abilities necessary for various careers to continue their education.

The teachers who reported seemed to be attempting to give girls training for the most important occupation of making a home. There is no evidence in the data collected to show that teachers are helping girls to select and prepare specifically for any other occupation in addition to that of homemaking.

Developing Intellectual Skills and Concepts Necessary for Civic Competence

The developmental task, developing intellectual skills and concepts necessary for civic competence, may be on first consideration a

⁸American Home Economics Association, Opportunities in Home Economics (Washington, D. C., 1949), p. 8.

⁹Ibid., pp. 9-10.

task which home economics training does not help the adolescent to meet. However, if we have recognized that we are helping to train adolescents for worthy home membership and that worthy home membership is the basis for good citizenship, we will see a close connection between the two.

To have civic competence, we should be aware of our community, its nature and its needs, and we should know how to work with others in a democratic manner in order to help our community meet these needs. Among the teacher-pupil objectives reported were some few which seemed to indicate an awareness of the community:

1. To learn how to prevent accidents in the home, school, and community.
2. To learn how to improve sanitation practices in home, school, and community.
3. To learn to cooperate with health organizations in the school and county in the promotion of good health for all.
4. To become acquainted with government regulations concerning our commodities.

None of the afore-mentioned objectives were listed by more than four teachers. The reporting of so few objectives in this area would seem to indicate that very little was done in our homemaking program to develop a sense of community awareness on the part of the girls enrolled in home economics. Perhaps in an effort to make the homemaking program a family centered program, teachers are tending to overlook the place the family has in the community and the relationship of various family members to the community of which they are a part.

Teachers of vocational home economics in the Roanoke District of Virginia seem to have endeavored to promote democratic beliefs and

principles. The 35 teachers who participated in this study reported 14 teacher-pupil objectives which were directed toward helping adolescents recognize that people are individuals, and as such, have individual differences. Forty-five objectives were related to the problem of becoming a worthy home member. Four objectives which emphasized the importance of good relations were reported (Table VII).

When such aspects of civil competence as concepts of law, government, economics, politics, geography and social institutions are considered, one thinks of other courses which aid the adolescent in meeting this particular developmental task. However, when human nature and the ability to work effectively with others are considered, homemaking is recognized for the important part it plays in giving training to the adolescent so that he can meet this task.

Desiring and Achieving Socially Responsible Behavior

There is little evidence in terms of the objectives stated for the four areas included in this study that much consideration is being given to this developmental task. However, consideration has been given to the importance of good relations and to worthy home membership. Consideration of personal traits and personal values, which go into the development of worthy home membership, would seem to help the adolescent become more socially responsible.

Preparing for Marriage and Family Life

The goal of the developmental task, preparing for marriage and family life, as stated by Havighurst is "to develop a positive attitude

toward family life and having children; and (mainly for girls) to get the knowledge necessary for home management and child-rearing."¹⁰

Evidence of the recognition of individual differences and worthy home membership was given through the teacher-pupil objectives reported. Approximately seven per cent of the objectives in each year of home economics were related to appreciation of family life. Seven per cent of the objectives in the third year of the course were related to home management as such (Table VII). The younger girls seemed to help with home duties whereas the older girls seemed to assume some home management responsibilities.

Building Conscious Values in Harmony with an Adequate Scientific World Picture

Specific objectives which would help the adolescent meet the developmental task of building conscious values in harmony with an adequate scientific world picture were not evident in those reported by the 35 home economics teachers of the Roanoke District of Virginia.

Havighurst¹¹ says:

The primary source of all values is the fundamental physiological drive of the organism. This drive expresses itself first in desire for food and warmth, later in desire for physical activity and for stimulation of certain zones of the body. These are the only values for an infant. All later values are built upon them.

¹⁰Havighurst, op. cit., p. 53.

¹¹Ibid., p. 56.

The primary values are patterned and channeled into a host of derivative values by experience in the family and in the culture. This process of building up derivative values takes place through the agency of persons who stand in special relations to the individual.

The degree of satisfaction a girl received from the work she did, the reward of approval given by the teacher and her classmates, and the opportunities she had for doing reasoning and reflective thinking may have done much to help her form her values.

Summary

The best thinkers in general education and in the field of homemaking education today look upon home economics as education for home and family life. Home and family living is used to designate that part of a total education which equips individuals for effective membership in the family so that each contributes to home and community life according to his capacity. The writer felt that the general over-all objectives set up by the home economics teachers in the Roanoke District of Virginia were consistent with this thinking.

Homemaking education, as generally conceived, is concerned with helping the individual live a more useful and satisfying personal and family life. This entails knowing the girl individually in order to be able to help her develop her own personality, and knowing her as a member of her family in order that the teacher may know the interactions of the family group and how the girl functions as a member of her family.

Personality development is now regarded as being dependent upon the manner in which, and the degree to which, one is able to meet the developmental tasks of life. Objectives in the area of home economics, then, should be directed toward helping pupils achieve these developmental tasks which Havighurst lists as being:

1. Accepting one's physique and accepting a masculine or feminine role.
2. New relations with age-mates of both sexes.
3. Emotional independence of parents and other adults.
4. Achieving assurance of economic independence.
5. Selecting and preparing for an occupation.
6. Developing intellectual skills and concepts necessary for civic competence.
7. Desiring and achieving socially responsible behavior.
8. Preparing for marriage and family life.
9. Building conscious values in harmony with an adequate scientific world picture.

Some of the objectives as stated by teachers and pupils were directed toward helping the girls meet some of their health needs. However, most of these needs were of a physical nature. It was felt that work on problems of mental health and happiness would also be important.

Opportunities for meeting the developmental task of new relations with age-mates of both sexes were provided to some extent in the areas of clothing and family relations.

Objectives in the area of family relations for the three years of the homemaking program were directed toward the development of oneself as a worthy home member; in the third year, they were directed also toward the role of the girl in her future home. Work toward these objectives probably helped the girls to become emotionally independent of parents and other adults.

The teachers who reported seemed to be attempting to give girls training for the most important occupation of making a home. There is no evidence in the data collected to show that teachers are helping girls to select and prepare specifically for any other occupation in addition to that of homemaking.

In training girls for worthy home membership, which is basic for good citizenship, teachers are probably helping girls develop some intellectual skills and concepts necessary for civic competence. However, in studying the objectives reported, it would seem that very little was done in the homemaking programs studied to develop a sense of community awareness on the part of the girls enrolled in home economics. Perhaps in an effort to make the homemaking program family centered, teachers are tending to overlook the place the family has in the community and the relationship of various family members to the community of which they are a part.

A few objectives directed toward the importance of good relations were reported. It might be assumed that teachers in working with girls on becoming worthy home members felt that they would, then, be able to achieve socially responsible behavior.

Girls in the homemaking programs studied seemed to be accepting home responsibilities consistent with the pattern of their growth and development. The younger girls tended to help with home duties, whereas, the older girls tended to assume home management responsibilities.

Specific objectives which would help the adolescent meet the developmental task of building conscious values in harmony with an adequate scientific world picture were not evident in those reported by the 35 home economics teachers in the Roanoke District of Virginia.

CHAPTER V

INTERPRETATION OF THE TEACHING METHODS REPORTED AS HAVING BEEN USED BY 35 TEACHERS IN THE ROANOKE DISTRICT OF VIRGINIA, 1949-50, IN WORKING TOWARD THE ATTAINMENT OF THE OBJECTIVES OF THE VOCATIONAL HOME ECONOMICS PROGRAMS

Teaching methods should be selected in terms of the goals of education. Spafford¹ says:

Selecting the subject matter to be taught and then deciding upon the methods to be used in teaching it worked so long as the learning of subject matter was the goal of education. Subject matter then answered the question of what to teach and method of how to teach it. The teacher is still concerned with what to teach, but this is seen as behavior patterns, special abilities, habits, and skills rather than as information to be learned. Subject matter used in a certain way becomes the means through which these learnings are to be realized. Subject matter and method then are inseparable.

The teacher who sees the purpose of learning to prepare supper at school as being able to prepare family suppers at home sets up a different teaching situation from the one who sees it as learning basic cookery processes, interpreting recipes, and acquiring management techniques. The dishes prepared in each case may be very similar, the cookery processes and management techniques used much the same, but the total teaching situation will be different because the purposes are different.

Williamson and Lyle² remind us that there are still other factors which need to be considered in selecting teaching methods to be used.

¹Ivor Spafford, Fundamentals in Teaching Home Economics (New York: John Wiley and Sons, Inc., 1948), p. 81.

²Maude Williamson and Mary Stewart Lyle, Homemaking Education in the High School (New York: D. Appleton-Century Company, Inc., 1941), p. 146.

Human beings are not standardized and therefore no method can be used with perfect success 100% of the time. Techniques must be selected according to the purposes, goals, interests, and abilities of the group and according to the ability of the teacher to use them. Various techniques may be used to develop initiative and self-direction in pupils; other techniques will create situations in which individual and group thinking will be stimulated; others will develop needed information; and still others will create situations in which groups will learn to work well together.

The writer was interested in finding out which teaching methods were used most frequently and in which areas of work. The way in which the data were collected—reporting of objectives within the areas and methods used within the areas—would not enable one to make a direct comparison between an objective set up and the methods used in working toward that particular objective. For example, one would have no way of knowing that field trips had been used in working toward the objective, "To learn about health services available." One does have a complete picture of the objectives within an area and of the methods used within that area. The writer felt that some general over-all relationships might exist between the methods used and the objectives to be attained.

Place Ratings of Teaching Methods

Thirty teaching methods were defined and listed as those which might have been used in teaching home economics. The teachers in the Roanoke District recorded those methods used in working on problems in the different areas of work. The writer then gave a place rating to the 30 teaching methods according to the per cent of teachers using each

method (Table VIII). This place rating showed that 13 of the 30 teaching methods included in this study were used by more than half of the home economics teachers in the Roanoke District. Three of the methods were used by slightly more than a third of the teachers; two methods were used by a fourth of the teachers; 11 methods were used by a fifth or fewer of the teachers. Only one method (games) was not reported as having been used. Although there was no indication in the data collected of how many times the methods were used nor how many different methods were used within one class period, the variety would seem to be encouraging in terms of maintaining pupil interest. Schorling³ says concerning this:

To maintain interest, an instructional hour must be characterized by a change of pace, of materials, of methods, and of physical and mental environment. Perhaps the most outstanding trait of the human mind is its craving for a change in experiences. Symptomatic is the relatively short span of attention of audiences or of groups in a classroom.

.....

Other things being equal, to make an hour of work interesting you must plan the show so that it will have a good many acts. One can find teachers with the ability to make their work interesting who recommend that the lesson for a period should be planned so as to employ from five to ten different procedures. Too often the teacher limits himself to one or two procedures for a whole period.

One would, then, feel that the home economics pupils taught in the Roanoke District during the school year of 1949-50 might have shown a relatively high degree of interest in their work due to the reasonably wide range of teaching methods which had been used.

³Raleigh Schorling, Student Teaching (New York: McGraw-Hill Book Company, Inc., 1940), p. 135.

TABLE VIII

PLACE RATINGS OF METHODS REPORTED AS HAVING BEEN USED BY
35 TEACHERS OF HOME ECONOMICS IN THE ROANOKE DISTRICT
OF VIRGINIA, 1949-50

Method	Per Cent Teachers Using
Class Discussion	88.0
Evaluation	80.0
Directed Study	74.4
Demonstration	72.8
Problem Solving	72.0
Laboratory	67.2
Cooperative Planning	66.4
Films	62.4
Written "Spot" Tests	60.8
Special Report	58.4
Lecture	56.0
Recitation	55.2
Rapid Oral Review	52.8
Committee Work	37.6
Short Drill	36.8
Oral Reading	36.8
Field Trip	27.2
Panel Discussion	25.6
Special Talk	21.6
Contests	18.4
Buzz Session	17.6
Dramatization	16.8
Slides	8.0
Singing	6.4
Interview	4.8
Debate	4.0
Records	3.2
Standardized Tests	2.4
Radio Programs	0.8
Games	0.0

Relationship of Teaching Methods to General Over-all

Objectives of Home Economics

The writer thought that it would be desirable to see if there seemed to be a general relationship between the teaching methods used by the majority of teachers and the general over-all objectives reported. In making this comparison, the writer took for granted that the frequency with which objectives and methods were listed would tend to indicate some relationship between the two.

In order to attain the objective, "to help girls become better prepared to promote good home and community life", which was reported 22 times by the home economics teachers participating in this study (Table VI), it would seem that teachers should try to help girls become able to think and live democratically.

The theory of dictatorship frankly challenges the assumption that the complex world created by the technical experts can be operated effectively by decisions arrived at through democratic processes. But we in America presumably are going to demonstrate the possibilities in cooperative thinking, and that requires that the greatest number possible should be taught to think straight in situations that cannot be predicted.⁴

Considering the contributions which may be made to the democratic thought process by the problem-solving method, cooperative planning, and evaluation, one would have expected these three methods to have been reported by almost, if not all, of the home economics teachers. A higher percentage of teachers reported having used the problem-solving method in

⁴Ibid., p. 123.

the area of family relations than in any other area. Clothing and health were the next in rank with the problem-solving method having been used least in the area of food (Table IX). This might cause one to wonder if more emphasis had been placed on subject matter per se in the area of food.

Cooperative planning was used by 81.1 per cent of the teachers in the area of food and by 70.3 per cent in the area of clothing. Only 54.2 per cent used it in the area of health, while the smallest percentage of teachers, 51.5 per cent, reported having used it in the area of family relations (Table IX). It would seem that cooperative planning, while desirable in all areas of work, would be especially so in the area of family relations. The home is where the pupil has had his first lessons in working with others, and it would seem that the home economics teachers would do well to consider the possibilities of working with the pupil, parents, and others in selecting learning activities which would enable the pupil to solve problems in this area. Spafford⁵ tells us that:

Recent years have brought increased awareness that school learning does not take place apart from the pupils' other experiences and that all of these should be seen as a unit. Out of this has come a recognition of the need for the curriculum to be school-community-pupil planned and carried out.

.....
The school should work with other agencies for the good of the home and work for and with the home--trying to make it possible for the family to do many of the things it would and should do, but does not now do.

⁵Spafford, op. cit., p. 91.

TABLE IX

METHODS REPORTED AS HAVING BEEN USED IN FOUR AREAS OF WORK BY MORE THAN 50 PER CENT OF THE
35 TEACHERS OF HOME ECONOMICS IN THE ROANOKE DISTRICT OF VIRGINIA, 1949-50

Health		Food		Clothing		Family Relations	
Method Used	Per Cent Teachers Using	Method Used	Per Cent Teachers Using	Method Used	Per Cent Teachers Using	Method Used	Per Cent Teachers Using
Class Discussion	83.3	Laboratory	100.0	Demonstration	100.0	Class Discussion	88.9
Films	75.0	Demonstration	97.3	Laboratory	94.6	Special Reports	77.8
Problem Solving	70.8	Class Discussion	91.9	Evaluation	91.9	Problem Solving	77.8
Written "Spot"	70.8	Directed Study	89.2	Class Discussion	86.5	Evaluation	74.1
Tests		Cooperative	81.1	Directed Study	75.7	Directed Study	59.3
Directed Study	66.7	Planning		Problem Solving	72.9	Lecture	59.3
Demonstration	66.7	Evaluation	81.1	Cooperative	70.3	Oral Reading	51.9
Evaluation	66.7	Recitation	78.4	Planning		Cooperative	51.5
Recitation	62.5	Written "Spot"	72.9	Written "Spot"	67.6	Planning	
Special Report	62.5	Tests		Tests			
Lecture	58.3	Films	72.9	Films	62.2		
Cooperative	54.2	Rapid Oral Review	70.3	Lecture	54.1		
Planning		Problem Solving	67.6	Special Report	51.4		
Rapid Oral Review	54.2	Committee Work	54.1				
		Lecture	54.1				

Evaluation, which was considered here as a teaching method rather than a means of collecting evidence of growth, was reported as having been used by more teachers in the areas of clothing and food than in family relations and health. This may have been due to a feeling on the part of teachers and pupils that the more tangible results of work in the areas of clothing and food could be more easily evaluated. It would seem to be just as important that evaluations be made for the more intangible results even though such evaluation is generally recognized to be more difficult. Brown⁶ says:

. . . devices are needed which will be simple enough to be used by the students in evaluating their own achievement and their progress toward more desirable attitudes and higher levels of aesthetic appreciation. Some progress has been made in developing such devices. . . .

Lectures, class discussions, directed study, field trips, laboratory work, and demonstrations are generally considered as being some of the methods which would be helpful in working toward the attainment of the general over-all objective, "to help girls acquire knowledge and develop skills necessary to carry out homemaking responsibilities", which was reported the second highest number of times by the teachers. All of these methods were reported as having been used by more than 50 per cent of the teachers with the exception of the field trip which was used by slightly more than a fourth (Table VIII).

It would seem that there has been a tendency on the part of the teachers to use those methods which are consistent with the kind of

⁶Clara M. Brown, Evaluation and Investigation in Home Economics (New York: Appleton-Century-Crofts, Inc., 1941), p. II.

learning toward which their general over-all objectives were directed. The writer feels, however, that emphasis should be given by all teachers to those methods which make their greatest contribution to the democratic thought process: problem-solving, cooperative planning and evaluation.

Relationship of Teaching Methods to Objectives in Four Areas of Home Economics

The methods used by 50 per cent or more of the teachers were listed for each of the four areas studied (Table IX). The writer felt that it would be helpful and interesting to see if there appeared to be a general relationship between the types of the majority of objectives reported in each of the four areas and the methods reported as used in the same four areas. It was thought that some general consistencies might be pointed out even though, from the data collected, it could not be determined which specific methods had been used in working toward a specific objective.

The largest percentage of teachers reported using class discussion, films, problem-solving, written "spot" tests, directed study, demonstration, evaluation, recitation and special report in working with pupils on problems in the area of health. Most of the objectives reported in the area of health were related to the acquisition of knowledge concerning standards and symptoms of disease. The majority of objectives in the area of health and the methods used in working toward

these objectives would, then, seem to be consistent since Williamson and Lyle⁷ tell us that:

. . . if you want to increase the information your pupils possess, you can do so by telling them, by pooling experiences through group discussion, by a study of references or examination of real things, by visiting authorities, by exploring real situations, by experimentation, and by demonstration.

The laboratory method, demonstration, class discussion, evaluation, directed study, and cooperative planning were methods reported most by teachers in the areas of food and clothing. These methods would seem to have been desirable in working for the acquisition of knowledge and the attainment of objectives directed toward the development of skills and abilities as reported in these two areas. Williamson and Lyle⁸ tell us that:

If you want to develop ability to carry through activities, to manage and to execute plans, you will use cooperative planning, problem-solving, supervised activity, group work.

The largest percentage (88.9 - 59.3) of the teachers reported using class discussion, special reports, problem-solving, evaluation, directed study and lecture in the area of family relationships. The greater number of objectives in this area were directed toward learning to recognize individual differences and becoming worthy home members which would seem to necessitate the teacher's being able to stimulate interest and purposeful thinking and to help pupils develop desirable

⁷Williamson and Lyle, op. cit., p. 147.

⁸Williamson and Lyle, loc. cit.

attitudes. The methods reported would, in general, seem to be desirable in working toward the objectives reported. If, however, teachers hope to help pupils become worthy home members—individuals able and willing to work, play, plan, and live together—it would seem that cooperative planning would have been used by more teachers in this area. Only 51.5 per cent of the teachers who worked with pupils on problems in the area of family relations reported using this method.

In addition to the methods discussed, panel discussions were used rather extensively in the area of family relations and field trips in the areas of food and clothing (see Appendix B). Concerning the panel discussion, Williamson and Lyle⁹ state that it:

. . . skillfully led, adequately prepared, and participated in by competent people is a valuable educative experience for all concerned. It offers an opportunity for cooperative thinking and may be stimulating to understanding.

The use of field trips in the areas of food and clothing would seem to be consistent with the philosophy that one should study real things rather than just to read about them.

Summary

The teachers in the Roanoke District of Virginia, during the school year of 1949-50, used a reasonably wide range of teaching methods even though only 13 of the 30 methods listed for study were used by over 50 per cent of the teachers. Although a high percentage of the teachers

⁹Ibid., p. 185.

used those methods which make their greatest contribution to the democratic thought process: problem-solving, cooperative planning and evaluation, it would seem desirable that all teachers use those methods. The methods used within the various areas of work seemed to be consistent with the kind of learning hoped for within those areas; however, it was felt that more emphasis should be placed on the use of cooperative planning, especially in the area of family relations. Many of the other methods used by only a relatively small percentage of the teachers would seem to be desirable from the standpoint of providing a greater variety.

CHAPTER VI

INTERPRETATION OF THE OUTCOMES OF INSTRUCTION IN THE VOCATIONAL HOME ECONOMICS PROGRAMS AS REPORTED BY 35 TEACHERS IN THE ROANOKE DISTRICT OF VIRGINIA, 1949-50

Evaluation is an essential and integral part of teaching. Plans for it should be made when the plans for learning experiences are drawn up because appraisal is based on pupil growth as evidenced by changes in pupil behavior. Brown¹ states that:

. . . evaluation must be an inherent part of any effective program of education and it must be meaningful evaluation rather than the vague, indefinite concept which many teachers talk about so volubly, but of which they have so little real comprehension.

Evaluation is essential in the never-ending cycle of formulating goals, measuring progress toward them, and determining the new goals which emerge as the result of new learnings. Evaluation involves measurement, which means obtaining quantitative evidence; but it is broader than measurement and implies that consideration has been given to certain value standards, and that an interpretation of the evidences has been made in the light of the particular situation.

Measurement should be recognized as an important part of the teaching cycle and its primary purpose in the classroom should be to aid in teaching. Measurement that is divorced from teaching is of slight value; instruction without measurement may be just as valueless.

Evaluation should be made in terms of the objectives set up by the teacher and pupils. Williamson and Lyle² say:

¹Clara M. Brown, Evaluation and Investigation in Home Economics (New York: Appleton-Century-Crofts, Inc., 1941), pp. 5-6.

²Maude Williamson and Mary Stewart Lyle, Homemaking Education in the High School (New York: D. Appleton-Century Company, Inc., 1941), pp. 296-99.

For example, if the objective is to develop increased interest in homemaking, the teacher will strive in some way to gage any change in interest which has taken place. If she is seeking to improve attitudes, develop desires for fine standards of work and living, she will try to find evidence of change in these attitudes and desires. If she has been teaching to develop abilities in homemaking of the manipulative, judgment, or creative type, she will use means to discover to what extent changes have taken place.

.....
Evaluation may be almost continuous, such as the daily and hourly judgments of students' needs and progress that the teacher makes mentally and continually revises; or it may be intermittent, as when the teachers and pupils take inventory in some manner of the progress made to date toward certain objectives.

.....
Obviously any appropriate form of evaluation that can be stripped of personal opinion is preferable to those that are affected by it; and if the time ever comes that the teacher can find objective measures for progress toward all of her goals, much of the doubt and uncertainty concerning the amount of pupil growth will disappear. Personal opinion is always somewhat variable; yet it must be kept in mind that the judgment of the experienced teacher with an educational point of view is a trained judgment and often reliable and accurate, and also that subjective appraisal of pupil development toward important goals may be of more value for student guidance than objective measurement of growth toward unimportant goals.

In this study, the writer has attempted to interpret the data reported as outcomes of instruction in terms of evidences of knowledge acquired, evidences of appreciations developed, and evidences of skills and abilities developed. No attempt was made to secure an evaluation in terms of all types of behavior.

Knowledge, appreciations, and skills and abilities are commonly recognized as part of the evidences of pupil learning. These evidences are secured by such means as: observation of the pupils; statements made by the pupils, parents and others; tests; check lists; and progress records.

In this study, the teachers listed those evidences of pupil learning which they and their pupils had recorded as having taken place as a result of work done in the areas of health, food, clothing, and family relations. These evidences were then grouped and reported under the headings of knowledge, appreciations, skills and abilities (Tables XI, XII, XIII).

Evidences of Knowledge Acquired

The teachers were much less likely to report evidence of knowledge gained by pupils than they were to report the development of appreciations and skills and abilities. Only 8.4 per cent of the evidences of pupil learning appeared under the heading of knowledge; whereas, 16.9 per cent were listed as appreciations and the remaining 74.7 per cent of evidences were listed under skills and abilities (Table X). Since the acquisition of some knowledge must precede or parallel the acquisition of skills, it would seem that more effort might be directed by these teachers towards securing evidences of knowledge gained by the pupils.

Teachers reported more evidences of pupil learning which indicated the acquisition of knowledge in the areas of health and food than in clothing and family relations. The evidences reported in health and food tended to be somewhat more comprehensive than those reported for the two other areas (Table XI). With one exception, all evidences of knowledge in the areas of health and food were listed in the first and second year of the homemaking program. This might indicate a feeling on

TABLE X

OUTCOMES OF INSTRUCTION IN TERMS OF THREE TYPES OF BEHAVIOR AS
 REPORTED BY 35 HOME ECONOMICS TEACHERS IN THE ROANOKE
 DISTRICT OF VIRGINIA, 1949-50

Type of Behavior	Health	Food	Clothing	Family Relations	Total	
					No.	Per Cent
Knowledge	22	15	12	2	51	8.4
Appreciations	6	16	20	60	102	16.9
Skills and Abilities	76	170	158	47	451	74.7
Total					604	100.0

TABLE XI

OUTCOMES OF INSTRUCTION IN TERMS OF APPRECIATIONS DEVELOPED AS REPORTED BY 3

Area and Year of Home Economics		Total Number Evidences of Pupil Learning by Year	Evidences of Appreciation										
			Per No. Cent		Per No. Cent		Per No. Cent		Per No. Cent		Per No. Cent		
			<u>Conscious of Sanitation Practices</u>		<u>Conscious of Health Qualifications for Mate</u>		<u>Conscious of Importance of Health</u>		<u>Conscious of Health Habits</u>		<u>Conscious of Family Health Problems</u>		
Health	I	66	2	3.0	0	0.0	0	0.0	0	0.0	0	0.0	
	II	24	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
	III	14	0	0.0	1	7.1	1	7.1	1	7.1	1	7.1	
			<u>Interested in New Recipes</u>		<u>Interested in Nutritional Value of Meals</u>		<u>Recognizes Nutrition Problems</u>		<u>Takes Pride in School Cafeteria</u>		<u>Discusses Food Problems</u>		
Food	I	91	5	5.5	7	7.7	1	1.1	1	1.1	0	0.0	
	II	65	0	0.0	0	0.0	0	0.0	0	0.0	1	1.5	
	III	45	0	0.0	1	2.2	0	0.0	0	0.0	0	0.0	
			<u>Critical of Fit of Garment</u>		<u>Considers Needs of Family</u>		<u>Considers Value and Appearance</u>		<u>Seeks Advice on Clothing Problems</u>				
Clothing	I	77	4	5.2	1	1.3	1	1.3	0	0.0			
	II	83	0	0.0	0	0.0	12	14.4	1	1.2			
	III	30	0	0.0	0	0.0	0	0.0	1	3.3			
			<u>Respects Individual Personalities</u>		<u>Respects Rights of Others</u>		<u>Enjoys Home Life More</u>		<u>Thoughtful of Brothers and Sisters</u>		<u>Less Critical of Others</u>		<u>Has Reasonable Interest</u>
Family Relations	I	19	2	10.5	2	10.5	2	10.5	2	10.5	1	5.3	1
	II	30	0	0.0	2	6.7	1	3.3	0	0.0	1	3.3	0
	III	60	0	0.0	9	15.0	4	6.7	6	10.0	2	3.3	2

ECONOMICS TEACHERS IN THE ROANOKE DISTRICT OF VIRGINIA, 1949-50

Developed Grouped According to Specific Categories

Developed Grouped According to															
t	Per		Per		Per		Per		Per		Per		Per		
	No.	Cent	No.	Cent	No.	Cent	No.	Cent	No.	Cent	No.	Cent	No.	Cent	

OUTCOMES OF INSTRUCTION

Area and Year of Home Economics		Total Number Evidences of Pupil Learning by Year	Per		Per		Per		Per		Per		Per	
			No.	Cent	No.	Cent	No.	Cent	No.	Cent	No.	Cent	No.	Cent
			<u>Observes Health Habits</u>		<u>Eliminates Accident Hazards</u>		<u>Treats Colds Promptly</u>		<u>Uses Disposable Tissues</u>		<u>Has Physical Examination</u>		<u>Has Physical Defects Corrected</u>	
Health	I	66	10	15.2	8	12.1	3	4.6	3	4.6	6	9.1	4	6.1
	II	24	5	20.8	4	16.7	0	0.0	0	0.0	2	8.3	2	8.3
	III	14	1	7.1	1	7.1	0	0.0	0	0.0	2	14.3	0	0.0
			<u>Prepares Family Meals</u>		<u>Has Better Eating Habits</u>		<u>Prepares New Dishes</u>		<u>Sets Attractive Table</u>		<u>Helps Others Set Table Attractively</u>		<u>Serves Meals Efficiently</u>	
Food	I	91	12	13.2	11	12.1	6	6.6	5	5.5	0	0.0	15	16.5
	II	65	10	15.4	6	9.2	3	4.6	0	0.0	0	0.0	13	20.0
	III	45	7	15.6	6	13.3	0	0.0	0	0.0	2	4.4	0	0.0
			<u>Constructs Own Clothing</u>		<u>Selects Becoming Clothing</u>		<u>Cares for Clothing Properly</u>		<u>Follows Good Work Habits</u>		<u>Selects, Uses, Cares for Equipment</u>		<u>Uses Guid Sheet to Pattern</u>	
Clothing	I	77	15	19.5	15	19.5	6	7.8	0	0.0	6	7.8	5	6.5
	II	83	16	19.3	12	14.5	5	6.0	2	2.4	0	0.0	0	0.0
	III	30	10	33.3	1	3.3	3	10.0	0	0.0	5	16.7	0	0.0
			<u>Plans Recreation for Family</u>		<u>Improved Personality Traits</u>		<u>Shares Home Responsibilities</u>		<u>Makes Clothing for Others</u>		<u>Develops Common Interests</u>		<u>Helps Solve Family Problems</u>	
Family Relations	I	19	2	10.5	1	5.3	1	5.3	1	5.3	0	0.0	0	0.0
	II	30	2	6.7	1	3.3	8	26.7	0	0.0	2	6.7	1	3.3
	III	60	3	5.0	5	8.3	17	28.3	0	0.0	0	0.0	0	0.0

TABLE XIII

OUTCOMES OF INSTRUCTION IN TERMS OF SKILLS AND ABILITIES DEVELOPED AS REPORTED BY 35 HOME ECONOMICS TEACHERS IN THE ROANOKE

Evidences of Skills and Abilities Developed Grouped According to									
Per No. Cent		Per No. Cent		Per No. Cent		Per No. Cent		Per No. Cent	
Has Physical Examination		Has Physical Defects Corrected		Helps Family See Needs		Checks Causes of Illness at School		Improved Physical Appearance	
6	9.1	4	6.1	1	1.5	1	1.5	4	6.1
2	8.3	2	8.3	0	0.0	0	0.0	1	4.2
2	14.3	0	0.0	0	0.0	0	0.0	1	7.1
Helps Others Set Table Attractively		Serves Meals Efficiently		Has Efficient Work Habits		Has Established Habits of Cleanliness		Canned Home Foods	
0	0.0	15	16.5	5	5.5	0	0.0	4	4.4
0	0.0	13	20.0	4	6.2	0	0.0	3	4.6
2	4.4	0	0.0	5	11.1	1	2.2	2	6.7
Selects, Uses, Cares for Equipment		Uses Guide Sheet to Pattern		Repairs and Remodels Clothing		Operates Sewing Machine		Replaces Machine Needles	
6	7.8	5	6.5	6	7.8	3	3.9	3	3.9
0	0.0	0	0.0	5	6.0	0	0.0	0	0.0
5	16.7	0	0.0	3	10.0	0	0.0	0	0.0
Develops Common Interests		Helps Solve Family Problems		Selects Friends Carefully		Entertains Friends at Home		Acknowledges Gifts Promptly	
0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
2	6.7	1	3.3	0	0.0	0	0.0	0	0.0
0	0.0	0	0.0	1	1.7	1	1.7	1	1.7

IN THE ROANOKE DISTRICT OF VIRGINIA, 1949-50

According to Specific Categories

Per Cent	Per No.	Per Cent	Per No.	Per Cent	Per No.	Per Cent	Per No.	Per Cent	Per No.	Per Cent	Per No.	Per Cent	Per No.	Per Cent	Per No.	Per Cent
ters Aid	Is More Cheerful	Takes Temperature and Pulse	Accepts Patrol Duties	Observes Traffic Rules												
0.0	0 0.0	0 0.0	0 0.0	0 0.0												
4.2	1 4.2	1 4.2	0 0.0	0 0.0												
7.1	0 0.0	0 0.0	1 7.1	1 7.1												
ods y	Helps with Cafeteria Service	Works More Coopera- tively	Observes Good Table Manners	Prepares Foods in Many Ways	Uses Appropriate Meal Time Conversation	Uses Range Efficiently	Raises Foods at Home	Makes and Uses Food Budget	Prepares Special Refreshments	Uses Leftovers Wisely						
1.1	1 1.1	1 1.1	1 1.1	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0						
1.5	0 0.0	0 0.0	1 1.5	2 3.1	1 1.5	1 1.5	1 1.5	0 0.0	0 0.0	0 0.0						
4.4	0 0.0	0 0.0	2 4.4	0 0.0	0 0.0	0 0.0	0 0.0	2 4.4	2 4.4	1 2.2						
s al ts	Makes Home Furnishings	Uses Machine Efficiently	Cleans and Adjusts Machine	Plans Clothing Purchases	Helps Family Members	Decorates Garments Suitably	Makes Clothing Accessories	Selects Own Clothing								
2.6	1 1.3	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0								
1.2	0 0.0	8 9.6	8 9.6	3 3.6	1 1.2	1 1.2	1 1.2	0 0.0								
0.0	0 0.0	0 0.0	0 0.0	1 3.3	0 0.0	0 0.0	0 0.0	3 10.0								

the part of the teachers that the basic knowledge for work in these areas should be acquired in the first two years and that the development of appreciations and skills and abilities would be of primary importance in the third year. This would provide additional evidence to cause one to wonder if sufficient attention had been given to the evaluation of pupils' work in terms of knowledge acquired.

The only two evidences of learning in terms of knowledge acquired in the area of clothing were knowledge of common textiles and clothing essentials; however, there was a large number of skills and abilities reported in this area. Only two evidences of pupil learning in the area of family relations appeared under the heading of knowledge.

Few evidences of pupil learning in this study are indicative of a knowledge of the basic principles involved in work in the four areas. Teachers should make every effort to see that pupils gain a knowledge of these basic principles. There is danger in assuming that pupils possess certain knowledge when they may not. For example, a pupil may plan a meal which is adequate in terms of nutrition and attractiveness because she has previously eaten such a meal or has seen it pictured. This does not necessarily mean that she has the understanding of the nutritional principles involved in menu planning. The fact that this one meal did meet nutritional standards is no guarantee that future meals planned by this girl would meet standards unless she acquired a working knowledge of nutrition.

Knowledge may not of itself enable a homemaker to maintain and operate a household efficiently; nevertheless, it is important. These

data seem to indicate a need for teachers to consider what knowledge is of basic importance, to provide ways and means for pupils to secure that knowledge, and to devise appropriate means for securing evidences of learning.

Evidences of Appreciations Developed

Evaluation in terms of appreciations may be, for most teachers, just a little more difficult than evaluation of knowledge acquired or skills and abilities developed. Appreciations—those values one recognizes or the estimate which one places on things, both the tangible and intangible—seem to be tied up with a person's background, personal makeup, and, especially in the case of the pupil, closely related to the information he possesses. Concerning evaluation of ability to appreciate, Brown³ tells us that:

Most home economics teachers would agree that they want to have students learn to appreciate what is really beautiful, whether it is found in costume, furniture, china, architecture, or the planting of home grounds and public parks. Hence they are interested in testing appreciations—a very difficult task, one reason for the difficulty being that it is often well-nigh impossible to dissociate information from appreciation.

Another reason that evaluation in terms of appreciations may be difficult is that it has not been easy to set up appreciation tests which are valid. Brown⁴ says in discussing their validity:

³Brown, op. cit., pp. 200-01.

⁴Ibid., pp. 201-02.

There was likely to be a rather low correlation between factual information and the ability to apply it, and that there was almost no correspondence between students' scores on a test that measured information about art principles and one that measured taste and ability to apply such information to concrete situations. Since good teachers are usually more concerned with the ability to reproduce information, the desirability of devising testing situations to check upon the former ability is evident.

The evidences of appreciations developed in the areas of health, food, and clothing were relatively few in number. Almost one-third more evidences of appreciations developed were reported in the area of family relations than were reported in the other three areas combined (Table XII). This would seem to be in keeping with the stating of the largest percentage of objectives in the area of family relations in terms of "to develop" because appreciations are generally considered as being developed. However, it is interesting to note so many evidences of appreciations reported in this area when we consider Brown's⁵ statement that:

'Family relationships' does not represent a body of knowledge in the sense that 'nutrition' or 'clothing selection' does; nor can it be studied without associating the various relationships with the situations in which they developed. Consequently if changes in point of view regarding family relationships are to be evaluated, such changes will need to be measured in the light of family situations.

That the pupil was cognizant of the family situation, at least to some extent, seemed to be evident from the evaluation given. It would seem that teachers need to become more fully aware of helping pupils to develop and to evaluate appreciations in the areas of health, food, and

⁵Ibid., p. 112.

clothing. The first emphasis would have to be given in the stating of objectives since it is at that point that the stage for further teaching is set.

Evidences of Skills and Abilities Developed

The largest percentage (74.7) of the evidences of pupil learning was reported as skills and abilities developed (Table X). The only area in which the evidences of skills and abilities developed did not exceed the other two types of learning studied was family relations. This should not necessarily be considered a weakness since Williamson and Lyle⁶ state that:

An analysis of homemakers responsibilities helped curriculum-builders to realize that home living embodied much more than the performing of skills; that many of the important responsibilities in home living are those which pertain to human relationships.

However, skills and abilities are an important kind of learning as Spafford⁷ tells us:

The necessity for manipulative skills represents an early need for learning which continues in varying degrees throughout life. The individual must learn to use his body to meet new and changing conditions—to walk, feed himself, handle utensils, work with tools, use the sewing machine, run a tractor, drive an airplane, dodge an auto. Present-day homemaking, although requiring less hard work on the whole,

⁶Williamson and Lyle, op. cit., pp. 76-7.

⁷Ivöl Spafford, Fundamentals in Teaching Home Economics (New York: John Wiley and Sons, Inc., 1948), pp. 99-100.

still demands many skills. Learning to use an electric washing machine, dryer, and mangle is more difficult than learning to use a washboard and charcoal irons; but, on the other hand, relatively fewer people do their own laundry work. The home economics teacher should not be less concerned with students' learning the manipulative aspects of homemaking, but more concerned with easier and more economical ways of acquiring and perfecting the skills needed both in school and on the job outside. There is need for better, not poorer, construction of clothing, cooking of food, caring for children, and cleaning of houses.

The school has given too little attention to the values to be gained for the individual in learning to do things with his hands. Creative activity has been thought of all too often as painting, pictures, writing poetry, or composing music. It is good that much drudgery has been removed from housekeeping. It is not so good that people do not learn at a high level of proficiency some of the skills and techniques of everyday living for its personal value to them. The growing girl will think more of herself as she learns to make a good-looking dress, to bake pastry that is flaky and tender, or to arrange flowers attractively.

We, therefore, consider skills and abilities important, not only because they enable us to do homemaking tasks efficiently, but because the satisfaction derived from a job well done contributes to personal development.

It is interesting that while the majority of outcomes were listed as skills and abilities, the majority of the objectives set up were stated in terms of "to learn." Spafford⁸ says:

The individual also has need for much knowledge, not because knowing things has value in itself but because it contributes to doing things which he considers essential and worth while.

The writer feels that perhaps the teachers thought of knowledge as being important because it was a pre-requisite to the development of skills

⁸Ibid., p. 100.

and abilities, but placed more emphasis upon evaluating in terms of skills and abilities than in terms of knowledge. This emphasis on evaluation of skills and abilities may have been because they are more tangible than other forms of learning such as appreciations and attitudes and, for that reason, easier to evaluate.

The number of skills and abilities developed by pupils in the area of health was decidedly larger in the first year and decreased rapidly the next two years. The writer expected this because teachers have tended to place more emphasis upon health work as such in the first year of the homemaking course.

The skills and abilities listed for the area of food remained consistently high throughout the three years while those listed for clothing remained approximately the same for the first two years and then dropped decidedly during the third year of the course. The decided drop in the number of skills and abilities developed in the last year of clothing was not necessarily due to placing less emphasis on their development during the third year, but, as will be noted from Table VII on objectives, decidedly fewer teachers reported on clothing work in the third year.

The area of family relations presents a different picture from the other three areas. A decidedly larger number of skills and abilities are reported in the third year of the program. Here, again, one must consider that twice as many teachers reported working in the area of family relations in the third year as in the first or second year of the course.

There seemed to be a continuity in the development of outcomes in terms of skills and abilities throughout the three years of the homemaking program. However, the nature of the skills and abilities developed did, for the most part, tend to change in keeping with the girls' logical development and progress. For example, the use of guide sheets, and the operation of the sewing machine were reported in the first year, whereas, making plans for purchasing clothing and making own clothing selections were reported in the second and third years of the course.

Summary

Evaluation, which is an essential and integral part of teaching, should be made in terms of the objectives set up by the teachers and pupils. In this study, the writer interpreted data reported as outcomes of instruction in terms of the objectives reported, and grouped them according to evidences of knowledge acquired, evidences of appreciations developed, and evidences of skills and abilities developed. Only 8.4 per cent of the evidences of pupil learning appeared under the heading of knowledge; whereas, 16.9 per cent were listed as appreciations and the remaining 74.7 per cent of evidences were listed under skills and abilities.

There seemed to be a need for teachers to place further emphasis upon evaluation in terms of knowledge acquired and appreciations developed. The first emphasis would have to be given in the stating of objectives since it is at that point that the stage for further teaching is set.

The development of outcomes in terms of skills and abilities was reported continuously throughout the three years of the homemaking program. The nature of the skills and abilities developed was, for the most part, in keeping with the logical development and progress of the high school pupil.

CHAPTER VII

INTERPRETATION OF REACTIONS TO SOME AREAS OF THE VOCATIONAL HOME ECONOMICS PROGRAMS AS REPORTED BY 35 TEACHERS IN THE ROANOKE DISTRICT OF VIRGINIA, 1949-50

The reactions of teachers and pupils to work done in the four areas of home economics reported are in reality another form of evaluation, this form being in terms of teachers' and pupils' interest in or liking for a particular area. Mort and Vincent¹ tell us that:

Interest is a powerful force. A person will rise to almost any occasion if he has interest in it. Teaching which goes on without the interest of the pupils is not good teaching. Interest is not the major objective of good teaching, it is just the necessary by-product. Interest is a double-edged tool for the teacher. He uses interest in two ways:

First, interest is an indicator of growth.

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Secondly, interest is a tool that can motivate new growth.

The writer has attempted in this chapter to discuss the teachers' and pupils' reactions to the four areas of work: health, food, clothing, and family relations as reported by the teachers of vocational home economics in the Roanoke District of Virginia, 1949-50.

Pupil Reaction

The pupils included in this study were asked to indicate their reaction to each of the four areas of work studied by checking in each

¹Paul R. Mort and William S. Vincent, Modern Educational Practice (New York: McGraw-Hill Book Company, Inc., 1950), p. 69.

area the extent to which they enjoyed their work in that area: "liked very much", "liked", "was all right", "didn't especially like", "didn't like."

Except for the first year of the health work, over 50 per cent of the pupils in each year of each of the four areas of work reported that they liked that area "very much." The next highest percentage of pupils in all areas, except the second year of family relations, indicated that they "liked" their work, and the third highest percentage reported that the work was "all right." A very small percentage of the pupils reported in the last two classifications, "didn't especially like" and "didn't like" (Table XIV). The favorable response of pupils to their work in the four areas of home economics included in this study may have been due to two factors: (1) pupils take home economics as an elective course and, therefore, it would be expected that they would be especially interested in it; (2) a wide range of teaching methods was used in work in the four areas studied, and, as has been previously pointed out, a change of pace, of materials, of methods and of physical and mental environment help to make instructional periods more interesting.

The highest percentage of pupils liking a particular area was reported for the third year pupils in the area of health. It is doubtful that much significance can be attached to this high percentage, however, because it includes only two groups with a total of 32 pupils. The second highest percentage was reported for first year pupils in the area of family relations (Table XIV). A slightly higher percentage of pupils

TABLE XIV

PUPIL REACTION TO FOUR AREAS OF THE HOME ECONOMICS PROGRAMS IN 35 SCHOOLS
IN THE ROANOKE DISTRICT OF VIRGINIA, 1949-50

Area and Year of Home Economics		Number Pupils Reporting	Summary of Pupils' Evaluations by Area and Year									
			Liked		Liked		Was		Didn't		Didn't	
			Very Much				All Right		Especially		Like	
			No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Health	I	107	44	41.1	38	35.5	19	17.7	6	5.6	0	0.0
	II	65	35	53.8	15	23.1	10	15.4	3	4.6	2	3.1
	III	32	23	71.9	9	28.1	0	0.0	0	0.0	0	0.0
Food	I	500	310	62.0	116	23.2	53	10.6	14	2.8	7	1.4
	II	261	164	62.8	73	28.0	20	7.7	4	1.5	0	0.0
	III	294	184	62.6	78	26.5	29	9.9	3	1.0	0	0.0
Clothing	I	500	307	61.4	140	28.0	36	7.2	10	2.0	7	1.4
	II	282	171	60.6	82	29.1	20	7.1	7	2.5	2	0.7
	III	263	147	55.9	78	29.7	29	11.0	8	3.0	1	0.4
Family Relations	I	64	44	68.8	12	18.8	6	9.4	2	3.1	0	0.0
	II	63	39	61.9	6	9.5	12	19.1	5	7.9	1	1.6
	III	172	104	60.5	51	29.7	17	9.9	0	0.0	0	0.0

indicated that they liked their work in food than indicated a similar liking for work in clothing.

Teacher Reaction

The home economics teachers participating in the study indicated the extent to which they enjoyed teaching in the areas of health, food, clothing, and family relations: "enjoyed teaching very much", "enjoyed teaching", "didn't mind teaching", "didn't especially enjoy teaching", "didn't enjoy teaching." It was interesting to note that all teachers reported that they "enjoyed teaching very much", "enjoyed teaching", or "didn't mind teaching" work in all four areas. No teachers checked the last two categories for any year of any area. The largest percentage of teachers enjoyed teaching family relations, clothing and food. Teachers reported that they enjoyed teaching health least (Table XV). It is generally recognized that there is a tendency to respond more favorably to questions when one's name is signed. Since the teachers signed their names to the materials on which this study was based, the writer is unable to state whether or not it may have influenced their reporting.

There was a relatively close relationship between the teachers' enjoyment of teaching and the pupils' enjoyment of work in the four areas. However, the teachers reported enjoying teaching health even less than the pupils enjoyed their work in that area. All high school pupils are required to take health and physical education. Many times, it is the home economics teacher who also teaches the health and physical

TABLE XV

TEACHER REACTION TO FOUR AREAS OF THE HOME ECONOMICS PROGRAMS WHICH THEY TAUGHT IN
35 SCHOOLS IN THE ROANOKE DISTRICT OF VIRGINIA, 1949-50

Area and Year of Home Economics		Number Teachers Reporting	Summary of Teachers' Evaluations by Area and Year									
			Enjoyed Teaching Very Much		Enjoyed Teaching		Didn't Mind Teaching		Didn't Especially Enjoy Teaching		Didn't Enjoy Teaching	
			No.	Cent	No.	Cent	No.	Cent	No.	Cent	No.	Cent
Health	I	13	3	23.1	5	38.5	5	38.5	0	0.0	0	0.0
	II	9	3	33.1	3	33.3	3	33.3	0	0.0	0	0.0
	III	2	0	0.0	2	100.0	0	0.0	0	0.0	0	0.0
Food	I	16	11	68.8	3	18.8	2	12.5	0	0.0	0	0.0
	II	11	8	72.7	2	18.2	1	9.1	0	0.0	0	0.0
	III	10	5	50.0	5	50.0	0	0.0	0	0.0	0	0.0
Clothing	I	16	10	62.5	6	37.5	0	0.0	0	0.0	0	0.0
	II	14	10	71.4	3	21.4	1	7.1	0	0.0	0	0.0
	III	7	5	71.4	2	28.6	0	0.0	0	0.0	0	0.0
Family Relations	I	6	5	83.3	1	16.7	0	0.0	0	0.0	0	0.0
	II	7	4	57.1	2	28.6	1	14.3	0	0.0	0	0.0
	III	14	9	64.3	4	28.6	1	7.1	0	0.0	0	0.0

education class. It may be that there has not been sufficient planning between the departments of health and physical education and home economics to avoid unnecessary repetition in this area.

Summary

The pupils included in this study gave a very favorable response to their work, especially for the areas of family relations, food and clothing. This may have been due to two factors: (1) pupils take home economics as an elective course and, therefore, it would be expected that they would be especially interested in it; (2) a wide range of teaching methods was used in work in the four areas.

Teachers reported very favorably to teaching work in the four areas. As was true for the pupils, teachers enjoyed the areas of family relations, food and clothing most, and health least.

CHAPTER VIII

FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Findings

The study of the teaching methods reported as having been used by home economics teachers in vocational classes of the high schools in the Roanoke District of Virginia, 1949-50, was made for two major purposes:

1. To find out what teaching methods were used most frequently by teachers in the various areas of home economics.
2. To find out whether teaching methods used seemed to produce satisfying results in terms of (a) pupil's liking for a subject matter area and (b) pupil's achievement.

The responses of 35 vocational home economics teachers in the Roanoke District of Virginia in regard to the teaching methods they used in the areas of health, food, clothing and family relations during the school year, 1949-50, were analyzed and interpreted. In order to be able to interpret the teaching methods used, it was necessary to interpret the objectives and outcomes of instruction also.

In analyzing the reports of the home economics teachers it was found that:

The largest percentage of the 35 vocational home economics teachers included in this study reported using class discussion, films, problem-solving, written "spot" tests, directed study, demonstration, evaluation,

recitation and special report in working with pupils on problems in the area of health; the laboratory method, demonstration, class discussion, evaluation, directed study, and cooperative planning in the areas of food and clothing; class discussion, special reports, problem-solving, evaluation, directed study and lecture in the area of family relationships. The teachers used a reasonably wide range of teaching methods even though only 13 of the 30 methods listed for study were used by over 50 per cent of the teachers.

It would seem that for the most part the teachers used those methods which were consistent with the kind of learning toward which their objectives were directed. Although a high percentage of the teachers used those methods which make their greatest contribution to the democratic thought process: problem-solving, cooperative planning and evaluation, it would seem desirable that all teachers use those methods. It was felt that more emphasis should be placed on the use of cooperative planning, especially in the area of family relations. Many of the other methods used by only a relatively small percentage of the teachers would seem to be desirable from the standpoint of providing a greater variety.

Variety in teaching methods is generally conceded to make class work more interesting. The use of a reasonably wide range of methods by the teachers included in this study seems to have been reflected in the liking on the part of their pupils for their work in the four areas. Except for the first year of the health work, over 50 per cent of the

pupils in each year of each of the four areas of work reported that they liked that area "very much." The next highest percentage of pupils in all areas except the second year of family relations indicated that they "liked" their work, and the third highest percentage reported that the work was "all right." Only a very small percentage of the pupils reported in the last two classifications: "didn't especially like" and "didn't like."

All teachers indicated that they "enjoyed teaching very much", "enjoyed teaching", or "didn't mind teaching" in all four areas. No teachers checked the last two categories, "didn't especially enjoy teaching", and "didn't enjoy teaching." The teachers, as did the pupils, indicated that they liked their work in the area of health less than their work in the other three areas.

The teaching methods used would seem to have been at least partially responsible for the pupils' achievement in home economics. The largest percentage of home economics pupils in all three years came within the group who achieved an average of 80 to 89 in all courses. This was likewise true for the pupils' averages in home economics. A higher percentage of the pupils achieved an average of 90 to 100 in home economics than came within this same average for all courses. The percentage of pupils who averaged below 70 was lower for home economics than for all courses.

The objectives set up, the methods used in working toward these objectives and the means of evaluation used resulted in more evidences

of pupil learning as skills and abilities developed than as knowledge acquired or appreciations developed. Only 8.4 per cent of the evidences of pupil learning appeared under the heading of knowledge; whereas, 16.9 per cent were listed as appreciations and the remaining 74.7 per cent of evidences were listed as skills and abilities.

Conclusions

This study was undertaken with the formulation of three assumptions, the first of which was stated as follows: "The effectiveness of teaching methods being used by teachers of vocational home economics may be reflected in the liking developed by both pupils and teachers in regard to the various areas of work." In view of the points brought out in the first part of this chapter, it would seem that sufficient evidence has been cited to permit the writer to conclude that this first assumption was valid.

In determining the validity of the second assumption, "the results of the study may be of value to teacher educators (pre-service and in-service) in helping teachers choose more effective methods", the writer is unable to support it with objective data as was done for the first hypothesis; but, basing conclusion on subjective judgment, the writer feels that in the future the assumption may prove to be a valid one. As was previously indicated, the teachers used a relatively wide variety of methods and used those methods which were consistent with the kind of learning toward which their objectives were directed; however, not all

teachers are using problem-solving, cooperative planning and evaluation. Since these methods are generally accepted as basic to sound home economics teaching, it would seem that teacher educators might see a necessity for giving teachers (pre-service and in-service) more effective guidance. Teacher educators might also find it desirable to encourage the use of other methods from the standpoint of providing a greater variety since it was found that only 13 of the 30 teaching methods listed for study were used by over 50 per cent of the teachers.

The validity of the third assumption, "the study should provide material which will be helpful to home economics teachers in setting up more satisfying learning experiences for the pupils with whom they work", will have to be established in the same manner as the second assumption. It was found that, although objectives in the area of health were directed toward helping the girls meet some of their physical needs, little attention was being given to mental health and happiness; that little was done in the homemaking program to develop a sense of community awareness on the part of the girls enrolled; that little help was being given girls in order to help them see career possibilities related to homemaking; that specific objectives which would help the adolescent meet the developmental task of building conscious values in harmony with an adequate scientific world picture were not evident. Since these phases of the adolescent's development are considered important, it might be that home economics teachers should reconsider some of their objectives to see if there is a possibility of giving their pupils additional help in meeting these developmental tasks.

Not all teachers were using problem-solving, cooperative planning and evaluation. This would seem to indicate a need for teachers to become aware of the contributions which these three methods make to the democratic thought process.

There was evidence that evaluation of learning other than in terms of skills and abilities needs to be given further consideration. As has been previously stated in this chapter, 8.4 per cent of the evidences of pupil learning appeared under the heading of knowledge; whereas, 16.9 per cent were listed as appreciations and the remaining 74.7 per cent of evidences were listed under skills and abilities. This seemed to indicate a need for teachers to give further study to the way in which objectives are stated so that they will be set up in terms of the kinds of behavior which they hope for as a result of their teaching.

Recommendations

While the results of this study of the teaching methods reported as having been used by home economics teachers in vocational classes of the high schools in the Roanoke District of Virginia, 1949-50, would seem to be most helpful to the teachers in this district and the teacher educators working with them, the writer feels that the implications may be just as great for other teachers of vocational home economics and other teacher educators. The writer, therefore, makes the following recommendations:

1. That teacher educators provide opportunities for teachers to study the developmental tasks of the adolescent and the implications they have for teaching home economics.

2. That teacher educators give teachers further assistance with program planning, especially in setting up objectives in terms of the kind of learning which they hope for as a result of their teaching.

3. That teacher educators help all teachers to recognize problem-solving, cooperative planning and evaluation as methods basic to sound teaching in home economics.

4. That teachers and teacher educators give further emphasis to the evaluation of learning in terms of knowledge and appreciations.

5. That supervisors of home economics education help local administrators and home economics teachers see possibilities for cooperative planning on the local school level in order that home economics teachers may make their greatest contribution to the over-all health program of their pupils.

6. That further studies be made to see which teaching methods seem to be most effective in working toward specific objectives in home economics.

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APPENDIX

APPENDIX A

SECTION I

Teaching Methods

"A teaching method is a technique for developing pupil learning, which under our present interpretation of learning, takes place most effectively when it occurs through self-purposed and self-directed experiences."¹

Typical learning experiences generally provided for in Home Economics:

1. Problem solving - In the problem solving method, the teacher will guide the students into situations as nearly like those they find at home as possible; stimulate them to think through home problems, solve them for themselves, and test their solutions in some appropriate way.

"Steps in problem solving:

1. The problem is met and recognized as such.
2. A decision is made to solve the problem.
3. The conditions are analyzed.
4. All available facts relating to the problem are gathered.
5. These facts are evaluated and those which are considered irrelevant are discarded.
6. A tentative or trial solution is found.
7. The solution is tested to see if it works.
8. If it does not, the facts are reevaluated; other possible solutions are looked for; and a second solution is found and checked."²

2. Class discussion - "A discussion means that there is a difference of opinion temporarily at least, concerning a situation. Attention focuses on bringing these points of view into the open in order to solve a problem, to decide on the best procedures to

¹Maude Williamson and Mary Lyle, Homemaking Education in the High School (New York: D. Appleton-Century Company, 1941), p. 146.

²Ibid., p. 153.

follow, to clear up a difficulty. . . . known facts are brought to bear on the question. New data and new experiences are sought as needed. The probable results of different courses of action are discussed and evaluated. A common answer may or may not be desired; that depends upon the type of problem. However, for a discussion to be successful, each individual must reach an answer for himself."³

"A stimulating leader usually states the problem to be discussed and then gives the group a few minutes for thought, during which time she talks about it, clarifying the conditions and any terms which may be ambiguous, suggesting case situations to which the conditions apply, or raising questions which stimulate thought. She then calls for ideas and suggestions. If no one volunteers at once and it seems difficult to get people to talk, she may call on some one directly, selecting a person who looks as though she had some thoughts on the subject."⁴

3. Panel discussion - "A panel discussion is in reality a group discussion carried on by a small group before an audience. In class use this audience is the class itself. The panel group and chairman are seated, usually around a table, before the audience in such a way that every one can see and hear. This of itself limits the size of the audience for a successful panel, for school use, to twenty-five or thirty. In class use the chairman usually tells the approach from which each panel member is to talk concerning the problem. The chairman then states the problem to be discussed, clarifying it, perhaps explaining why the panel had been formed, and informing the group that the latter part of the period will be given to discussion from the floor. The chairman then opens the discussion. Sometimes he asks each panel member to express his opinion in three to five minutes (rarely more) and then stimulates a free discussion between the members. In other cases he stimulates a free give and take at the start, and an attempt is made to approximate as closely as possible the spontaneity of a lively conversation. After about half an hour, he calls the panel discussion closed, summarizes the points brought out, and asks for questions or discussion from the audience."⁵

³Ivol Spafford, Fundamentals in Teaching Home Economics (New York: John Wiley and Sons, Second Edition, 1940), p. 275.

⁴Williamson and Lyle, op. cit., p. 176.

⁵Ibid., pp. 185-86.

4. Recitation - Recitation means "the reciting or repeating of knowledge, facts learned, or experiences had.

"Successful personal living and homemaking make use of a great deal of information - facts, knowledge, whatever it may be called - and, while much of it may be learned through use in actual situations, it may be tested partially at least by the recitation method."⁶

5. Special talk - A speaker - village doctor, county health nurse, agriculture teacher, and others may come before the class to present information the class members do not have and cannot easily secure themselves, to introduce a new aspect of work, or to arouse interest.
6. Special report - One person brings before the class information related to work the class is now doing or is going to do. This report should answer questions raised in class. The special report is a method of bringing to class information which there is no time nor opportunity for all to get at the moment.
7. Committee work - By committee work we mean a group working together to carry through an activity. "Sometimes a committee is set up to do a special piece of work for the entire class. A committee needs to set up an organization, make a plan of work, decide upon a division of labor, and set a time for group meetings and for completing the job. The members should recognize that the report presented or piece of work done should represent group opinion, that questions should be settled on merit and not by personal preference or by the loudest talking or by the most persistent member. Teacher guidance will be needed to see that all work according to the rules of the game and that every aspect of the problem is considered. After this is done, the teacher should accept the results of committee work just as the pupils are expected to do."⁷
8. Directed study - "The study under guidance which accompanies small group or class work is known as directed study. A small group may be planning meals and need to check on nutritive qualities of certain foods, ways of cooking meats, how to serve a buffet supper.

⁶Spafford, op. cit., p. 282.

⁷Ibid., p. 286.

"In any type of directed study, the girl needs to have a definite purpose in mind, know what she is going after and why she wants it. She should have a plan of work, know sources of help, and have some means of checking her progress.

"Teacher guidance should be available when and as needed. Some girls will need more than others, and not all will need the same kind. The teacher must be able to come in at the right moment, ask the questions which brings to light an unrecognized problem, give the suggestion which clears up the difficulty, point to sources of help."⁸

9. Demonstration - A demonstration occurs when one or more persons show how a process is carried out. It is frequently used to provide information, to create interest, or to develop an appreciation of standards of work, and some understandings through widening the range of experience.

"Demonstrations may vary in scope from the very short informal showing to a small group how to fill a bobbin, to the long formal demonstration given to a large audience in cooking schools.

"If the demonstration is long and important enough to be a lesson of itself, it will consist of three parts: first, a preparatory period of short duration, during which its need and purpose will be clarified; second, the demonstration itself; and third, a follow-up period for practice of the process demonstrated. When the demonstration is given merely for the purpose of awakening interest, this last period is often omitted."⁹

10. Laboratory - The laboratory method is that through which students acquire motor techniques such as meal preparation, refinishing furniture, and cleaning a floor. The student may not become skilled but he becomes acquainted with the techniques and gets the feel of an operation to be perfected later.

"Each laboratory lesson, whether it extends over one class period only or over several days, consists of three parts. The first is used for developing the plans for the work, the second for carrying out those plans, and the third for summarizing and evaluating."¹⁰

⁸Ibid., pp. 286-87.

⁹Williamson and Lyle, op. cit., p. 199.

¹⁰Ibid., pp. 190-91.

11. Field trip - A field trip is an excursion outside the classroom which is "planned in order to develop appreciation and understanding of things as they really are, and to secure information at its source."¹¹
12. Cooperative planning - Cooperative planning implies that the students, teacher, and others concerned, work together to set up purposeful goals, to select the experiences through which they can be achieved and to evaluate progress.
13. Singing - The teacher and class may sing a song about balanced meals, sewing and so forth.
14. Short drill - The class may, for a few minutes, continue to repeat or perform important skills such as threading the machine or learning the basic seven.
15. Rapid oral review - The teacher and class may discuss or look back over experiences and information previously discussed for the purpose of recalling to mind or examining for improvement.
16. Written "spot" tests - These written tests, questions or problems on which the pupil writes, may be used as a means of helping students evaluate progress, to stimulate interest, to instigate a discussion or as a review.
17. Debate - The debate is a method which may be used to discuss the arguments on both sides of a question. The affirmative (for the questions as stated), and the negative (against the question as stated) discuss and examine questions through argument.
18. Dramatization - A dramatization as it would be used in class is a method through the use of which an endeavor is made to give life and a sense of reality to problems through characterizing and portraying real or imaginary people in real or imaginary situations.
19. Lecture - "The lecture is a useful means of presenting, orally, information that is new or unusual or not available, except in too technical a form for the group to grasp, and which one can interpret, simplify, and make clear."¹²

¹¹Ibid., p. 205.

¹²Ibid., p. 374.

20. Films - A film may be shown to the class as a means of introducing work on a problem, stimulating interest, explaining a process, imparting knowledge, helping to develop attitudes, appreciations, and ideals, and summarizing work.
21. Records - Records may be used for very much the same reasons as films except that use is made of the sense of sound rather than sight or both sight and sound.
22. Radio programs - Special radio programs may be used at times during class period to bring immediate and pertinent presentations of material of interest to the class. More often, however, transcriptions of radio programs are available for teaching purposes.

Classes may also give radio programs. "Planning and putting on such a program has real educational value."¹³
23. Slides accompanied by explanation and/or discussion - Slides may be used for the same purpose as films. Their use provides an opportunity for class discussion during the showing.
24. Standardized tests - Standardized tests are those "tests which, having been given to a large number of girls, graded, and carefully analyzed might be regarded as normal or standard measurements for what a class of a certain age and grade level might be expected to know."¹⁴
25. Oral reading - The teacher or pupils may read to the class material which is of common interest.
26. Contests - Competition among groups may be a means of stimulating and maintaining interest providing the class does not lose sight of their goals in sheer rivalry.
27. Games - A game might be defined as play according to set rules. As the term is used here, it means play according to set rules which is done for the educational experience which it provides. For example, the game, Vitamingo, might be used in the study of nutrition.
28. Interview - One person may discuss a subject with another before the class for the purpose of securing information from the latter. For example, the class may be studying the career of journalism.

¹³Spafford, op. cit., p. 306.

¹⁴Williamson and Lyle, op. cit., p. 307.

Instead of making a report to the class, one member may invite a journalist to meet with her class and discuss journalism with her there.

29. Buzz session - A buzz session is a means of providing an opportunity for everyone to express his opinion by dividing a class into small groups, each group having a chairman who listens to the various ideas presented and then takes them back to the total class groups for further discussion and consideration.
30. Evaluation - "Evaluation involves selecting and/or preparing and using instruments of measurement, studying the evidence collected to find out what has or has not been learned, and determining both the procedures that have been effective in promoting learning and the nature and causes of difficulties."¹⁵
31. Others -

¹⁵Spafford, op. cit., p. 217.

SECTION II

Teaching Methods Used With Class Groups

_____ Teacher _____ School

General over-all objective:

If a record is kept for different classes in terms of the various areas of homemaking studied, designate the class or grade level in the column to the left of that area of work. (Class groups--i.e., sophomore class or 10th grade)

CLASS OR GRADE LEVEL	AREAS OF WORK (Give specific objective(s) under each)	METHODS USED (Designate by number corresponding to the specific method or combination of methods described in Section I, Teaching Methods which were used in working toward objective(s).)
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_____ I. Health

_____ II. Personal appearance

_____ III. Food

CLASS	AREAS OF WORK	METHODS USED
-------	---------------	--------------

_____	IV. Clothing	
-------	--------------	--

_____	V. Family relations	
-------	---------------------	--

_____	VI. Social behavior	
-------	---------------------	--

_____	VII. Housing	
-------	--------------	--

_____	VIII. Use of time and energy	
-------	------------------------------	--

_____	IX. Recreation	
-------	----------------	--

CLASS	AREAS OF WORK	METHODS USED
-------	---------------	--------------

_____	I. Income earning and spending	
-------	--------------------------------	--

_____	XI. Caring for children	
-------	-------------------------	--

_____	XII. Home care of the sick	
-------	----------------------------	--

_____	XIII. Other	
-------	-------------	--

SECTION III

Evidences of Pupil Learning

_____ Teacher _____ School

List evidences of pupil learning in the following areas in terms of methods or combination of methods:

I. Health

II. Personal appearance

III. Food

IV. Clothing

V. Family relations

(Evidences of pupil learning continued)

VI. Social behavior

VII. Housing

VIII. Use of time and energy

IX. Recreation

X. Income earning and spending

XI. Caring for children

(Evidences of pupil learning continued)

XII. Home care of the sick

XIII. Other

SECTION IV

General Situations

	<u>Teacher</u>		<u>School</u>
I. Class group(s) for which methods are listed	Number students in group(s)	Age range of students	Occupational groups represented and number in each
Example: 10th grade	16	14-16	Farmers-10, salesmen-1, industrial workers-4, carpenters-1

II. Summary of test results which may be available: (For same class group(s) as listed in No. I)

	<u>I.Q.</u>	<u>Achievement</u>	<u>Other</u>
Example: 10th grade (16)	5 students	90- 99	
	10	100-109	
	1	110-119	

III. Summary of academic standing: (For same class group(s) as listed in No. I)

	<u>Average in all courses</u>	<u>Average in home economics</u>
Example: 10th grade (16)	1 student	-69
	5	70-79
	7	80-89
	3	90-100

SECTION V-A

Pupil's Evaluation Sheet

_____ Class or grade level

List in the column at the extreme left the areas of work you have had this year. Then check one of the five columns to the right which most nearly expresses your feeling about that area of work.

Area of work	Liked very much	Liked	Was all right	Didn't especially like	Didn't like

SECTION V-B

Summary — Pupil's Evaluations

Teacher _____ School _____

Class or grade level _____

Area of work	Liked very much	Liked	Was all right	Didn't especially like	Didn't like

Class or grade level _____

Area of work	Liked very much	Liked	Was all right	Didn't especially like	Didn't like

Class or grade level _____

Area of work	Liked very much	Liked	Was all right	Didn't especially like	Didn't like

SECTION VI

Teacher's Evaluation Sheet

Teacher _____ School _____

List areas of work taught in grade levels with whom this study was made.
Check the column which most nearly expresses your feeling about that area of work.

Class or grade level _____

Area of work	Enjoyed teaching very much	Enjoyed teaching	Didn't mind teaching	Didn't especially enjoy teaching	Didn't enjoy teaching

Class or grade level _____

Area of work	Enjoyed teaching very much	Enjoyed teaching	Didn't mind teaching	Didn't especially enjoy teaching	Didn't enjoy teaching

Class or grade level _____

Area of work	Enjoyed teaching very much	Enjoyed teaching	Didn't mind teaching	Didn't especially enjoy teaching	Didn't enjoy teaching

Area and Year of Home Economics	Number Teachers Reporting	Problem Solving		Class Discussion		Panel Discussion		Recitation		Special Talk		Special Report		Committee Work		Directed Study		Demor ti
		No.	Cent	No.	Cent	No.	Cent	No.	Cent	No.	Cent	No.	Cent	No.	Cent	No.	Cent	No.
Health I	13	10	77.0	12	92.3	2	15.4	9	69.2	3	23.1	8	61.5	4	30.8	10	76.9	9
II	9	5	55.6	6	66.7	5	55.6	4	44.4	5	55.6	6	66.7	4	44.4	5	55.6	7
III	2	2	100.0	2	100.0	0	0.0	2	100.0	0	0.0	1	50.0	0	0.0	1	50.0	0
Food I	16	10	62.5	14	87.5	2	12.5	12	75.0	5	31.3	6	37.5	10	62.5	12	75.0	16
II	11	8	72.7	11	100.0	3	27.3	9	81.8	1	9.1	6	54.6	5	45.5	11	100.0	10
III	10	7	70.0	9	90.0	2	20.0	8	80.0	3	30.0	6	60.0	5	50.0	10	100.0	10
Clothing I	16	9	56.3	14	87.5	4	25.0	5	31.3	2	12.5	9	56.3	4	25.0	11	68.8	16
II	14	13	92.9	12	85.7	2	14.3	6	42.9	3	21.4	7	50.0	4	28.6	11	78.6	14
III	7	5	71.4	6	85.7	1	14.3	3	42.9	1	14.3	3	42.9	2	28.6	6	85.7	7
Family Relations I	6	4	66.7	6	100.0	3	50.0	3	50.0	1	16.7	5	83.3	2	33.3	4	66.7	1
II	7	5	71.4	6	85.7	1	14.3	3	42.9	0	0.0	6	85.7	0	0.0	4	57.1	0
III	14	12	85.7	12	85.7	7	50.0	5	35.7	3	21.4	10	71.4	7	50.0	8	57.1	1

*Tables VIII and IX were compiled from this original tabulation.

APPENDIX B*

METHODS REPORTED AS HAVING BEEN USED BY 35 TEACHERS OF HOME ECONOMICS IN THE ROANOKE DISTRICT OF VIRGINIA, 1949-

													Number and Per Cent of Teachers Reporting Methods Used by Area and Year of Home Economics														
Area Per Cent	Special Talk		Special Report		Committee Work		Directed Study		Demonstra- tion		Laboratory		Field Trip		Cooperative Planning		Singing		Short Drill		Rapid Oral Review		Written Spot Tests		Debate		Dra- matiza- tion No.
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent			
69.2	3	23.1	8	61.5	4	30.8	10	76.9	9	69.2	5	38.5	1	7.7	6	46.2	1	7.7	4	30.8	6	46.2	11	84.6	1	7.7	2
44.4	5	55.6	6	66.7	4	44.4	5	55.6	7	77.8	5	55.6	1	11.1	5	55.6	1	11.1	6	66.7	6	66.7	5	55.6	0	0.0	1
100.0	0	0.0	1	50.0	0	0.0	1	50.0	0	0.0	0	0.0	0	0.0	2	100.0	0	0.0	1	50.0	1	50.0	1	50.0	0	0.0	0
75.0	5	31.3	6	37.5	10	62.5	12	75.0	16	100.0	16	100.0	8	50.0	13	81.3	1	6.3	4	25.0	10	62.5	11	68.8	1	6.3	2
81.8	1	9.1	6	54.6	5	45.5	11	100.0	10	90.9	11	100.0	3	27.3	9	81.8	1	9.1	5	45.5	8	72.7	8	72.7	1	9.1	3
80.0	3	30.0	6	60.0	5	50.0	10	100.0	10	100.0	10	100.0	6	60.0	8	80.0	1	10.0	6	60.0	8	80.0	8	80.0	1	10.0	1
31.3	2	12.5	9	56.3	4	25.0	11	68.8	16	100.0	14	87.5	4	25.0	11	68.8	1	6.3	7	43.8	7	43.8	10	62.5	0	0.0	4
42.9	3	21.4	7	50.0	4	28.6	11	78.6	14	100.0	14	100.0	6	42.9	9	64.3	1	7.1	5	35.7	7	50.0	8	57.1	0	0.0	3
42.9	1	14.3	3	42.9	2	28.6	6	85.7	7	100.0	7	100.0	3	42.9	6	85.7	1	14.3	4	57.1	4	57.1	7	100.0	0	0.0	2
50.0	1	16.7	5	83.3	2	33.3	4	66.7	1	16.7	1	16.7	1	16.7	3	50.0	0	0.0	2	33.3	3	50.0	2	33.3	0	0.0	0
42.9	0	0.0	6	85.7	0	0.0	4	57.1	0	0.0	0	0.0	0	0.0	4	57.1	0	0.0	0	0.0	2	28.6	1	14.3	0	0.0	1
35.7	3	21.4	10	71.4	7	50.0	8	57.1	1	7.1	1	7.1	1	7.1	7	7.1	0	0.0	2	14.3	4	28.6	4	28.6	1	7.1	2

NOKE DISTRICT OF VIRGINIA, 1949-50

s Used by Area and Year of Home Economics

Written Spot Tests		Debate		Drama- tization		Lecture		Films		Records		Radio Programs		Slides		Standard- ized Tests		Oral Reading		Contests		Games		Int
No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.
11	84.6	1	7.7	2	15.4	7	53.8	9	69.2	0	0.0	0	0.0	0	0.0	0	0.0	5	38.5	1	7.7	0	0.0	1
5	55.6	0	0.0	1	11.1	6	66.7	9	100.0	0	0.0	0	0.0	1	11.1	0	0.0	4	44.4	2	22.2	0	0.0	0
1	50.0	0	0.0	0	0.0	1	50.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	50.0	0	0.0	0	0.0	0
11	68.8	1	6.3	2	15.5	9	56.3	13	81.3	1	6.3	0	0.0	3	18.8	0	0.0	6	37.5	8	50.0	0	0.0	1
8	72.7	1	9.1	3	27.3	7	63.6	7	63.6	0	0.0	1	9.1	1	9.1	1	9.1	6	54.6	4	36.4	0	0.0	1
8	80.0	1	10.0	1	10.0	4	40.0	7	70.0	0	0.0	0	0.0	0	0.0	0	0.0	4	40.0	3	30.0	0	0.0	0
10	62.5	0	0.0	4	25.0	9	56.3	12	75.0	2	12.5	0	0.0	2	12.5	1	6.3	3	18.8	2	12.5	0	0.0	0
8	57.1	0	0.0	3	21.4	7	50.0	6	42.9	0	0.0	0	0.0	2	14.3	0	0.0	2	14.3	1	0.0	0	0.0	2
7	100.0	0	0.0	2	28.6	4	57.1	5	71.4	0	0.0	0	0.0	1	14.3	1	14.3	1	14.3	2	28.6	0	0.0	0
2	33.3	0	0.0	0	0.0	4	66.7	0	0.0	1	16.7	0	0.0	0	0.0	0	0.0	3	50.0	0	0.0	0	0.0	0
1	14.3	0	0.0	1	14.3	4	57.1	4	57.1	0	0.0	0	0.0	0	0.0	0	0.0	4	57.1	0	0.0	0	0.0	0
4	28.6	1	7.1	2	14.3	8	57.1	6	42.9	0	0.0	0	0.0	0	0.0	0	0.0	7	50.0	0	0.0	0	0.0	1

<u>Lecture</u>		<u>Films</u>		<u>Records</u>		<u>Radio Programs</u>		<u>Slides</u>		<u>Standard-ized Tests</u>		<u>Oral Reading</u>		<u>Contests</u>		<u>Games</u>		<u>Interview</u>		<u>Buzz Session</u>		<u>Evaluation</u>	
No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
7	53.8	9	69.2	0	0.0	0	0.0	0	0.0	0	0.0	5	38.5	1	7.7	0	0.0	1	7.7	1	7.7	8	61.5
6	66.7	9	100.0	0	0.0	0	0.0	1	11.1	0	0.0	4	44.4	2	22.2	0	0.0	0	0.0	2	22.2	7	77.8
1	50.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	50.0	0	0.0	0	0.0	0	0.0	0	0.0	1	50.0
9	56.3	13	81.3	1	6.3	0	0.0	3	18.8	0	0.0	6	37.5	8	50.0	0	0.0	1	6.3	1	6.3	12	75.0
7	63.6	7	63.6	0	0.0	1	9.1	1	9.1	1	9.1	6	54.6	4	36.4	0	0.0	1	9.1	1	9.1	10	90.9
4	40.0	7	70.0	0	0.0	0	0.0	0	0.0	0	0.0	4	40.0	3	30.0	0	0.0	0	0.0	2	20.0	8	80.0
9	56.3	12	75.0	2	12.5	0	0.0	2	12.5	1	6.3	3	18.8	2	12.5	0	0.0	0	0.0	2	12.5	14	87.5
7	50.0	6	42.9	0	0.0	0	0.0	2	14.3	0	0.0	2	14.3	1	0.0	0	0.0	2	14.3	4	28.6	13	92.9
4	57.1	5	71.4	0	0.0	0	0.0	1	14.3	1	14.3	1	14.3	2	28.6	0	0.0	0	0.0	2	28.6	7	100.0
4	66.7	0	0.0	1	16.7	0	0.0	0	0.0	0	0.0	3	50.0	0	0.0	0	0.0	0	0.0	1	16.7	4	66.7
4	57.1	4	57.1	0	0.0	0	0.0	0	0.0	0	0.0	4	57.1	0	0.0	0	0.0	0	0.0	1	14.3	5	71.4
8	57.1	6	42.9	0	0.0	0	0.0	0	0.0	0	0.0	7	50.0	0	0.0	0	0.0	1	7.1	5	35.7	11	78.6