

THE CONTRIBUTION OF MICHIGAN
HOMEMAKING TEACHERS TO
SCHOOL LUNCH OPERATION

Thesis for the Degree of M. S.
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Nila Burt Laidlaw
1949

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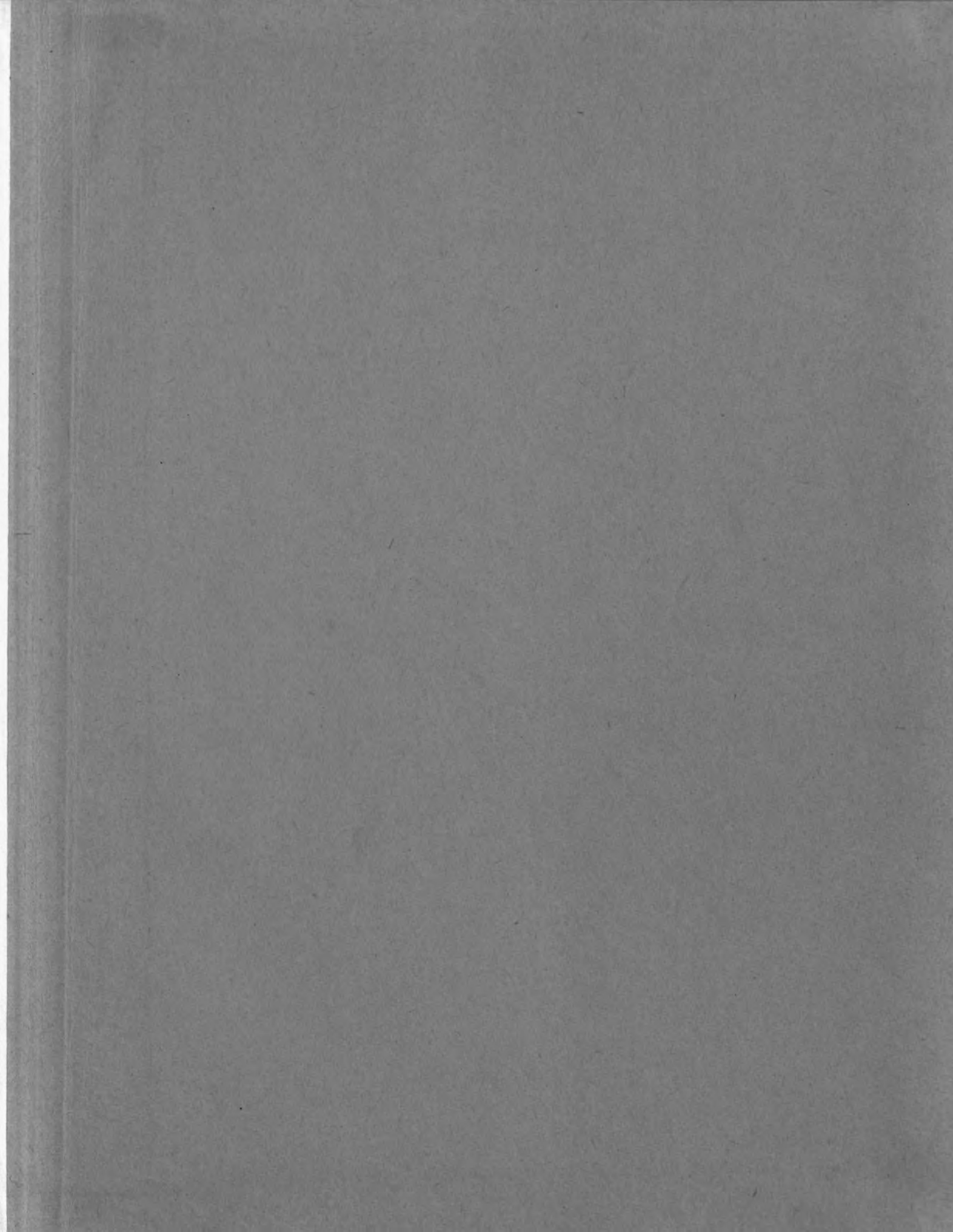
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**THE CONTRIBUTION OF MICHIGAN HOMEMAKING TEACHERS
TO SCHOOL LUNCH OPERATION**

By

Nila Burt Laidlaw

A THESIS

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I INTRODUCTION

ORIGIN OF THE PROBLEM

The history of school feeding is that of charitable organizations providing for the welfare of indigent children. It dates back almost a century and a half in Germany, a hundred years in France, to 1865 in England, and in our own country there is a record of the Children's Aid Society having served a noon meal to the children in an industrial school of New York City as early as 1853 (2). Little progress was made in the United States for many years, but with the development of the science of nutrition in the latter years of the nineteenth century many persons became conscious of the importance of the right kind of food for school children. As a result of this interest in nutrition, "penny lunches" were opened in Boston and Philadelphia in 1894 to feed the under-nourished children at low cost. Other cities followed their example in rapid succession. In a number of these cities the lunchrooms were leased to commercial organizations on a concessionaire basis. Time proved that this hit and miss operation of the school lunch was not accomplishing the desired results and between 1909 and 1920 an increasing number of school systems took over the control of lunchroom management. Knoll (12) reports that by 1940 the concessionaires had been almost entirely eliminated.

While lunchrooms in the larger cities established themselves on a firm foundation they developed slowly in the rural

and small town areas until the depression years of the early thirties and World War II brought the realization that proper nutrition for school children was a community problem and a national responsibility. Since its inception in 1935 with the temporary assistance of the Federal government, the lunch program has grown steadily. The 79th Congress recognized the importance of the program by passing the National School Lunch Act of 1946; this Act provides permanent legislation to guarantee its continuance. Nearly 45,000 schools and more than 6,000,000 children in the United States and its territories received some kind of school lunch assistance under this Act in the year ending June 30, 1948 (25).

Even though the school lunch is becoming an accepted part of the school program it is accepted too casually too often. In many instances it is considered only as a service to those students who do not have time to go home for lunch. Jardine (11) estimated that 11,000,000 children were eating their lunch at school in 1947. If this is true, then we may assume that the cafeteria manager is teaching more children than any other teacher in the school system (3). If we are to improve the food habits and promote good nutrition for all children, the school must recognize its responsibility for making the noon meal something more than a service feature. The school lunch must be an integral part of the school system.

The expanding program of child feeding necessitated finding someone to assume the duties of planning, preparing, and serving the noon meal. The responsibility for quantity food

service became a regular function of more home economics teachers than ever before. Because of her special training and experience it was a natural development that the assistance of the home economist in the public school be sought and, in many instances, actual participation in the operation of the lunchroom became a large part of this teacher's job.

At the same time that the lunch program has been developing, the whole concept of the field of home economics has broadened. Boys as well as girls and men as well as women are enrolling in the all-day, out-of-school, and adult programs. The homemaking teacher in the smaller schools is scheduled for a full day of teaching; in addition she may have an evening class, she may sponsor the activities of the Future Homemakers of America, and in many schools she is expected to assume a major part in the operation of the noon lunch. We recognize the fact that in light of her training she is the person best qualified to assume these duties. But when it must be done at the sacrifice of classroom teaching or of health, many teachers are turning away from any and all responsibility in connection with the program.

The homemaking teacher has a unique contribution to make to the school lunch. However, if the school lunch is to be a part of the total school program there are other agencies that should cooperate in the venture: the business education classes, the physical education department, the science teachers, and the parents. Virginia F. Thomas, in an analysis of the situation in

West Virginia, says that there is a place for every department and every teacher in the school in the promotion and operation of the school lunch program (23).

The purpose of this study is to gather data relative to the homemaking teacher and the school lunch situation as it exists in Michigan today: to determine the contribution of the homemaking teacher to the school lunch program and the contribution being made by other school agencies. It is thought that the findings may point ways in which the training program of prospective homemaking teachers may be strengthened. If the major contribution of the teacher is to be menu planning, then she must be given concrete help in the planning of nutritionally adequate meals that will be accepted by children and that can be served within the food cost allowance of the lunchroom budget. If the majority of teachers have a responsibility for marketing and the quantity purchase of staples, then help must be given in this field. One can make any number of similar comparisons from other phases of the lunchroom operation. Or it may be that the homemaking teacher can make her best contribution through the nutrition education program. The parents, faculty members, and lunchroom workers need education in nutrition as well as do the student patrons of the school lunch.

PURPOSE OF THE STUDY

The purpose of this study is to determine the extent to which the homemaking teachers in the public schools of Michigan are assuming responsibilities for the operation of the school lunch and to what extent the total school shares in this responsibility.

STATEMENT OF HYPOTHESES

The re-evaluation of the contributions of the homemaking teacher to the school lunch program would help it attain the position it deserves as an integral part of the total school system with the full support of the faculty and the community.

The evidence indicates a need for the expansion of the program for training non-professional persons in key positions of lunchroom management in the technique of menu planning, quantity food buying, the establishment of high standards of food service, and of sanitation.

II REVIEW OF LITERATURE

Although much is being written concerning the growing importance of the school lunch, its relationship to the well-being of the school child, and the integration of the lunchroom into the total school program, very little can be found relative to the place of the homemaking teacher in the program.

Ruth Powell (17) of the Arkansas Department of Education has made an excellent statement of the teacher's contribution to the school lunch in an article of that same title. She says that the homemaking teacher can make an effective contribution to the school lunch program in four distinct ways: 1) she can convince the superintendent of a need for a school lunch committee, outline its functions, and be an active member of the committee; 2) she can assist the school lunch managers and helpers by giving advice on quantity food purchasing, equipment arrangement, kitchen management, and work schedules; 3) she may conduct nutrition classes for the elementary teachers and offer suggestions concerning ways in which health, nutrition, and the school lunch may be correlated with other subjects; 4) she can vitalize and enrich her homemaking classes by the use of real lunchroom problems in quantity food preparation, by checking on the morning and evening meals of the children in school, and by planning noon meals which will supplement those eaten at home.

In a survey of the food service responsibilities of high school home economics teachers in Iowa, Goldsmith (8) found that

the separation of the cafeteria from the home economics departments was most common in cities with a population of 10,000 or over. Forty per cent of the teachers reporting asked for help in setting up quantity cookery recipes. Organization plans were requested by thirty-three per cent of the teachers. Other problems presented included quantity food buying and selection of equipment. Thirty-six per cent of the teachers recommended at least one course in lunchroom management for college students planning to teach home economics in the small towns of that state.

Shepherd (21) conducted a study of the relationship of the homemaking teacher to the school lunch program in seventeen schools in seven counties of Texas. The data were received from questionnaires and personal interviews with seventeen superintendents and eleven homemaking teachers. A comparison of the menus as planned by two superintendents, two homemaking teachers, and two lunchroom managers was made according to the Recommended Dietary Allowances of the National Dairy Council and Lunch at School of the United States Department of Agriculture. The conclusions drawn were: 1) the lunchroom management training of the homemaking teacher is directly related to her assumption of responsibility in the lunchroom; 2) the homemaking teacher is better qualified to plan menus than is either the worker or the superintendent; and 3) the lunchrooms in which the homemaking teacher assumes responsibility operate more efficiently than those in which she assumes no responsibility. The responsibilities assumed, either directly

or jointly with some other person, varied from one extreme to the other; that is, the teacher assumed practically all of the responsibility or none.

Thomas (23) has reported an even more recent study of the responsibilities of the home economics teacher in relation to the school lunch program in West Virginia. The first of the nine reasons listed for undertaking the study was to determine the number of school lunch duties for which the home economics teacher was responsible. Her findings indicate that the number of responsibilities which make up the total school day determines, to some extent, the effect the school lunch program has upon the classroom efficiency of the teacher. Fifty-seven per cent of the teachers in the combined vocational and non-vocational schools supervised the school lunch program in addition to teaching five or more classes per day. Thomas was of the opinion that, in order to give time to assume some of the responsibility for the school lunch and at the same time teach home economics classes, it would be desirable that the teacher be scheduled for three classes a day, and never more than four classes, depending upon the nature of the school lunch duties for which the home economics teacher is responsible. She further recommended that the home economics teachers change their concept of the lunch program and recognize that the school lunch is not the total responsibility of the home economics teacher or her classes. However, the planning of menus and the supervision of food preparation should continue to be the responsibility of the home economics teacher.

One of the basic beliefs expressed by Flanagan (7) before the 1948 Convention of the Association of School Business Officials is that the school lunch program is the responsibility of the school agency and, just as any other part of the school program, it should reflect the coordinated effort of the community if it is to function satisfactorily in the lives of children.

Concerning the schedule of the homemaking teacher, West and Wood (26) recommend that in a small school where 200 or more students are served the teacher should devote one-third of her time to lunchroom management and two-thirds to teaching.

The two studies reviewed in the material which follows have attracted nation-wide attention. Both analyzed the contribution of the noon meal to the well-being of the child and stressed the importance of trained persons in key positions in the school lunch program.

Mack (13) and her co-workers at the Pennsylvania State College conducted a nine-year study of the school lunch programs in Pennsylvania. The study was begun in 1935 to observe the food habits and nutritional status of a large number of persons of different sexes and ages with different socio-economic backgrounds. At the end of the study it was concluded that the only children who showed marked improvements in nutritional status were those children whose home dietaries had been studied and the school lunch, designed to complement the meals received at home, was planned by a person trained in nutrition and dietetics.

Florida began a five-year study in September, 1940, to measure the effectiveness of the school lunch in improving the nutritional status of rural school children (1). The children were given a physical examination; hemoglobin and red blood cell counts were taken; the height and weight were determined three times during the study. The daily lunch was planned to provide one-half or more of the recommended dietary allowances for each nutrient. Results were comparable with those reported in Pennsylvania; there was an increase in the hemoglobin values during the school year and a decrease in hemoglobin values during the summer vacation period. Height and weight measurements charted on the Wetzal grid showed a shift in channels toward a better physique and a definite advance in the development level. The authors concluded that adequate lunches, under the preparation of trained supervisors, offer an effective means of raising the nutritional status of school children. When an untrained person took over the food preparation and certain hard-to-get foods were left off the menu, the children who had previously shown a rise in hemoglobin values showed a drop for that year.

In an address before the second annual meeting of the School Food Service Association in November, 1948, Dr. Cederquist (4) of Michigan State College stressed the importance of the lunchroom manager knowing something about the food habits of the community before planning the school lunch or, ideally, about the food habits of each individual child and emphasized the necessity of enlisting the full cooperation of the parents of each child.

She expressed the belief that an extensive nutrition education program is necessary. Parents must be made to understand that the school lunch will not assure adequate nutrition for any child unless it fits into the feeding program of the home. The school lunchroom as an educational instrument for teaching good food habits will function only if both the child and his parents are actively engaged in the program.

The effectiveness of a school Lunch Advisory Committee in publicizing school lunches is discussed in a recent article by McMillan (14). This committee, consisting of the school nurse, foods teacher, P.T.A. representative, parent, student, and principal, was organized last year in every San Bernadino school where food was sold. It considers any problem which concerns the school lunchroom including hours for lunch, food served, cafeteria discipline, or any phase of operation. Written reports of its meetings are presented to the cafeteria manager and the general business manager of each school. The menus for each week are published in the Sunday issue of the local newspaper in an effort to create a favorable attitude on the part of members of the community toward the school lunch and to make them realize that "the school cafeteria is the best place for children to eat."

The review of literature would seem to indicate these fundamental beliefs:

The school lunch fulfills its function of improving the health and nutrition of children only when the menus are planned

by a trained person who makes a positive correlation between the meals served at school and the home food intake of the child.

The homemaking teacher, by virtue of her training, has a definite contribution to make to the school lunch program.

The school lunch is not the sole responsibility of the homemaking teacher or of her classes. A strong lunch program can function only through the joint action of the child, of his parents, and of all departments in the school.

III HISTORY OF FEDERAL ASSISTANCE TO SCHOOL LUNCH PROGRAM

Widespread interest in the school lunch really began during the depression years. It is true that a beginning had been made in feeding children at school in the early years of the century and that many of the larger cities had established well organized lunchrooms prior to the early thirties (10). But when the nation was faced by "workers with idle hands and empty pockets and farmers with bumper crops, bulging bins and empty pockets" (6) Congress established the Works Progress Administration and the National Youth Administration to provide work for needy persons. Through these organizations workers were supplied to build, serve, and administer school lunches. The United States Department of Agriculture donated foods purchased under its program to support farmers' prices of agricultural commodities. School lunches in this period were organized, then, to provide work for needy persons and to provide an outlet for surplus goods.

The spotlight was focused on the importance of feeding children well and on the need for training them in proper eating habits when in World War II years the Selective Service findings showed thirty per cent of the youth examined were physically unfit for military service (18). Some 700,000 had remedial defects which had not been corrected. England had had a similar experience in 1902; three out of every five men who wanted to enlist for military service in the Boer War were rejected as physically unfit for duty (6). Parliament ordered a national investigation and there

followed the passing of the Provision of Meals Act in 1906. This Act gave local authorities permission to install restaurants as a part of the regular school equipment in order to serve suitable lunches to the elementary school children (2).

The liquidation of the Works Progress Administration in the United States in 1943 brought an end to the funds for the operation of school lunches in many parts of the country. Surplus commodities were no longer available: a great defense army was being fed. The national government realized that wartime was not the time to cut down on school lunches; too many mothers were employed in war production (22). In 1943 Congress authorized a \$50,000,000 appropriation for the continuation of the lunch program in a new, simplified way. Food was to be purchased by the sponsors from local merchants and farmers. The primary reason for this change was to conserve transportation and storage facilities that are a necessary part of the centralized distribution plan.

Through these authorized funds any public or non-profit private school could receive aid for its school lunch program. The sponsors were asked to submit monthly claims for reimbursement and reports of operation to the Office of Distribution of the Food Distribution Administration. A specified amount was to be returned to the school for each child participating in the program; the amount to be returned to the school depended upon the type of meal served. Thus, the emphasis was changed from the disposal of surplus foods to the nutritional aspect of the lunch itself. The Food

Distribution Administration published lists of abundant foods and the elasticity of the menu allowed for the use of those locally available. The plan further stipulated that all children were to be fed regardless of their ability to pay, and that there should be no discrimination in feeding those who paid and those who were fed free.

After a three-year trial of this reimbursed type of program, the 79th Congress passed the National School Lunch Act. Several revisions had been made and a major portion of Title II, providing for nutrition education, deleted when the School Lunch Bill HR 3370 was accepted by the House on May 23; it was passed by the Senate on May 24, and became Public Law 396 when it was signed by President Truman on June 4, 1946 (19). Thus the "hand-to-mouth" existence of the federally aided school lunch program was abolished; its continuation was guaranteed through permanent legislation.

The School Lunch Act of 1946 is a grant-in-aid assistance to the states in providing an adequate supply of foods and other facilities for the establishment, maintenance, operation, and expansion of non-profit school lunch programs (20). The Act in itself does not appropriate money; it permanently authorizes an appropriation without the passage of new bills. There is no limit set on the amounts that may be authorized to defray food costs, but not more than \$10,000,000 may be spent annually to provide equipment for storing, preparing, and serving of foods in schools. The

equipment appropriation in 1946-1947 was the first for this purpose and, though the amount was small, it enabled many schools to buy equipment needed to start their school lunch programs and others to expand and improve lunchrooms already in operation. No funds have been allocated for equipment since this first amount.

The National School Lunch Act is administered under the United States Department of Agriculture (16). It is intended that each state shall develop its own program and it requires that after 1948 the State Department of Education assume responsibility for its direction. Each state must submit its plan of operation to the Department of Agriculture indicating the manner in which the program is to be conducted. Information is included regarding the state plan for supervision, finances, and procedures. No money is allowed any state for the expense of administering the lunch program. The plan must be accepted before the signatures are affixed and the state becomes eligible to receive its quarterly share of the federal funds.

As with other grants-in-aid programs, the state is required to match the federal funds. The matching fund may be acquired from a variety of sources and it may include the payments children make for their lunches. Through 1950 the state-local contributions must match the federal funds dollar for dollar. From 1951 to 1955 the state-local contribution must be one-and-a-half dollars for each dollar of federal money, and after 1955 the proportion is three dollars of state-local money for each dollar of the federal funds (16).

The money is divided among the states on the basis of the number of children five to seventeen years of age, inclusive. The Act specifies a formula for the allocation of funds so that states with a larger child population and a per capita income lower than the national average will receive a larger proportionate share. If it is apparent before the end of the year that any state will not use its share of the federal school lunch funds, the amount of this surplus may be redivided among the other states. Maximum reimbursement is established at nine cents for Type A lunch, six cents for Type B lunch and two cents for Type C or milk only. There shall be no discrimination against any pupil for his inability to pay. The states are encouraged to adjust their own reimbursement rates so that the programs in lower income areas will receive more than those where the incomes are higher.

Section 6 of the Act charges the Department of Agriculture with the direct purchase of food for distribution to schools in accordance with their needs. Foods purchased under this authority are chosen carefully to provide nutrients that are likely to be missing in most areas of the country. Schools benefit because even though they receive foods that can be fitted into the Type A lunch, their reimbursement is not decreased.

Section 9 designates the Department of Agriculture as being responsible for setting the nutrition standards for lunches. This section also states that insofar as practicable the schools will make use of those foods designated by the department as

being in abundance as well as those which are donated to them. This department also furnishes lists of abundant foods and menu suggestions to the sponsors (16). Congress has been looking ahead to the future by building up the domestic consumption of good foods when the overseas demands for food will fall off.

The Consumers Guide (20) has summarized the reasons why Uncle Sam is promoting school lunches as follows:

1. as a measure of national security,
2. to safeguard the health and well-being of the nation's children, and
3. to encourage the domestic consumption of nutritional agricultural commodities and other foods.

STATUS OF THE NATIONAL SCHOOL LUNCH PROGRAM

According to a report received from O. F. Beyer (25), Field Area Supervisor, Foods Distribution Programs Branch, Production and Marketing Administration, United States Department of Agriculture, all of the forty-eight states, the District of Columbia, and the territories of Alaska, Hawaii, Puerto Rico, and the Virgin Islands were sponsoring school lunch programs under the National School Lunch Act in the fiscal year 1948. Participating in the program were 6,106,359 children, or 22.6 per cent of all the students enrolled in the elementary and secondary schools.

STATUS OF THE NATIONAL SCHOOL LUNCH PROGRAM IN MICHIGAN

The national school lunch program is growing in Michigan. In the fiscal year 1948, 1,325 schools were a part of the national program (25); in February, 1949, 1,566 schools were participating in the program.* The office of the State Director of School Lunches made a complete break-down of the types of meals for which the schools of Michigan were reimbursed during the month of February, 1949. The following figures are a part of that analysis:

742 schools served Type A lunch
 32 schools served Type A lunch without milk
 91 schools served Type B lunch
16 schools served Type B lunch without milk
 881**
685 schools served Type C lunch, or milk only
 1,566 total schools participating

The average daily participation was 245,794 students; 4,602,530 meals were reimbursed during the month of February of which 2,305,531 were Type C, or milk only.

* This information was secured in the Office of Henry J. Ponitz, State Director of School Lunches, Department of Public Instruction, Lansing, Michigan, on May 16, 1949.

** 399 schools of the 881 shown served a Type C, or milk only, in addition to Type A or Type B.

TYPES OF LUNCHEAS AS DEFINED BY THE NATIONAL SCHOOL LUNCH ACT*

Type A is a complete lunch, hot or cold, providing 1/3 to 1/2 of one day's nutritive requirements and must contain at least:

- (a) One-half pint whole milk;
- (b) Two ounces of fresh or processed meat, poultry meat, cooked or canned fish, or cheese, or one-half cup cooked dry peas, beans, or soybeans, or four tablespoons of peanut butter; or one egg;
- (c) Six ounces (three-fourths cup) of raw, cooked, or canned vegetables and/or fruit;
- (d) One portion of bread, muffins, or other hot bread made of whole-grain cereal or enriched flour; and
- (e) Two teaspoons of butter or fortified margarine.

The protein requirements in (b) above may be met by serving one-half the required quantities of each of two proteins. One-half cup of fruit juice may be served in meeting one-half of the requirements of (c).

Type B lunch is an incomplete lunch, hot or cold, which is less adequate nutritionally. It must contain at least:

- (a) One-half pint whole milk;
- (b) One ounce of fresh or processed meat, poultry meat, cooked or canned fish, or cheese, or one-half egg; or one-fourth cup cooked dry peas, beans, or soybeans, or two tablespoons peanut butter;
- (c) Four ounces (one-half cup) raw, cooked, or canned vegetables and/or fruit;
- (d) One portion of bread, muffins, or other hot bread made of whole-grain cereal or enriched flour; and
- (e) One teaspoon of butter or fortified margarine.

Type C lunch is one-half pint of whole milk (which meets the minimum butterfat and sanitation requirements of state and local laws), as a beverage.

NOTE -- No meal for children can be considered complete unless milk is served. However, if milk cannot be secured, a Type A or B lunch without milk may be served.

* This material was adapted from Form No. SL-4, 8-48--2500, received from the office of the State Director of School Lunch.

IV PROCEDURE

SELECTION OF TECHNIQUE

In making an analysis of the contributions of the homemaking teacher to the school lunch it seemed desirable to contact as many schools as possible in order to secure an over-all picture of Michigan. The questionnaire method for collecting data related to the problem was therefore determined to be the most practical.

CONSTRUCTION OF QUESTIONNAIRE

Before attempting to construct a questionnaire, a complete list was made of all types of information related to the school lunch that might be of value to prospective teachers in developing an understanding of their relationship to and responsibility for the program. Suggestions for items to be included in this list were secured from Mrs. Mabelle S. Ehlers, Head of the Department of Institution Administration, and from Mrs. Merle D. Byers of the Home Economics Education Department, from observations of lunch programs in operation, and from a review of available published materials. These items fell logically into three main categories: 1) those concerned with the general over-all organization of the lunch program, 2) those related to the direct operation of the school lunch, and 3) those facts pertaining to the training and schedules of the homemaking teachers of Michigan who are assuming varying degrees of responsibility in the operation of the lunchrooms.

In order to encourage a high percentage of returns, to eliminate generalizations, and to secure data that might be tabulated and analyzed with greater accuracy, the check list technique was employed wherever possible in the construction of a double-page questionnaire. In Part I, General Information, questions were set up to secure facts relative to the total school enrollment, the number of students transported, the length of the noon hour, the type of lunch served, the number of students eating the noon meal at school, the number of workers employed, the amount of time assigned to the homemaking teacher for her part in the program, and other facts related to a general understanding of the organization of the lunch programs in Michigan schools. Part 2, Administration - Division of Responsibilities, was designed to determine the allocation of responsibilities among the various members of the school staff for the activities connected with the direct operation of the school lunch. And, since the basic problem was concerned with the extent to which the homemaking teacher was assuming responsibilities in the lunch program, Part 3, Homemaking Teacher - Training and Schedule, was designed for her to answer giving information about her training, experience, daily schedules, and extra-curricular assignments.

The first draft of the questionnaire was criticized by Mrs. Ehlers, Mrs. Byers and other members of the home economics education staff, Doctor Ralph Van Hoesen, Associate Professor of Education, Michigan State College, and was checked by the superintendents in two nearby schools, C. W. Overholt, Williamston Community

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that proper record-keeping is essential for transparency and accountability, particularly in financial matters. The text suggests that organizations should implement robust systems to track every detail, from small expenses to major investments.

2. The second section focuses on the role of technology in modern record-keeping. It highlights how digital tools and software can streamline the process, reducing the risk of human error and making data more accessible. The author argues that embracing technology is not just a convenience but a necessity for staying competitive in today's fast-paced environment.

3. The third part of the document addresses the challenges of data security and privacy. It notes that as more information is stored digitally, the potential for breaches and misuse increases. Organizations are urged to invest in strong cybersecurity measures and to ensure that all data handling complies with relevant regulations and standards.

4. The fourth section discusses the importance of regular audits and reviews. It states that periodic checks are crucial for identifying discrepancies, correcting mistakes, and ensuring that the record-keeping system remains effective and up-to-date. The text encourages a proactive approach to auditing rather than waiting for problems to arise.

5. The final part of the document provides a summary of the key points and offers some concluding thoughts. It reiterates that while record-keeping may seem like a mundane task, it is in fact a critical component of any successful organization. The author concludes by encouraging readers to take the time to evaluate their current practices and make necessary improvements.

Schools, and Edward L. Murdock, Okemos Consolidated School. The suggestions and criticisms received from these sources were utilized in preparing a second draft of the questionnaire, which was then sent to fifteen superintendents for a preliminary checking. These were accompanied by a personal letter explaining the purpose of the study and by an invitation to make any comments, criticisms, or suggestions which they thought might result in an improvement of the study.

The returns from these schools were tabulated and minor changes made in light of the criticisms offered. The questionnaire in this final form was then reviewed by the first three persons named above and approved for distribution.

SELECTION OF SCHOOLS FOR SAMPLING

Two previous studies in Michigan influenced the selection of schools for sampling: Georgia Halstead's (9) analysis of the activities for which homemaking teachers carry or share responsibility in high school, and that of M. Marie Harris (10) relative to the status of homemaking teachers and lunchroom managers in Michigan and Ohio.

In the first of these studies Halstead contacted the Michigan schools receiving reimbursement from federal funds for vocational education. She discovered that less than one-half of the teachers reported any responsibility for the school lunch. Only a simple analysis was made of the kinds of responsibilities

assumed in relation to the lunch: two-thirds of the teachers enjoyed planning the menus, buying supplies, supervising food preparation, and keeping records. Advertising, selling, and supervising of employees were the activities least enjoyed.

The second study, limited to cities of more than 10,000 population, was a comparison of the status of the home economics teachers, teacher-managers, and full-time cafeteria managers in respect to salaries, rights, benefits, and privileges. Harris reported that many schools had both Home Economics teachers and lunchroom managers, and some schools had Home Economics teachers as well as teacher-managers. Nineteen instances were cited of Home Economics trained teacher-managers in the returns from the 60 schools of 36 Michigan cities analysed in her study.

Harris further comments that in an increasing number of large cities the homemaking teacher is relieved of lunchroom responsibilities and that there is a full-time cafeteria manager who is specially trained in her field of work. Goldsmith (8) presents evidence to substantiate this statement in reporting her findings relative to the food service responsibilities of homemaking teachers in certain communities of Iowa. She says that the separation of the cafeteria from the homemaking department was most common in cities of over 10,000 population.

Since the Harris and Goldsmith studies have shown that in the larger cities the cafeteria is separated from the homemaking department and, therefore, presents no management problem to the

homemaking teacher, and since in this particular state those cities are in the minority, it was decided to limit the study to those schools in cities of less than 10,000 population. It was also felt that a much more accurate picture of the relationship of the homemaking teacher to the school lunch program could be presented if no distinction were made between those schools receiving reimbursement from the federal funds for vocational education and those schools receiving no reimbursement.

At this point it was necessary to compile a master list of schools in Michigan cities of less than 10,000 population in which there was known to be a homemaking department. This was accomplished by checking the list of schools published in the Michigan Education Directory (15) against the latest available Michigan census figures (24) and deleting those cities having a population greater than 10,000. To determine those schools having homemaking departments, this list was then checked with the April 1948 issue of the Directory of Michigan Schools Having Home Economics Departments (5). Those schools having no home economics departments were eliminated. To verify the accuracy of this list and to determine the names of the present homemaking teachers, the list was then checked against the 1948-1949 roll of homemaking teachers as compiled by the eight regional chairmen of the State Home Economics Curriculum Committee. This final checking resulted in a master list of 463 schools, each one of which had one or more homemaking teachers, located in cities of less than 10,000 population.

After considerable deliberation, it was decided to include the entire number of schools in the sampling.

COLLECTION OF DATA

A letter of transmittal accompanied each questionnaire in order to acquaint the superintendent with the purpose of the study and to give simple instructions for completing each part. When the mailing list showed more than one homemaking teacher as a member of the staff, additional copies of Part 3 were attached for each teacher to complete if she had any part whatsoever in the lunch program. A self-addressed, stamped envelope was enclosed for the return of the completed forms. At the end of two weeks a follow-up card was sent as a reminder to all those who had failed to reply.*

A total of 379 questionnaires were received out of the 463 which had been mailed. These represent an 81.8 per cent return. Table 1 shows that 68 schools, or 17.9 per cent of those reporting, have no lunch program. Thirty-seven schools, 9.8 per cent, serve milk only. 6.1 per cent of the returns were classed as incomplete because they lacked sufficient information to be useful. Two hundred and fifty-one schools, or 66.2 per cent, are serving some kind of school lunch. The returns from these schools, each one

* A copy of the letter of transmittal, the questionnaire, and the follow-up card are included in the Appendix, pages 91 - 93.

of which has a homemaking department, constitute the group analyzed in this study.

TABLE 1
CLASSIFICATION AND DISTRIBUTION OF RETURNS
ON THE BASIS OF USEFUL INFORMATION

Classification	Distribution of Returns	
	Number	Per cent
Lunch program in operation.	251	66.2
No lunch program . .	68	17.9
Milk only served . .	37	9.8
Incomplete returns . .	23	6.1
Total returns. .	379	100.0

The fact that only 17.9 per cent of the schools have no lunch program, and several of these schools indicate they will have a lunch program in operation before the next school year, suggests that the administrators recognize the noon lunch as an important school function.

Since these schools ranged in size of total enrollment from 120 to 3,731 pupils, and since the problems in the administration of small schools are so different from those in the large schools, it seemed advisable to divide the returns into more homogeneous groupings on the basis of total pupil enrollment. An examination of Table 2 will show that 102 schools, or 40.6 per

cent, had a total pupil enrollment of 120 to 499. The second group of schools with pupil enrollments from 500 to 999 is represented by 106 returns, or 41.8 per cent, of the schools studied. Forty-four schools, or 17.6 per cent, had a total census of 1000 or over and these constitute the third group.

TABLE 2

TOTAL ENROLLMENT AND DISTRIBUTION OF RETURNS
IN THE 251 SCHOOLS STUDIED

School Enrollment	Distribution of Returns	
	Number	Per cent
120 - 499	102	40.6
500 - 999	105	41.8
1000 - over. . . .	44	17.6

A master tabulation of each group of returns was made on a large chart which had been set up as a duplicate of the original questionnaire. From this chart a number of tables were constructed in order to present a more detailed analysis of the findings.

V DISCUSSION

The discussion of the findings of the 251 schools which constitute the study is centered around the three major divisions of the questionnaire. Part 1, General Information, is an analysis of the kinds of lunch programs in operation in Michigan, the proportion of the student enrollment being served by the lunchroom, the plans of organization for the preparation of food, the status of the nutrition education program as a part of the school lunch, the extent to which a School Lunch Advisory Committee is being used, the number of adult and student workers employed, and the patron load per worker. Part 2, Allocation of Responsibilities, presents information concerning the division of lunchroom duties among the school personnel to determine the extent to which the homemaking teacher is assuming specific responsibilities and the extent to which other members of the school staff are sharing in these same responsibilities. Part 3, Schedule and Training, summarizes information relative to the schedules and training of homemaking teachers who have an active part in the program: the number of hours scheduled for lunchroom supervision, the number of hours spent in school lunch supervision, the number of homemaking teachers whose lunchroom duties require them to remain in the building during the noon hour, the number who receive additional remuneration for their lunchroom assignments, the kind of instruction they must give to lunchroom employees, and the college courses the teachers have had as training for their part in this program.

THE HISTORY OF THE UNITED STATES

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GENERAL INFORMATION

Types of Lunch Programs in Operation

The figures presented in Table 3 reveal that in the majority of schools studied, 88.8 per cent, the only lunch program being sponsored is reimbursed from the funds of the National School Lunch Act. 94 per cent of all the schools reporting a lunch program in operation are receiving some assistance from the funds provided by the Act. This is determined by the addition of 5.2 per cent in the first column of Table 3, which represents the group of schools operating a combination of lunch plans, all of which utilize federal funds to some extent, to 88.8 per cent, which represents those schools in which the only lunch served receives federal assistance. A further examination of the table discloses that in 96.1 per cent of the small schools the only lunch served is reimbursed from the federal funds; 81.8 per cent of the large schools operate the same types of programs. Only 3.9 per cent of the small schools sponsor lunch programs without federal assistance; 7.7 per cent of the middle size schools and 6.9 per cent of the large schools operate without this assistance. These figures suggest that the small school is depending to a slightly greater extent upon the National School Lunch Act to assist in financing its lunchroom than is the large school.

The number of schools receiving federal assistance for the operation of the school lunch has an implication for those who

1. The first part of the document is a list of names and addresses, which appears to be a directory or a list of contacts. The names are written in a cursive script, and the addresses are listed below them. The list includes names such as "John A. Smith", "Mary E. Jones", and "Robert L. Brown".

2. The second part of the document is a series of short, handwritten notes or entries. These notes are written in a cursive script and are organized into a list format. The notes appear to be related to the names and addresses listed in the first part, possibly providing additional information or details about each contact.

3. The third part of the document is a series of short, handwritten notes or entries. These notes are written in a cursive script and are organized into a list format. The notes appear to be related to the names and addresses listed in the first part, possibly providing additional information or details about each contact.

4. The fourth part of the document is a series of short, handwritten notes or entries. These notes are written in a cursive script and are organized into a list format. The notes appear to be related to the names and addresses listed in the first part, possibly providing additional information or details about each contact.

5. The fifth part of the document is a series of short, handwritten notes or entries. These notes are written in a cursive script and are organized into a list format. The notes appear to be related to the names and addresses listed in the first part, possibly providing additional information or details about each contact.

6. The sixth part of the document is a series of short, handwritten notes or entries. These notes are written in a cursive script and are organized into a list format. The notes appear to be related to the names and addresses listed in the first part, possibly providing additional information or details about each contact.

7. The seventh part of the document is a series of short, handwritten notes or entries. These notes are written in a cursive script and are organized into a list format. The notes appear to be related to the names and addresses listed in the first part, possibly providing additional information or details about each contact.

8. The eighth part of the document is a series of short, handwritten notes or entries. These notes are written in a cursive script and are organized into a list format. The notes appear to be related to the names and addresses listed in the first part, possibly providing additional information or details about each contact.

9. The ninth part of the document is a series of short, handwritten notes or entries. These notes are written in a cursive script and are organized into a list format. The notes appear to be related to the names and addresses listed in the first part, possibly providing additional information or details about each contact.

10. The tenth part of the document is a series of short, handwritten notes or entries. These notes are written in a cursive script and are organized into a list format. The notes appear to be related to the names and addresses listed in the first part, possibly providing additional information or details about each contact.

TABLE 3
CLASSIFICATION AND PERCENTAGE DISTRIBUTION
OF TYPES OF LUNCH PROGRAMS
IN OPERATION

Allocation of Responsibility	Distribution			
	Per cent in all schools	Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
Number of schools reporting	251	102	105	44

Meals served are reimbursed
from funds of National
School Lunch Act

Type A	46.2	67.6	38.0	15.9
B	6.0	6.9	6.7	2.3
A and B	2.0	1.9	2.9	0.0
A and C	28.2	15.8	31.4	50.0
B and C	3.2	2.9	1.9	6.8
A and B and C	3.2	1.0	3.8	6.8
Total	88.8	96.1	84.7	81.8

Lunchroom offers enough
choices for a complete meal;
not federally reimbursed .

2.4	0.0	4.8	2.3
-----	-----	-----	-----

One hot dish served to supple-
ment the lunch carried from
home

3.2	3.9	2.9	2.3
-----	-----	-----	-----

Caterer prepares lunches out-
side of school

0.4	0.0	0.0	2.3
-----	-----	-----	-----

Combinations of the plans
described above*

5.2	0.0	7.6	11.3
-----	-----	-----	------

* All combinations include one or more of the programs reimbursed
from the funds of the National School Lunch Act.

are training prospective teachers to have a part in the school lunch
program. The qualified teacher must understand the requirements of
each of the meal plans as outlined by the National School Lunch Act
and should be given some assistance in the wise use of the surplus
commodity foods that are frequently available.

Per Cent of Total School Enrollment Served a Noon Meal by School Lunch Program

Interesting facts relative to the percentage of the total pupil enrollment being served by the school lunchroom are presented in Table 4. In determining the percentages in this table no account was made of the individual portions of milk served. The percentages given represent meals or supplementary meals only, and were found by dividing the total number of meals served in each school by the total school enrollment.

TABLE 4

**PER CENT OF TOTAL PUPIL ENROLLMENT SERVED A NOON MEAL
IN THE SCHOOL LUNCHROOM**

Per Cent of Total Student Enrollment Served	Distribution			
	Per cent in all schools	Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
Number of schools reporting	251	102	105	44
Over 75.	5.6	11.8	1.9	0.0
50 - 74.	19.5	32.4	14.3	2.3
25 - 49.	34.6	42.2	38.1	9.1
Under 25	32.3	8.8	39.0	70.4
No reply	8.0	4.8	6.7	18.2
Average of total school enrollment served.	29.2	48.8	31.3	15.1

Table 4 indicates that 5.6 per cent of all the schools reporting are serving more than three-fourths of the total school enrollment. 11.8 per cent of the small schools are serving more than three-fourths of their student body while none of the large schools serve as large a proportion. The reverse relationship is true in the lower percentage brackets; that is, 70.4 per cent of the large schools serve less than one-fourth of the students enrolled and 8.8 per cent of the smaller schools are serving a similar number.

The figures in Table 4 also imply that the school lunchroom as an educational experience for all students is not being utilized to the fullest extent of its possibilities. There is a distinct relationship between the size of the school and the per cent of the student body served. Fifteen out of every 100 students in the large schools eat in the lunchroom; 48 of each 100 in the small schools eat in the lunchroom. The noon meal is the one activity of the school day common to all pupils regardless of age, sex, or size of school. Why is it that such a small proportion of the students eat in the school lunchroom?

Nutrition Education Program as a Part of the School Lunch

That the full significance of the opportunity the lunchroom offers for nutrition education for all students has not been understood is evidenced by Table 5.

Less than one-half of all the schools reporting, 43.8 per cent, have a nutrition program as a part of the school lunch. Is this one of the reasons for such a small percentage of the student body eating lunch at school?

TABLE 5

PER CENT OF SCHOOLS REPORTING A NUTRITION PROGRAM
AS A PART OF THE SCHOOL LUNCH

Status of Nutrition Program	Per cent in all schools	Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
Number of schools reporting	251	102	105	44
Have a nutrition program . .	43.8	53.9	36.2	38.7
Have no nutrition program. .	51.4	44.1	60.0	47.7
No reply	4.8	2.0	3.8	13.6

It seems worth noting here that a detailed analysis of the original tabulation reveals that of the 110 schools in which a nutrition program is a part of the school lunch only 75, or 68.1 per cent, of those same schools provide training in food selection and eating habits. While table manners and social relations are not a part of nutrition education, they may accompany it. Many schools do have training in these important phases of everyday living as a part of their lunchroom activity. Also worth noting is the fact that the same analysis of the detailed tabulation shows five schools, or 3.8 per cent, of those reporting no school lunch nutrition program are providing training in all four of these phases, and eleven others,

or an additional 8.5 per cent, do offer training in one or more. There might be material here for a study to determine more about the kinds of nutrition programs in operation and the effectiveness of such programs in increasing student health and student participation in the school lunch.

Table 6 shows that in 65 schools, or 59.1 per cent, of 110 schools in which nutrition education is a part of the school lunch, the homemaking teacher is named as the person in charge of the program. She is in first rank position in both the small and

TABLE 6

PERCENTAGE DISTRIBUTION OF PERSONS NAMED IN CHARGE
OF NUTRITION EDUCATION PROGRAMS AS REPORTED
IN 110 SCHOOLS

Person in Charge of Nutrition Program	Distribution			
	Per cent in all schools	Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
Number of schools reporting	251	102	105	44
Homemaking teacher	59.1	67.3	60.5	29.5
Homemaking teacher and teachers, cook, or home- making class	4.5	5.5	5.3	0.0
Other persons.	20.9	19.9	10.5	47.0
Person named, position not identified	6.4	1.8	7.9	17.6
No reply	9.1	5.5	15.8	5.9

middle size schools. The detailed analysis of the original tabulation indicates that in the large schools the category "Other Persons" includes two superintendents, three cafeteria managers, two teachers, and one curriculum coordinator. In five instances the homemaking teacher is named as the person in charge. So, even here she may be placed as first in position.

The facts in Table 6 suggest that the homemaking teacher is in a very strategic position in respect to nutrition education; a fact which has definite implication for the training program of the prospective teacher.

School Lunch Advisory Committee

Less than two-fifths of the 251 schools participating in the study, as shown in Table 7, make use of an Advisory Committee in the operation of their lunchrooms.

TABLE 7

PER CENT OF SCHOOLS REPORTING A SCHOOL LUNCH ADVISORY COMMITTEE

Status of School Lunch Advisory Committee	Per cent in all schools	Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
Number of schools reporting	251	102	105	44
Have an advisory committee .	39.0	40.2	35.2	45.4
Have no advisory committee .	59.0	58.8	60.9	54.6
No reply	2.0	1.0	3.9	0.0

Although the practices indicated in Table 7 vary only about ten per cent between the small and large schools, the largest schools give the highest percentage of affirmative answers. If more schools were to make use of the advisory committee to bring the school and community in closer contact, it might well be the means of strengthening the school feeding program by making the community aware that the habits of good eating are equally as important to our young people as are the abilities to read and write. Through the joint action of the School Lunch Advisory Committee and the nutrition education program, the general public can be made aware of the importance of the school lunch as a part of general education. The author has made no attempt to determine the activities of the School Lunch Advisory Committee. The personnel of this committee, its functions, and purposes might be the basis for further investigation.

Plan of Organization for Food Preparation

When the feeding of children became a part of the school program the homemaking department, because of its association with foods, was often chosen as the sponsoring agency. The change in the type of meal served at noon has increased the labor involved in the preparation of the meal, has demanded increased equipment, additional work area, full-time adult employees, and has taken the preparation of the noon meal almost entirely away from the students

TABLE 8

DESCRIPTION AND PERCENTAGE DISTRIBUTION OF THE PLANS
OF ORGANIZATION FOR FOOD PREPARATION

Description of Plan	Distribution			
	Per cent in all schools	Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
Number of schools reporting	251	102	105	44
Homemaking class under the supervision of the teacher	4.0	3.9	5.7	0.0
Homemaking class with one or more paid cooks under the supervision of the teacher	6.0	7.8	5.7	2.3
A cafeteria class under the supervision of the teacher	0.4	1.0	0.0	0.0
A cafeteria class with one or more paid cooks under the supervision of the teacher	<u>2.4</u>	<u>0.0</u>	<u>4.8</u>	<u>2.3</u>
Total	12.8	12.7	16.2	4.6
Paid adult workers under the supervision of the:				
superintendent	25.0	31.4	15.2	34.1
homemaking teacher	16.8	14.7	21.0	11.4
head cook	6.4	4.0	6.7	11.4
superintendent and home- making teacher	19.9	24.5	20.0	9.1
superintendent and head cook	4.3	2.9	5.7	4.5
homemaking teacher and head cook	1.2	0.0	2.8	0.0
superintendent, homemak- ing teacher, and head cook	3.6	1.0	5.7	4.5
cafeteria manager.	2.4	0.0	2.9	6.8
other persons.	<u>2.8</u>	<u>1.0</u>	<u>3.8</u>	<u>4.5</u>
Total	82.4	79.5	83.8	86.3
Volunteer student workers from all classes under the supervision of homemaking teacher	1.6	2.9	0.0	2.3
A private individual on a commercial basis; con- cession.	0.4	0.0	0.0	2.3
All other plans.	2.8	4.9	0.0	4.5

in the homemaking department. Table 8 shows that more than four-fifths of the school meals are now being prepared by adult workers under the supervision of the superintendent, the homemaking teacher, the head cook, or a number of combinations of these same individuals. In only 12.8 per cent of all the schools reporting do the homemaking classes actually participate in the preparation of the food.

Location of the Lunchroom Kitchen

It is gratifying to see that the preparation of the food for the noon meal is moving out of the homemaking department. Table 9 offers evidence that the lunchroom kitchen now occupies its own quarters in approximately eighty per cent of the schools studied. The lunch kitchen is still a part of the homemaking department in almost one-third of the smaller schools, in one-fifth of the schools with enrollments from 500 to 999, and in less than five per cent of the larger schools. It is significant, too, that while the lunchroom has moved out, it is still associated with the homemaking department by virtue of its location adjacent to the department in approximately 17 per cent of the cases studied.

TABLE 9

LOCATION OF LUNCHROOM KITCHEN IN RELATION
TO HOME MAKING DEPARTMENT

Location	Per cent in all schools	Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
Number of schools reporting	251	102	105	44

The lunchroom kitchen is:

A part of the homemaking department	20.7	27.5	21.0	4.5
Adjacent to the homemaking department	17.5	17.6	17.1	18.2
Across the hall from the homemaking department. .	7.2	10.9	2.8	9.1
On the same floor, in the same section of the building	0.8	0.0	1.9	0.0
On the same floor in another section of the building	9.2	7.8	9.5	11.4
On another floor in the same section of the building	14.7	12.7	18.1	11.4
On another floor in another section of the building.	11.6	9.8	13.3	11.4
In a separate building . .	14.7	12.7	13.3	22.7
Other locations:				
basement	0.4	1.0	0.0	0.0
grade building	1.2	0.0	1.0	4.5
off premises	0.8	0.0	0.0	4.5
other combinations . . .	1.2	0.0	2.0	2.3

Number of Lunchroom Workers and Patron Load

There seems to be no general agreement in respect to the number of adult workers employed and the number of meals served by each worker. This is shown in Table 10. More than 90 per cent of the schools employ adult workers. The large schools which do employ adults have an average of 3.1 workers; this number decreases as the school enrollments become smaller. The average number of workers employed in the small schools is 1.9.

TABLE 10
DISTRIBUTION AND NUMBER OF ADULT WORKERS EMPLOYED
IN SCHOOL LUNCHROOMS

School Enrollment	Number of Schools Reporting	Per Cent of Schools Employing Adults		Number Employed			
				Adults Total		Adults Average	
		Full-time	Part-time	Full-time	Part-time	Full-time	Part-time
All schools	251	92.3	21.1	553	89	2.4	1.7
120 - 499	102	91.8	13.7	178	18	1.9	1.3
500 - 999	105	91.4	21.9	248	40	2.6	1.7
1000 - over	44	93.2	36.3	127	31	3.1	1.9

An examination of Table 11 will show the average number of patrons for each adult worker is 79.2, with the highest average patron load reported in the small schools and the lowest average load in the larger schools.

TABLE 11

PATRON MEALS SERVED PER ADULT WORKER EMPLOYED

School Enrollment	Number of Schools Reporting	Total Number Adult Workers	Total Number Patron Meals* Served	Average Number Patron Meals Per Adult Worker	Range In Number Of Meals Served Per Worker
All schools	251	598	47405	79.2	10 - 380
120 - 499	102	187	16678	89.2	29 - 195
500 - 999	105	268	21858	81.6	10 - 380
1000 - over	44	143	8869	62.0	13 - 202

* Meals indicates number of student meals served exclusive of individual milk sales.

The figures representing patron load were arrived at by dividing the total number of meals served, column four of Table 11, by the total number of adults employed, column two. The total number of adult workers in any given classification was determined by dividing the number of part-time workers, shown in column six of Table 10, by 2 and adding the figure obtained to the number of full-time workers in the same classification of schools. Illustration: 89 part-time workers are employed in the classification "All schools" according to column five of Table 10. $89/2$ is equal to 44.5 or 45 full-time workers. This figure, 45, added to 553, column five of Table 10, equals 598 full-time adult workers, column three of Table 11. From the variation in the number of adult workers employed and the

patron load per adult worker, one might conclude that if those in charge of lunchroom management had a better understanding of standards of performance there might be a more equal distribution of the employee work load.

The proportion of schools using student workers in the lunchroom decreases as the schools increase in size (Table 12). Although the average number of student workers per school employing is greater in the large schools, the patron load per student worker is approximately one fourth of that in the small school. This wide variation in the numbers of student workers suggests the possibility of an investigation into the use of student workers. No attempt was made in this study to determine the kind of work done or to segregate volunteer workers from those who assist in the lunchroom as a part of a homemaking class activity.

TABLE 12
DISTRIBUTION AND NUMBER OF STUDENT WORKERS EMPLOYED
IN SCHOOL LUNCHROOMS

School Enrollment	Number of Schools Reporting	Per Cent of Schools Employing Students	Total Number Students Employed	Average Number Students Employed	Patrons Served Per Student Employed
All schools	251	88.4	2243	10.1	21.1
120 - 499	102	92.1	399	4.2	41.8
500 - 999	105	89.5	1045	11.1	29.0
1000 - over	44	77.3	799	23.5	11.1

SUMMARY OF GENERAL INFORMATION

A summary of existing practices relative to school lunch operation is presented in Table 13.

TABLE 13

SUMMARY OF EXISTING PRACTICES RELATIVE TO SCHOOL LUNCH OPERATION

Practices	In All Schools	In Schools of Varying Enrollments		
		120-499	500-999	1000-over
Number of schools reporting	251	102	105	44
Per cent of schools in which the noon lunch receives assistance from funds of the National School Lunch Act	88.8	96.1	84.7	81.8
The noon lunch is prepared by paid adult workers	82.4	79.5	83.8	86.3
Portion of student body served a noon meal in the lunchroom (exclusive of separate milk sales) . . .	29.2	48.8	31.3	15.1
Per cent of schools in which a nutrition education program is a part of the school lunch	43.8	53.9	36.2	38.7
Per cent of schools making use of a School Lunch Advisory Committee	39.0	40.2	35.2	45.4
Average number of adult workers employed:				
full-time	2.4	1.9	2.6	3.1
part-time	1.7	1.3	1.7	1.9
Average number of student workers employed:	10.1	4.2	11.1	23.5
Patron load per adult worker employed	79.2	89.2	81.6	62.0

In 96.1 per cent of the small schools, those with enrollments of 120-499, the only lunch program in operation is one receiving assistance from the National School Lunch Act. In 79.5 per cent of these small schools, the lunch is prepared by paid adult workers, and is served to approximately one-half of the students enrolled. In slightly over half of the small schools, there is a nutrition education program as a part of the school lunch, and two schools out of five make use of a School Lunch Advisory Committee. The small school employs an average of 1.9 full-time adult workers, 1.3 part-time adult workers, and 4.2 student workers; 89.2 patron meals are served for each full-time adult employed.

The columns representing all the schools and the other schools with larger enrollments may be read in a similar manner.

ALLOCATION OF RESPONSIBILITIES

In order to present a true picture of the contribution of the homemaking teacher to the school lunch program, it was first necessary to determine the number of instances in which the teacher has no part. A preliminary checking of Part 2 of the returned questionnaires showed 62 homemaking teachers, or 24.7 per cent of those reporting, have no part whatsoever in the operation of the noon lunch. The distribution of these teachers in the three groupings of schools studied is shown in Table 14.

TABLE 14

PER CENT OF SCHOOLS IN WHICH THE HOMEMAKING TEACHER HAS NO RESPONSIBILITY FOR THE SCHOOL LUNCH

School Enrollment	Schools Reporting	Homemaking Teacher Has No Responsibility for Lunchroom	
	Number	Number	Per Cent
All Schools	251	62	24.7
120-499	102	18	17.6
500-999	105	38	26.6
1000-over	44	16	36.4

The group of returns analyzed in Table 14 were set apart from all the others being studied and are shown as this same per cent in the succeeding tables, numbers 15 through 39, under the heading, "Homemaking teacher, No responsibility."

In an analysis of each of the specific activities related to lunchroom operation an attempt was made to determine the degree to which the homemaking teacher carried the full responsibility for the activity, the number of instances reported in which she shared an activity with other persons, and the extent to which other school personnel were assuming responsibility.

The twenty-five specific items of lunchroom operation were combined into five divisions of related activities and will be discussed in these major groupings: Planning of Menus and Buying of Foods; Employing and Scheduling Workers; Supervision of Food Preservation, Food Preparation, Counter Service, and Dining Room; Accounting and Record Keeping; and Improvement, Care, and Maintenance of the School Lunch Plant.

Planning of Menus and Buying of Food

Tables 15 through 19 present detailed analyses of the allocation of activities related to this phase of the school lunch. A close examination of Tables 15 and 16 will reveal that in each of the three groups of schools represented the homemaking teacher assumes the highest percentage of complete responsibility for both menu planning and approving the menu planned by someone else. The increase in percentage of "No Allocation" in Table 16 might be accounted for by the fact that in those schools in which the homemaking teacher plans the menus there is no need for further checking to be done.

the first of these is the fact that the system is not a simple one, but a complex one, in which the various parts are interrelated and interdependent. The second is that the system is not a static one, but a dynamic one, in which the parts are constantly changing and evolving. The third is that the system is not a closed one, but an open one, in which the parts are constantly interacting with the environment. The fourth is that the system is not a linear one, but a non-linear one, in which the parts are constantly interacting with each other in a non-linear fashion. The fifth is that the system is not a deterministic one, but a probabilistic one, in which the parts are constantly interacting with each other in a probabilistic fashion. The sixth is that the system is not a simple one, but a complex one, in which the parts are interrelated and interdependent. The seventh is that the system is not a static one, but a dynamic one, in which the parts are constantly changing and evolving. The eighth is that the system is not a closed one, but an open one, in which the parts are constantly interacting with the environment. The ninth is that the system is not a linear one, but a non-linear one, in which the parts are constantly interacting with each other in a non-linear fashion. The tenth is that the system is not a deterministic one, but a probabilistic one, in which the parts are constantly interacting with each other in a probabilistic fashion.

The system is a complex one, in which the various parts are interrelated and interdependent. The system is a dynamic one, in which the parts are constantly changing and evolving. The system is an open one, in which the parts are constantly interacting with the environment. The system is a non-linear one, in which the parts are constantly interacting with each other in a non-linear fashion. The system is a probabilistic one, in which the parts are constantly interacting with each other in a probabilistic fashion. The system is a complex one, in which the parts are interrelated and interdependent. The system is a dynamic one, in which the parts are constantly changing and evolving. The system is an open one, in which the parts are constantly interacting with the environment. The system is a non-linear one, in which the parts are constantly interacting with each other in a non-linear fashion. The system is a probabilistic one, in which the parts are constantly interacting with each other in a probabilistic fashion.

TABLE 15
ALLOCATION AND PERCENTAGE DISTRIBUTION OF RESPONSIBILITY
FOR PLANNING THE MENU

Allocation of Responsibility	Distribution			
	Per cent in all schools	Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
Number of schools reporting	251	102	105	44
<u>Homemaking teacher</u>				
Complete responsibility.	24.7	25.5	25.7	20.4
Joint responsibility with				
head cook.	21.1	24.5	18.1	20.4
superintendent and				
head cook.	2.0	3.9	1.0	0.0
homemaking class	6.4	6.9	8.5	0.0
volunteer student workers	2.4	1.0	3.8	2.3
all others	1.6	2.0	1.9	0.0
No responsibility.	24.7	17.6	26.6	36.4
<u>Other persons</u>				
Head cook.	15.5	18.6	12.4	15.9
Superintendent and				
head cook.	0.4	0.0	0.0	2.3
All others	0.8	0.0	2.0	0.0
No reply	0.4	0.0	0.0	2.3

The homemaking teacher assumes more responsibility than any other one person for making menu substitutions, Table 17, except in the large schools; here the head cook assumes the responsibility. The head cook is also assigned the responsibility for making the market orders in schools of all sizes, Table 18, but she buys the staples in quantity in only the large schools, Table 19. The homemaking teacher ranks first in complete responsibility for this part of the buying in both of the other groups studied.

[illegible]

TABLE 16

**ALLOCATION AND PERCENTAGE DISTRIBUTION OF RESPONSIBILITY
FOR APPROVING THE MENU PLANNED BY SOMEONE ELSE**

Allocation of Responsibility	Distribution			
	Per cent in all schools	Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
Number of schools reporting	251	102	105	44
<u>Homemaking teacher</u>				
Complete responsibility.	19.9	24.5	19.0	11.4
Joint responsibility with				
superintendent	2.8	4.9	1.9	0.0
head cook.	3.2	0.0	6.7	2.3
No responsibility.	24.7	17.6	26.6	36.4
<u>Other persons</u>				
Superintendent	9.2	15.7	6.7	0.0
Head cook.	4.8	8.8	2.9	0.0
All others	2.8	0.0	1.9	11.3
No allocation.	18.3	20.6	13.3	25.0
No reply	14.3	7.9	21.0	13.6

TABLE 17

**ALLOCATION AND PERCENTAGE DISTRIBUTION OF RESPONSIBILITY
FOR MAKING MENU SUBSTITUTIONS**

Allocation of Responsibility	Distribution			
	Per cent in all schools	Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
Number of schools reporting	251	102	105	44
<u>Homemaking teacher</u>				
Complete responsibility.	23.1	29.4	20.0	15.9
Joint responsibility with				
superintendent	0.4	0.0	1.0	0.0
head cook.	16.3	12.8	22.9	9.1
superintendent and head				
cook	0.8	0.0	1.9	0.0
homemaking class	0.8	1.0	1.0	0.0
No responsibility.	24.7	17.6	26.6	36.4
<u>Other persons</u>				
Head cook.	23.9	28.4	17.1	29.5
Superintendent and head				
cook	0.8	2.0	0.0	0.0
No allocation.	2.4	2.9	1.9	2.3
No reply	6.8	5.9	7.6	6.8

ANNEX 1

THE FOLLOWING INFORMATION IS FOR THE USE OF THE USER OF THE SYSTEM AND IS NOT TO BE USED FOR ANY OTHER PURPOSE.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054	1055	1056	1057	1058	1059	1060	1061	1062	1063	1064	1065	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	1076	1077	1078	1079	1080	1081	1082	1083	1084	1085	1086	1087	1088	1089	1090	1091	1092	1093	1094	1095	1096	1097	1098	1099	1100	1101	1102	1103	1104	1105	1106	1107	1108	1109	1110	1111	1112	1113	1114	1115	1116	1117	1118	1119	1120	1121	1122	1123	1124	1125	1126	1127	1128	1129	1130	1131	1132	1133	1134	1135	1136	1137	1138	1139	1140	1141	1142	1143	1144	1145	1146	1147	1148	1149	1150	1151	1152	1153	1154	1155	1156	1157	1158	1159	1160	1161	1162	1163	1164	1165	1166	1167	1168	1169	1170	1171	1172	1173	1174	1175	1176	1177	1178	1179	1180	1181	1182	1183	1184	1185	1186	1187	1188	1189	1190	1191	1192	1193	1194	1195	1196	1197	1198	1199	1200	1201	1202	1203	1204	1205	1206	1207	1208	1209	1210	1211	1212	1213	1214	1215	1216	1217	1218	1219	1220	1221	12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TABLE 18

**ALLOCATION AND PERCENTAGE DISTRIBUTION OF RESPONSIBILITY
FOR MAKING MARKET ORDERS**

Allocation of Responsibility	Distribution			
	Per cent in all schools	Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
Number of schools reporting	251	102	105	44
<u>Homemaking teacher</u>				
Complete responsibility.	21.1	15.7	28.6	15.9
Joint responsibility with				
head cook.	6.8	7.8	5.7	6.7
superintendent and				
head cook.	0.4	0.0	0.0	2.3
homemaking class	3.6	5.0	2.8	2.3
No responsibility.	24.7	17.6	26.6	36.4
<u>Other persons</u>				
Superintendent	1.2	2.0	1.0	0.0
Head cook.	38.6	47.0	31.4	36.4
Superintendent and head				
cook	2.4	3.9	1.9	0.0
All others	0.8	1.0	1.0	0.0
No reply	0.4	0.0	1.0	0.0

It is interesting to note in Table 19 that in 19.6 percent of the small schools the superintendent assumes the responsibility for buying the staples in quantity.

TABLE 19

ALLOCATION AND PERCENTAGE DISTRIBUTION OF RESPONSIBILITY
FOR BUYING STAPLES IN QUANTITY

Allocation of Responsibility	Distribution			
	Per cent in all schools	Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
Number of schools reporting	251	102	105	44
<u>Homemaking teacher</u>				
Complete responsibility.	25.0	21.6	31.4	18.2
Joint responsibility with				
superintendent	2.8	2.9	2.9	2.3
head cook.	4.0	4.9	4.8	0.0
superintendent and				
head cook.	0.4	1.0	0.0	0.0
homemaking class	0.8	1.0	1.0	0.0
No responsibility.	24.7	17.6	26.6	36.4
<u>Other persons</u>				
Superintendent	12.8	19.6	9.5	4.5
Head cook.	20.7	16.7	19.0	34.0
Superintendent and				
head cook.	6.4	10.8	3.8	2.3
No allocation.	0.8	1.0	1.0	0.0
No reply	1.6	2.9	0.0	2.3

Employing and Scheduling Workers

According to information presented in Tables 20 and 21 the administration employs and schedules adult workers; Tables 22 and 23 indicate that the homemaking teacher employs and schedules the student workers.

TABLE 20

ALLOCATION AND PERCENTAGE DISTRIBUTION OF RESPONSIBILITY FOR EMPLOYING FULL-TIME WORKERS

Allocation of Responsibility	Distribution			
	Per cent in all schools	Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
<u>Number of schools reporting</u>	251	102	105	44
<u>Homemaking teacher</u>				
Complete responsibility. .	4.0	4.9	3.8	2.3
Joint responsibility with superintendent	7.1	2.9	11.4	6.8
No responsibility.	24.7	17.6	26.6	36.4
<u>Other persons</u>				
Superintendent	47.0	54.9	42.9	38.6
Head cook.	1.6	2.9	0.0	2.3
Superintendent and head cook.	4.0	1.0	4.8	9.0
Board of education	2.4	4.0	1.9	0.0
All others	2.0	2.9	1.0	2.3
No allocation.	2.4	4.0	1.9	0.0
No reply	4.8	4.9	5.7	2.3

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TABLE 21

**ALLOCATION AND PERCENTAGE DISTRIBUTION OF RESPONSIBILITY
FOR SCHEDULING FULL-TIME WORKERS**

Allocation of Responsibility	Per cent in all schools	Distribution		
		Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
Number of schools reporting	251	102	105	44
<u>Homemaking teacher</u>				
Complete responsibility.	10.3	8.8	13.3	6.8
Joint responsibility with				
superintendent	3.2	2.0	4.8	2.3
head cook.	1.2	1.0	1.0	2.3
homemaking class	0.4	0.0	1.0	0.0
No responsibility.	24.7	17.6	26.6	36.4
<u>Other persons</u>				
Superintendent	34.2	41.1	29.5	29.5
Head cook.	8.8	10.8	7.6	6.8
Superintendent and				
head cook.	2.8	2.0	1.9	6.8
All others	1.2	1.0	1.0	2.3
No allocation.	6.0	10.8	1.9	4.5
No reply	7.2	4.9	11.4	2.3

It has already been shown that there is no agreement in the number of adults employed and the patron load per employee, Tables 10 and 11, pages 41 and 42. Can a lack of uniformity in the number of workers employed and the patron load per employee be attributed to this division of responsibility in employing and scheduling? If these responsibilities were in the hands of one

trained in management, one who understood standards of performance, might there be a better scheduling of all workers, an increase in the efficiency of operation, and a reduction in labor cost?

TABLE 22

ALLOCATION AND PERCENTAGE DISTRIBUTION OF RESPONSIBILITY
FOR EMPLOYING STUDENT WORKERS

Allocation of Responsibility	Distribution			
	Per cent in all schools	Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
Number of schools reporting	251	102	105	44
<u>Homemaking teacher</u>				
Complete responsibility.	30.2	25.5	39.0	20.4
Joint responsibility with				
superintendent	4.8	3.9	5.7	4.5
head cook.	4.0	3.9	2.9	6.8
superintendent and				
head cook.	1.6	3.9	0.0	0.0
No responsibility.	24.7	17.6	26.6	36.4
<u>Other persons</u>				
Superintendent	12.3	19.6	9.5	2.3
Head cook.	6.0	5.0	5.7	9.1
Superintendent and				
head cook.	3.2	2.9	3.8	2.3
All others	3.6	1.0	2.9	11.4
No allocation.	5.6	9.8	2.9	2.3
No reply	4.0	6.9	1.0	4.5

TABLE 23

ALLOCATION AND PERCENTAGE DISTRIBUTION OF RESPONSIBILITY
FOR SCHEDULING STUDENT WORKERS

Allocation of Responsibility	Per cent in all schools	Distribution		
		Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
<u>Number of schools reporting</u>	<u>251</u>	<u>102</u>	<u>105</u>	<u>44</u>
<u>Homemaking teacher</u>				
Complete responsibility.	31.5	30.4	35.2	25.0
Joint responsibility with				
superintendent	2.8	5.9	1.0	0.0
head cook.	6.0	5.9	7.6	2.3
superintendent and				
head cook.	0.4	1.0	0.0	0.0
homemaking class	0.4	1.0	0.0	0.0
all others	0.8	0.0	1.0	2.3
No responsibility.	24.7	17.6	26.6	36.4
<u>Other persons</u>				
Superintendent	11.1	13.7	6.6	15.9
Head cook.	10.7	15.6	10.4	0.0
Superintendent and				
head cook.	2.0	2.0	2.9	0.0
Principal.	2.0	0.0	1.9	6.8
All others	2.4	1.0	2.9	4.5
No allocation.	2.4	3.9	1.0	2.3
No reply	2.8	2.0	2.9	4.5

Supervision of Food Preservation, Food Preparation, Counter Service, and Dining Room

A comparison of the allocations of this group of activities will show that the head cook is carrying the responsibility for the supervision of food preservation, Table 24, for food

TABLE 24

ALLOCATION AND PERCENTAGE DISTRIBUTION OF RESPONSIBILITY
FOR SUPERVISION OF FOOD PRESERVATION

Allocation of Responsibility	Distribution			
	Per cent in all schools	Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
Number of schools reporting	251	102	105	44
<u>Homemaking teacher</u>				
Complete responsibility.	15.1	20.6	12.3	9.1
Joint responsibility with				
superintendent	1.6	3.9	0.0	0.0
head cook.	9.1	9.8	8.5	9.1
superintendent and				
head cook.	1.2	2.0	1.0	0.0
homemaking class	0.8	1.0	1.0	0.0
all others	0.8	1.0	1.0	0.0
No responsibility.	24.7	17.6	26.6	36.4
<u>Other persons</u>				
Superintendent	2.4	2.9	2.8	0.0
Head cook.	22.7	23.5	20.9	25.0
Superintendent and				
head cook.	2.4	2.9	1.0	4.5
All others	2.0	1.0	2.8	2.3
No allocation.	8.8	7.9	10.7	6.8
No reply	8.4	5.9	11.4	6.8

preparation, Table 25, and for counter service, Table 26. However, if one were to combine the percentages representing the cases in which the homemaking teacher assumed responsibility completely or jointly with the head cook, homemaking class, superintendent, and other persons it would be found that she has a major part in the supervision of all three of these activities.

TABLE 25

ALLOCATION AND PERCENTAGE DISTRIBUTION OF RESPONSIBILITY
FOR SUPERVISION OF FOOD PREPARATION

Allocation of Responsibility	Distribution			
	Per cent in all schools	Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
Number of schools reporting	251	102	105	44
<u>Homemaking teacher</u>				
Complete responsibility.	23.5	28.4	23.8	11.4
Joint responsibility with				
superintendent	1.6	1.0	2.8	0.0
head cook.	13.9	17.6	11.4	11.4
superintendent and				
head cook.	0.4	0.0	1.0	0.0
homemaking class	0.8	1.0	1.0	0.0
No responsibility.	24.7	17.6	26.6	36.4
<u>Other persons</u>				
Superintendent	1.2	2.0	1.0	0.0
Head cook.	30.7	30.4	29.4	33.9
Superintendent and				
head cook.	1.2	2.0	0.0	2.3
All others	0.8	0.0	1.0	2.3
No allocation.	0.4	0.0	1.0	0.0
No reply	0.8	0.0	1.0	2.3

TABLE 26

**ALLOCATION AND PERCENTAGE DISTRIBUTION OF RESPONSIBILITY
FOR SUPERVISION OF COUNTER SERVICE**

Allocation of Responsibility	Distribution			
	Per cent in all schools	Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
Number of schools reporting	251	102	105	44
<u>Homemaking teacher</u>				
Complete responsibility.	19.1	22.6	19.0	11.4
Joint responsibility with				
superintendent	1.6	2.9	1.0	0.0
head cook.	6.4	4.9	8.6	4.5
superintendent and				
head cook.	0.8	2.0	0.0	0.0
homemaking class	1.2	2.0	1.0	0.0
volunteer student workers	0.4	1.0	0.0	0.0
No responsibility.	24.7	17.6	26.6	36.4
<u>Other persons</u>				
Superintendent	1.6	1.0	2.9	0.0
Head cook.	31.0	32.3	26.6	38.6
Superintendent and				
head cook.	2.0	4.9	0.0	0.0
Teachers	0.8	2.0	0.0	0.0
All others	2.4	1.0	3.8	2.3
No allocation.	3.2	2.9	4.8	0.0
No reply	4.8	2.9	5.7	6.8

The extent to which other teachers in the school are sharing with the homemaking teacher in the supervision of the dining room is presented in Table 27. They share this activity almost equally in schools of all sizes. This seems to be one of the phases of lunch-room operation in which the other members of the school staff have

begun to fit into the picture. One might anticipate a high degree of student participation in both dining room and counter supervision; but, according to Tables 26 and 27, this is not a common practice. Are the homemaking teachers missing an opportunity to make use of a good vocational experience for those students in Homemaking III who have a major interest in food service?

TABLE 27

ALLOCATION AND PERCENTAGE DISTRIBUTION OF RESPONSIBILITY
FOR SUPERVISION OF DINING ROOM

Allocation of Responsibility	Distribution			
	Per cent in all schools	Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
Number of schools reporting	251	102	105	44
<u>Homemaking teacher</u>				
Complete responsibility.	16.7	18.6	16.2	13.6
Joint responsibility with				
superintendent	1.6	3.0	0.0	2.3
head cook.	3.2	3.9	3.8	0.0
homemaking class	0.8	1.0	1.0	0.0
teachers	4.0	4.9	2.9	4.5
all others	3.2	0.0	5.7	4.5
No responsibility.	24.7	17.6	26.6	36.4
<u>Other persons</u>				
Superintendent	3.6	6.9	1.9	0.0
Head cook.	8.3	8.8	6.6	11.5
Superintendent and				
head cook.	0.8	1.0	1.0	0.0
Teachers	15.5	17.6	14.3	13.6
Principal.	1.6	3.0	0.0	2.3
All others	6.8	4.9	9.5	4.5
No allocation.	4.8	4.9	4.8	4.5
No reply	4.4	3.9	5.7	2.3

Accounting and Record Keeping

The responsibilities for all phases of accounting and record keeping are divided among more people than are any of the other activities previously discussed. Although a number of persons are involved in each of these activities, Tables 28 through 35 would seem to indicate that, except for a few scattered instances, there is a tendency to concentrate the responsibility in the hands of the administration--the superintendent or his secretary.

The teachers and student workers share with the homemaking teacher in selling lunch tickets, Table 28. Student workers receive cash for meals in the large and middle groups of schools, Table 29. The homemaking teacher assumes more responsibility for keeping a record of the number of persons served in schools of less than 1,000 enrollments, Table 30; the head cook takes over this activity in the large schools. Tables 31 and 32 indicate the head cook is responsible for keeping a perpetual inventory and taking a monthly physical inventory in about one-fifth of the schools of all sizes. The homemaking teacher keeps the financial records and prepares the monthly financial reports in more of the schools with enrollments of 500 to 999 than any other one person, Tables 33 and 34.

TABLE 28

ALLOCATION AND PERCENTAGE DISTRIBUTION OF RESPONSIBILITY
FOR SELLING LUNCH TICKETS

Allocation of Responsibility	Distribution			
	Per cent in all schools	Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
Number of schools reporting	251	102	105	44
<u>Homemaking teacher</u>				
Complete responsibility.	6.8	3.9	11.4	2.3
Joint responsibility with				
superintendent	0.4	1.0	0.0	0.0
head cook.	0.4	0.0	0.0	2.3
homemaking class	2.8	4.9	1.9	0.0
student workers.	1.2	0.0	2.9	0.0
teachers	1.2	2.0	0.0	2.3
all others	1.6	0.0	3.8	0.0
No responsibility.	24.7	17.6	26.6	36.4
<u>Other persons</u>				
Superintendent	8.3	14.7	5.7	0.0
Head cook.	2.0	2.0	2.0	2.3
Superintendent and				
head cook.	0.4	0.0	1.0	0.0
Secretary to superintendent	8.0	14.7	4.8	0.0
Teachers	9.6	17.7	2.9	6.8
Student workers	8.3	3.9	9.5	15.9
All others	7.6	3.9	9.5	11.3
No allocation.	11.1	8.8	11.4	15.9
No reply	5.6	4.9	6.6	4.5

TABLE 29

**ALLOCATION AND PERCENTAGE DISTRIBUTION OF RESPONSIBILITY
FOR RECEIVING CASH FOR MEALS**

Allocation of Responsibility	Distribution			
	Per cent in all schools	Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
Number of schools reporting	251	102	105	44
<u>Homemaking teacher</u>				
Complete responsibility.	8.7	8.8	10.5	4.5
Joint responsibility with				
homemaking class	3.6	3.9	4.8	0.0
student workers.	2.4	1.0	3.8	0.0
teachers	1.2	2.0	0.0	2.3
all others	2.0	1.0	3.8	2.3
No responsibility.	24.7	17.6	26.6	36.4
<u>Other persons</u>				
Superintendent	7.2	12.7	4.8	0.0
Head cook.	3.6	4.9	1.9	4.5
Secretary to superintendent	8.7	15.7	4.8	2.3
Teachers	7.6	13.7	3.8	2.3
Student workers.	15.1	8.8	18.1	22.7
All others	11.2	5.9	11.4	22.7
No allocation.	1.2	1.0	1.9	0.0
No reply	2.8	3.0	3.8	0.0

Number of books read	Number of students
0	1
1	2
2	3
3	4
4	2
5	1
6	1
7	1
8	1
9	1
10	1

TABLE 30

**ALLOCATION AND PERCENTAGE DISTRIBUTION OF RESPONSIBILITY
FOR KEEPING A RECORD OF THE NUMBER OF PERSONS SERVED**

Allocation of Responsibility	Distribution			
	Per cent in all schools	Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
Number of schools reporting	251	102	105	44
<u>Homemaking teacher</u>				
Complete responsibility.	14.7	15.6	15.2	11.4
Joint responsibility with				
head cook.	1.2	2.0	1.0	0.0
homemaking class	3.9	3.9	5.7	0.0
all others	6.4	4.9	8.6	4.5
No responsibility.	24.7	17.6	26.6	36.4
<u>Other persons</u>				
Superintendent	6.4	11.8	3.8	0.0
Head cook.	12.7	11.8	11.4	18.1
Superintendent and				
head cook.	3.2	4.9	1.9	2.3
Secretary to superintendent	5.6	9.8	2.9	2.3
Teachers	2.4	4.9	1.0	0.0
Student workers.	6.4	2.0	9.5	9.1
All others.. . . .	10.0	8.8	11.4	9.1
No allocation.	1.2	0.0	0.0	6.8
No reply	1.2	2.0	1.0	0.0

TABLE 31

**ALLOCATION AND PERCENTAGE DISTRIBUTION OF RESPONSIBILITY
FOR KEEPING PERPETUAL INVENTORY**

Allocation of Responsibility	Distribution			
	Per cent in all schools	Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
Number of schools reporting	251	102	105	44
<u>Homemaking teacher</u>				
Complete responsibility. . .	13.1	13.7	15.2	6.8
Joint responsibility with				
head cook.	6.8	5.9	7.6	6.8
homemaking class	0.4	0.0	1.0	0.0
No responsibility.	24.7	17.6	26.6	36.4
<u>Other persons</u>				
Superintendent	7.2	14.7	2.9	0.0
Head cook.	24.6	24.6	22.8	29.5
Superintendent and				
head cook.	2.4	2.9	2.9	0.0
Secretary to superintendent	1.6	2.9	0.0	2.3
Superintendent and				
secretary.	1.6	1.0	2.9	0.0
All others	2.0	2.0	1.0	4.6
No allocation.	10.8	10.8	12.4	6.8
No reply	4.8	3.9	4.7	6.8

TABLE 32

**ALLOCATION AND PERCENTAGE DISTRIBUTION OF RESPONSIBILITY
FOR TAKING MONTHLY PHYSICAL INVENTORY OF FOODS**

Allocation of Responsibility	Distribution			
	Per cent in all schools	Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
Number of schools reporting	251	102	105	44
<u>Homemaking teacher</u>				
Complete responsibility.	14.6	14.8	17.1	9.1
Joint responsibility with				
superintendent	0.4	1.0	0.0	0.0
head cook.	3.2	2.9	4.8	0.0
homemaking class	0.8	0.0	1.9	0.0
No responsibility.	24.7	17.6	26.6	36.4
<u>Other persons</u>				
Superintendent	7.2	13.7	3.8	0.0
Head cook.	24.3	22.5	24.7	27.3
Superintendent and				
head cook.	3.2	6.9	1.0	0.0
All others	3.2	2.0	2.9	6.8
No allocation.	11.2	10.8	10.5	13.6
No reply	7.2	7.8	6.7	6.8

TABLE 33

ALLOCATION AND PERCENTAGE DISTRIBUTION OF RESPONSIBILITY
FOR KEEPING FINANCIAL RECORDS

Allocation of Responsibility	Per cent in all schools	Distribution		
		Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
Number of schools reporting	251	102	105	44
<u>Homemaking teacher</u>				
Complete responsibility.	16.3	15.7	21.9	4.5
Joint responsibility with				
superintendent	2.8	2.0	3.8	2.3
head cook.	0.8	0.0	0.0	4.5
homemaking class	2.0	2.9	1.9	0.0
secretary to				
superintendent	2.4	2.0	2.9	2.3
all others	2.4	1.0	4.8	0.0
No responsibility.	24.7	17.6	26.6	36.4
<u>Other persons</u>				
Superintendent	19.4	32.2	11.5	9.1
Head cook.	3.2	2.0	1.9	9.1
Superintendent and				
head cook.	3.6	3.9	3.8	2.3
Secretary to superintendent	10.4	10.8	9.5	11.4
Superintendent and				
secretary.	4.0	6.9	1.9	2.3
All others	7.2	3.0	7.6	15.8
No reply	0.8	0.0	1.9	0.0

TABLE 34

ALLOCATION AND PERCENTAGE DISTRIBUTION OF RESPONSIBILITY
FOR PREPARING MONTHLY FINANCIAL REPORTS

Allocation of Responsibility	Distribution			
	Per cent in all schools	Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
Number of schools reporting	251	102	105	44
<u>Homemaking teacher</u>				
Complete responsibility.	16.7	17.6	20.0	6.8
Joint responsibility with				
superintendent	4.0	2.9	3.8	6.8
head cook.	1.2	0.0	1.0	4.5
student workers.	0.8	0.0	1.9	0.0
secretary to superinten-				
dent	1.2	1.0	1.0	2.3
all others	0.4	0.0	1.0	0.0
No responsibility.	24.7	17.6	26.6	36.4
<u>Other persons</u>				
Superintendent	22.3	37.3	15.2	4.5
Head cook.	2.0	2.0	1.0	4.5
Superintendent and				
head cook.	2.8	1.0	3.8	4.5
Secretary to superintendent	17.5	15.7	18.1	20.7
All others	5.2	3.9	4.7	9.0
No allocation.	0.4	1.0	0.0	0.0
No reply	0.8	0.0	1.9	0.0

TABLE 35

ALLOCATION AND PERCENTAGE DISTRIBUTION OF RESPONSIBILITY
FOR PAYING LUNCHROOM BILLS

Allocation of Responsibility	Distribution			
	Per cent in all schools	Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
Number of schools reporting	251	102	105	44
<u>Homemaking teacher</u>				
Complete responsibility.	9.2	9.8	8.6	9.1
Joint responsibility with				
superintendent	1.6	1.0	1.9	2.3
superintendent and				
head cook.	0.4	1.0	0.0	0.0
homemaking class	1.6	3.9	0.0	0.0
all others	2.4	0.0	5.7	0.0
No responsibility.	24.7	17.6	26.6	36.4
<u>Other persons</u>				
Superintendent	27.5	37.3	26.6	6.8
Head cook.	2.0	2.0	1.0	4.5
Superintendent and				
head cook.	1.6	1.0	1.9	2.3
Secretary to superintendent	17.9	14.7	19.0	22.7
Board of education	4.8	7.8	1.9	4.5
All others	5.5	3.9	4.9	11.4
No reply	0.8	0.0	1.9	0.0

Improvement, Care, and Maintenance of the School Lunch Plant

The planning of improvements in the school lunchroom, Table 36, and the selection of equipment, Table 37, are centered around the homemaking teacher and the superintendent or the combination of these two persons, and the head cook. In only one instance

TABLE 36

ALLOCATION AND PERCENTAGE DISTRIBUTION OF RESPONSIBILITY
FOR PLANNING IMPROVEMENTS IN PHYSICAL SET-UP

Allocation of Responsibility	Distribution			
	Per cent in all schools	Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
Number of schools reporting	251	102	105	44
<u>Homemaking teacher</u>				
Complete responsibility.	4.4	5.9	4.8	0.0
Joint responsibility with				
superintendent	16.7	11.8	22.8	13.6
head cook.	3.6	2.9	4.8	2.3
superintendent and				
head cook.	16.3	12.7	20.0	16.0
homemaking class	1.6	2.9	1.0	0.0
all others	8.4	12.8	5.7	4.5
No responsibility.	24.7	17.6	26.6	36.4
<u>Other persons</u>				
Superintendent	12.7	20.6	7.6	6.8
Superintendent and				
head cook.	4.4	6.9	1.9	4.5
All others	3.6	3.0	0.0	13.6
No allocation.	0.8	0.0	1.9	0.0
No reply	2.8	2.9	2.9	2.3

TABLE 37

ALLOCATION AND PERCENTAGE DISTRIBUTION OF RESPONSIBILITY
FOR SELECTION OF EQUIPMENT

Allocation of Responsibility	Distribution			
	Per cent in all schools	Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
Number of schools reporting	251	102	105	44
<u>Homemaking teacher</u>				
Complete responsibility.	4.8	6.9	3.8	2.3
Joint responsibility with				
superintendent	15.5	10.8	23.7	6.8
head cook.	4.4	3.9	4.8	4.5
superintendent and				
head cook.	19.4	19.6	22.8	11.4
homemaking class	2.0	2.9	1.0	2.3
all others	4.8	5.9	3.8	4.5
No responsibility.	24.7	17.6	26.6	36.4
<u>Other persons</u>				
Superintendent	7.2	11.8	2.9	6.8
Head cook.	1.6	2.0	1.0	2.3
Superintendent and				
head cook.	9.2	12.7	4.8	11.4
All others	4.8	5.9	1.9	9.0
No allocation.	0.4	0.0	1.0	0.0
No reply	1.2	0.0	1.9	2.3

does the superintendent rank first in assuming responsibility for planning improvements--the group of schools with 500 to 999 enrollments, Table 36.

The head cook or the head cook and janitor carry the major responsibility for the care of equipment and the maintenance of sanitation. These facts are evidenced in Tables 38 and 39.

TABLE 38

ALLOCATION AND PERCENTAGE DISTRIBUTION OF RESPONSIBILITY
FOR CARE AND MAINTENANCE OF EQUIPMENT

Allocation of Responsibility	Distribution			
	Per cent in all schools	Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
Number of schools reporting	251	102	105	44
<u>Homemaking teacher</u>				
Complete responsibility.	4.4	5.9	2.9	4.5
Joint responsibility with				
superintendent	4.0	2.0	7.6	0.0
head cook.	9.9	12.7	10.5	2.3
superintendent and				
head cook.	7.2	5.9	6.6	11.3
homemaking class	4.0	4.9	4.8	0.0
all others	3.2	4.9	1.9	2.3
No responsibility.	24.7	17.6	26.6	36.4
<u>Other persons</u>				
Superintendent	4.0	5.9	2.9	2.3
Head cook.	22.3	26.5	20.9	15.9
Superintendent and				
head cook.	3.2	3.9	2.9	2.3
Janitor.	1.6	1.0	1.9	2.3
All others	10.7	8.8	8.6	20.4
No reply	0.8	0.0	1.9	0.0

TABLE 39

ALLOCATION AND PERCENTAGE DISTRIBUTION OF RESPONSIBILITY
FOR MAINTENANCE OF SANITATION

Allocation of Responsibility	Distribution			
	Per cent in all schools	Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
Number of schools reporting	251	102	105	44
<u>Homemaking teacher</u>				
Complete responsibility.	4.0	6.9	2.9	0.0
Joint responsibility with				
superintendent	5.2	3.9	7.6	2.3
head cook.	9.9	10.8	10.5	6.8
superintendent and				
head cook.	7.1	9.8	5.7	4.5
homemaking class	1.2	1.0	1.9	0.0
all others	6.8	8.7	5.7	4.5
No responsibility.	24.7	17.6	26.6	36.4
<u>Other persons</u>				
Superintendent	4.0	5.9	2.9	2.3
Head cook.	15.1	18.6	13.3	11.5
Superintendent and				
head cook.	2.8	2.0	3.8	2.3
Janitor.	5.6	2.0	5.7	13.6
Head cook and janitor.	6.0	6.9	4.8	6.8
All others	5.2	4.9	5.7	4.5
No reply	2.4	1.0	2.9	4.5

SUMMARY OF ALLOCATION OF RESPONSIBILITIES

A brief look at the discussion presented on pages 46 through 73 will indicate that the homemaking teacher has no responsibility for the lunchroom operation in approximately 24.7 per cent of all schools studied. In those schools in which she does have a part, a summary may be made as follows:

1. The homemaking teacher assumes more responsibility than any other one person for planning the lunch menu, approving the menu, and making menu substitutions. She buys the staples in quantity in approximately one-fourth of the schools studied. The head cook assumes these responsibilities when the homemaking teacher does not.
2. The superintendent employs and schedules adult workers; the homemaking teacher employs and schedules student workers.
3. The head cook carries most of the responsibility for the supervision of food preservation, food preparation, and counter service. The homemaking teacher and the other teachers in the school share almost equally in the supervision of the dining room.
4. The activities connected with record keeping are divided among many people. Except for a few scattered instances, there is a tendency to center this responsibility in the office of the superintendent.
5. The improvement of the lunchroom and the selection of equipment is a joint activity of the homemaking teacher, superintendent, and head cook. The care of equipment is in the hands of the head cook and the janitor assists her in maintaining sanitation.

SCHEDULE AND TRAINING OF THE HOMEMAKING TEACHER

To gain a further understanding of the relationship of the homemaking teacher to the school lunch, an answer was sought for each of these questions:

1. How much time is the homemaking teacher scheduled for lunchroom supervision?
2. How much time does she spend daily in lunchroom supervision?
3. Do her lunchroom duties require that she stay during the noon hour?
4. Does she receive any remuneration for her lunchroom work?
5. What part does she have in the training of lunchroom workers?
6. What are some of the situations which create management problems?
7. What college courses has she had as background training for her part in the lunchroom program?

To determine the answers to the questions listed above, an analysis was made of Part 3 of the questionnaire--the portion which was to have been completed by the homemaking teacher herself. A total of 190 questionnaires were available for this part of the study: those from the 189 schools in which the teacher has a part in the lunchroom program and an additional one received from the second teacher in a school in which both had some part in the program.

Table 40 is a summary of the time allowed the homemaking teacher for lunchroom supervision, as reported by the superintendent, and the time spent in supervision, as reported by the homemaking

As

None

30

min

60

min

2 h

3 h

5 h

1/2

W

In

Sc

COMPARISON
LUNCHROOM

Time Assigned Daily	Per Cent Assigned	Enrollments		In Schools With Enrollments over 1000 (29 cases)				
		Minutes Spent		Per Cent		Extra Minutes Spent		
		1	Average	Assigned	Spend Extra Time	Extra Minutes Spent		
						Range	Total	Average
None	34.2	40	51.7	34.5	6 - 150	408	41	
30 minutes. . .	2.1	90	--	--	--	--	--	--
60 minutes. . .	35.3	71	20.7	17.3	30 - 60	180	30	
2 hours. . .	4.8	35	6.9	3.4	30 -	30	30	
3 hours. . .	2.1	60	6.9	3.4	60 -	60	60	
5 hours. . .	1.0	--	--	--	--	--	--	--
1/2 day. . .	0.5	--	--	--	--	--	--	--
Misc. time:	3.2	--	--	--	--	--	--	--
Incomplete returns. .	12.6	--	13.8	--	--	--	--	--
No reply . .	4.2	--	--	--	--	--	--	--
TOTALS	100.0	56 av.	100.0	58.6	6 - 150	678	40	

teacher. Of the 190 teachers reporting 98, or 51.5 per cent, spend an average of 54 minutes more each day in school lunch activities than is allowed them for this purpose. The amount of extra time spent ranges from six minutes to two and one-half hours daily, and one single instance is reported in which the teacher spends "8 - 10 hours". A close examination of the questionnaire returned by this teacher discloses these additional facts: she teaches four home-making classes and one class in ninth grade English; she is a play director, and a class sponsor as well as advisor to the Future Homemakers of America; she has complete authority for ten of the twenty lunchroom activities in which she participates; she serves as chairman of the Nutrition Education Committee; and she supervises three full-time adults and twenty-eight students employed in the lunchroom.

While the percentage of teachers who spend extra time in lunchroom activities increases as the schools grow larger, the average of extra time spent per teacher decreases.

Table 41 presents the answer to the third question: Do her lunchroom duties require that she stay during the noon hour? Over one-half of the teachers reporting are expected to supervise during the noon hour. This is true in all enrollment groupings.

TABLE 41

PER CENT OF HOME MAKING TEACHERS WHO SUPERVISE
THE SCHOOL LUNCH DURING THE NOON HOUR

Lunchroom Duties Require Teacher To Stay During Noon Hour	Per Cent In All Schools	Per Cent in Schools Of Varying Enrollments		
		120-499	500-999	1000-over
Number of teachers reporting	190	84	77	29
Yes.	54.7	52.4	58.4	51.7
No	39.0	38.1	39.0	41.4
No reply	6.3	9.5	2.6	6.9

Table 42 answers the question relative to additional remuneration for school lunch supervision. In only 11.6 per cent of all the cases reporting does the teacher receive any additional funds for her lunchroom activity. The practice appears to be more common in the large schools than in the smaller.

TABLE 42

PER CENT OF HOME MAKING TEACHERS RECEIVING ADDITIONAL REMUNERATION
FOR SCHOOL LUNCH SUPERVISION

Receive Additional Remuneration For Lunchroom Supervision	Per Cent In All Schools	Per Cent in Schools Of Varying Enrollments		
		120-499	500-999	1000-over
Number of teachers reporting	190	84	77	29
Yes.	11.6	6.0	13.0	24.1
No	57.3	60.0	57.1	48.3
No reply	31.1	33.3	29.9	27.6

According to Table 43, 56.3 per cent of the homemaking teachers are responsible for instruction lunchroom workers in efficient work habits; 48.4 per cent of the teachers instruct the workers in menu making and food preparation. Over one-third of the teachers are responsible for some instruction in all of the phases listed in the table.

TABLE 43

PERCENTAGE DISTRIBUTION OF TYPES OF TRAINING
WHICH HOMEMAKING TEACHERS GIVE
TO LUNCHROOM EMPLOYEES

Types of Training Given to Employees	Distribution			
	Per cent in all schools	Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
Number of teachers reporting	190	84	77	29
Good work habits	56.3	52.4	54.5	37.9
Menu making	48.4	55.9	46.7	31.0
Food preparation	48.4	52.4	51.9	27.6
Acceptable personal habits	45.8	46.4	49.3	34.5
Menu substitutions	43.7	45.2	45.4	34.5
Care of equipment	43.7	50.0	42.8	27.6
Use of equipment	41.6	46.4	40.3	31.0
Food service	38.9	48.8	54.5	31.0
Making market orders	36.3	42.9	33.8	24.1
Food preservation	34.2	44.0	22.6	20.7
Food storage	34.2	45.2	35.1	34.5
No reply	15.3	19.0	10.4	17.2

The situations creating management problems in respect to the school lunch are comparatively unimportant. Table 44 suggests that the greatest number of difficulties center around the lunch

being prepared in the homemaking room and the interruptions of classes to attend to the details of lunchroom operation. Both of these are reported as problems to less than thirty per cent of any of the teachers. The author is of the opinion that this data has no particular significance except to point out that some of these situations still exist.

TABLE 44

PERCENTAGE DISTRIBUTION OF SITUATIONS
WHICH CREATE MANAGEMENT PROBLEMS

Situations Which Create Management Problems	Per cent in all schools	Distribution		
		Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
Number of teachers reporting	190	84	77	29
Lunch prepared in the home-making department.	24.2	28.6	23.4	13.8
Classes are frequently interrupted by workers, salesmen, and others, for lunchroom details.	22.1	20.2	25.0	13.8
Classroom activities are limited because the equipment must be shared with the lunchroom.	15.8	19.0	14.3	10.4
Foods units must be scheduled to conform to the lunchroom work hours	14.2	14.3	18.2	3.4
A class is being taught and lunch is being prepared in same room at the same time	13.7	15.5	15.6	3.4
Lunch is being prepared in a separate room but must be supervised while teaching another class.	8.4	8.3	11.7	0.0
No problems.	8.4	5.9	9.1	13.8
No reply	42.1	50.0	37.7	48.3

The background training of the homemaking teacher varies greatly in respect to college courses related to food service. Table 45 lists in order of frequency the courses which the teachers report having had as a part of their college training. Menu Planning ranks first, Quantity Cookery ranks second, and School Lunch is third in order.

TABLE 45

PERCENTAGE DISTRIBUTION OF COLLEGE COURSES
RELATED TO FOOD SERVICE AS REPORTED
BY THE HOMEMAKING TEACHERS

College Courses Reported By Homemaking Teachers	Distribution			
	Per cent in all schools	Per cent in schools of varying enrollments		
		120-499	500-999	1000-over
Number of teachers reporting	190	84	77	29
Meal Planning.	74.2	67.9	77.9	82.8
Quantity Cookery	61.6	55.9	66.2	65.5
School Lunch	41.6	34.5	40.3	65.5
Institution Management . . .	33.2	28.6	39.0	31.0
Institution Marketing. . . .	25.3	23.8	26.0	27.9
Institution Equipment. . . .	24.2	21.4	24.7	31.0
Institution Accounting . . .	14.7	13.1	14.3	20.7
Tea Room Management.	13.1	9.5	13.0	24.1
Catering	8.4	5.9	13.0	3.4
No reply	17.4	22.6	13.0	13.8

There is only one instance in Table 45 in which the figures given are out of order: in the column representing the schools with enrollments over 1000, Institution Marketing and Institution Equipment are the exceptions. This table indicates that less than forty

1. The first step in the process of identifying a problem is to define the problem. This involves identifying the symptoms of the problem and determining the scope of the problem. Once the problem has been defined, the next step is to identify the causes of the problem. This involves identifying the factors that are contributing to the problem and determining the underlying causes of the problem. Once the causes of the problem have been identified, the next step is to develop a plan to address the problem. This involves identifying the actions that need to be taken to address the problem and determining the resources that will be needed to implement the plan. Once a plan has been developed, the next step is to implement the plan. This involves carrying out the actions that have been identified in the plan and monitoring the progress of the plan. Finally, the last step in the process is to evaluate the results of the plan. This involves determining whether the plan has been successful in addressing the problem and identifying any lessons learned from the process.

2. The second step in the process of identifying a problem is to identify the causes of the problem. This involves identifying the factors that are contributing to the problem and determining the underlying causes of the problem. Once the causes of the problem have been identified, the next step is to develop a plan to address the problem. This involves identifying the actions that need to be taken to address the problem and determining the resources that will be needed to implement the plan. Once a plan has been developed, the next step is to implement the plan. This involves carrying out the actions that have been identified in the plan and monitoring the progress of the plan. Finally, the last step in the process is to evaluate the results of the plan. This involves determining whether the plan has been successful in addressing the problem and identifying any lessons learned from the process.

Problem Statement		Cause		Effect	
1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36
37	38	39	40	41	42
43	44	45	46	47	48
49	50	51	52	53	54
55	56	57	58	59	60
61	62	63	64	65	66
67	68	69	70	71	72
73	74	75	76	77	78
79	80	81	82	83	84
85	86	87	88	89	90
91	92	93	94	95	96
97	98	99	100	101	102

3. The third step in the process of identifying a problem is to develop a plan to address the problem. This involves identifying the actions that need to be taken to address the problem and determining the resources that will be needed to implement the plan. Once a plan has been developed, the next step is to implement the plan. This involves carrying out the actions that have been identified in the plan and monitoring the progress of the plan. Finally, the last step in the process is to evaluate the results of the plan. This involves determining whether the plan has been successful in addressing the problem and identifying any lessons learned from the process.

per cent of the teachers in any of the schools studied have had any courses in Institution Administration other than Menu Planning, Quantity Cookery, and School Lunch. There were a few instances reported in which the homemaking teacher intimated that all of these previously listed college courses had been combined into one.

SUMMARY OF SCHEDULE AND TRAINING OF HOMEMAKING TEACHER

The highlights of this part of the discussion are:

1. More than one-half of the homemaking teachers report spending more time in lunchroom activity than their daily schedule provides. The range of time spent is 6 to 540 minutes daily with an over-all average of 54 minutes reported.
2. More than one-half of the homemaking teachers must stay during the noon hour to supervise lunchroom activity.
3. Additional remuneration is granted in about one-tenth of the schools for lunchroom activity. The practice is more common in the large school than in the small one.
4. The homemaking teachers are assuming responsibility for training lunchroom employees in from one-third to one-half of the schools reporting. Training is given more frequently in menu making, food preparation, and good work habits.
5. Less than one-fourth of the teachers report situations which create management problems. The two most commonly reported were 1) the lunch being prepared in the homemaking department, and 2) the interruption of classes to attend to lunchroom details.
6. Except for Meal Planning, Quantity Cookery, and School Lunch, the homemaking teacher has had comparatively few college courses to prepare her for her part in the school lunch program.

VI CONCLUSIONS AND RECOMMENDATIONS

The findings of the study as summarized in the three major divisions of the discussion have indicated that approximately three-fourths of the homemaking teachers are employed in schools in which she has some part of the school lunch program. More than eighty per cent of the lunch programs in operation are receiving assistance from the funds of the National School Lunch Act. One of the major responsibilities of the homemaking teacher is the planning of lunch menus. Therefore, the prospective teacher must be given a thorough understanding of the provisions of the Act; she must be familiar with the requirements of the two basic types of meal patterns and should have instruction in the use of various surplus commodities that are frequently available.

She buys the staples in quantity in one-fourth of the schools studied*, she employs and schedules the student workers*, and from one-half to one-third of the teachers have a responsibility for training all lunchroom workers**. The homemaking teacher works with the superintendent and head cook in the planning of improvements to and in the selection of equipment for the lunchroom*.

A comparison of these responsibilities assumed by the homemaking teacher in the operation of the lunchroom with the college courses she has taken*** will suggest that the training program of the prospective teacher should be broadened. Since she supervises

* Page 74

** Page 82

*** Page 81

and trains lunchroom workers she needs information concerning institution management practices. In order to assist in planning improvements to the physical plant and selection of equipment for it she needs instruction in the field of Institution Equipment. To do an efficient job of buying she needs the background of a course in Institution Marketing.

While all of these courses as well as Institution Accounting are a must for those persons who anticipate a full-time program of lunchroom management, it is not practical to suggest the addition of three courses to the pre-service training program of the homemaking teacher who is to have the lunchroom as one of her school activities. A summer workshop for teacher-managers incorporating a number of these phases of institution management would give valuable assistance to the teachers in the state.

In the schools in which the nutrition education program is a part of the school lunch, the homemaking teacher is the person most frequently named as chairman of the program. The pre-service training of the teacher should give her suggestions for the strengthening of this nutrition program. The lunchroom is not the sole responsibility of the homemaking teacher. She needs guidance in developing plans whereby other members of the school staff and of the community can become interested in such a program and be willing to offer their services and support.

More than one-half of the teachers in the schools studied are expected to supervise the lunchroom during the noon hour, and

approximately the same proportion of the teachers spend an average of 54 minutes more each day in lunchroom activities than has been assigned to them for this purpose. If the administration is to expect the homemaking teacher to assume a major role in the operation of the lunchroom, then it will be necessary to make some adjustment of this teacher's schedule. Unless this is done the teachers will either continue to turn aside from all lunchroom activities or will accept it at the sacrifice of good classroom teaching.

The head cook is assuming the major responsibility for making market orders, the supervision of food preparation and counter service, the keeping of inventories, the care and maintenance of equipment, and the maintenance of sanitation. These activities suggest the basic materials which might constitute an in-service employee training program or serve as the foundation for area workshops for lunchroom personnel. Instruction of this type might be offered in county area groupings through the office of the State School Lunch Director.

SUGGESTIONS FOR FURTHER STUDIES

Since the data on the questionnaires have been analyzed from the over-all point of view only, further study might be made of the lunchroom activities of the experienced teacher and of the beginning teacher. Information concerning the teacher load in addition to lunchroom activities might be summarized; that is, the number of classes taught by the homemaking teacher as well as the extra-curricular activities assigned to her in addition to the supervision of the lunchroom.

The School Lunch Advisory Committee and the effectiveness of the nutrition education program in connection with the school lunch are problems in which special investigations might be done. A study of the use of adult and student workers might aid in establishing standards of patron load per employee. These studies might all lead to a more uniform plan for the over-all operation of the lunch program and the development of suggestions for the integration of the lunchroom into the total program.

VII LITERATURE CITED

1. Abbott, O. D., Townsend, R. O., French, R. B., and Ahmann, C. F.
1946 Effectiveness of the School Lunch in Improving the Nutritional Status of School Children. Bulletin No. 426, University of Florida Experiment Station, Gainesville, Florida.
2. Bryan, Mary de Garmo
1946 The School Cafeteria. F. S. Crofts & Co., New York. 740 pp.
3. Bryan, Mary de Garmo
1948 School Meals at the Crossroads. Procedure Book, 2nd Annual School Food Service Association. School Food Service Association, University of Mississippi, University, Mississippi.
4. Cederquist, Dena
1948 Is it Adequate? Procedure Book, 2nd Annual School Food Service Association. School Food Service Association, University of Mississippi, University, Mississippi.
5. Directory of Michigan Schools Having Home Economics Departments,
1948 Office of Vocational Education, Department of Public Instruction, Lansing, Michigan. (April, 1948)
6. First Call for Lunch.
1946 Consumers Guide, 12(3): 9-11.
7. Flanagan, Thelma G.
1949 Basic Beliefs About Lunch Programs. Nation's Schools, 43(2): 64-65.
8. Goldsmith, Any Houchin
1940 The Food Service Responsibilities of High School Home Economics Teachers in Certain Communities of Iowa. Unpublished Master's Thesis, Kansas State College of Agriculture and Applied Science, Manhattan, Kansas.
9. Halstead, Georgia
1945 Determining the Activities for Which Home Economics Teachers Carry or Share Responsibility in the High Schools. Unpublished Master's Thesis, Michigan State College, East Lansing, Michigan

10. Harris, M. Marie
1945 An Evaluation of the Status of the High School Home Economics Teachers and Lunch Room Managers in the Michigan and Ohio Schools. Unpublished Master's Thesis, Michigan State College, East Lansing, Michigan.
11. Jardine, Janet M.
1947 This Job of Lunchroom Management. Nation's Schools, 40(5): 57-58.
12. Knoll, Arthur L.
1940 School Lunchrooms--Whither Away? Journal of the American Dietetic Association, 16: 43-47.
13. Mack, Pauline Beery
1947 Nine-Year Study of the School Lunch. Journal of Home Economics, 39: 73-79.
14. McMillan, Martha
1949 Publicizing the School Cafeteria. Practical Home Economics, 27(4): 220.
15. Michigan Education Directory and Buyers Guide, 1948-1949.
1948 Michigan Education Directory, Lansing, Michigan.
16. Morris, Margaret
1947 School Lunches in the United States. Journal of the American Dietetic Association, 23: 1068-1072.
17. Powell, Ruth
1947 The School Lunch Program; The Teacher's Contribution. Journal of Home Economics, 39: 408.
18. Rosenfield, Harry N.
1946 Congress Looks at School Health. Nation's Schools, 38(1): 47-48.
19. School Lunch Bill, HR 3370. Journal of the American Dietetic Association, 22: 664.
1946
20. The School Lunch Bell Rings Again.
1946 Consumers Guide, 12(9): 12-14.
21. Sheperd, Irma Orr
1947 Relationship of Home Economics Teacher to School Lunch Program. Unpublished Master's Thesis, Texas State College for Women, Denton, Texas.
22. The Third Freedom Goes to School.
1943 Consumers Guide, 9(8): 8-10.

[illegible]

Figure 1. The effect of the number of trials on the number of correct responses. The number of correct responses was significantly higher than the number of incorrect responses in all cases. The number of correct responses was significantly higher than the number of incorrect responses in all cases. The number of correct responses was significantly higher than the number of incorrect responses in all cases.

1. *Journal of the American Medical Association*, 2000; 283: 2686-2692.

23. Thomas, Virginia F.
1948 A Survey of the Responsibilities of the Home Economics Teacher in Relation to the School Lunch Program Which May Affect the Efficiency of Class Room Teaching in a Sample of Schools in West Virginia, 1946-1947.
Unpublished Master's Thesis, West Virginia University, Morgantown, West Virginia.
24. U. S. Bureau of the Census. Sixteenth Census of Michigan, 1940
1941 U. S. Government Printing Office, Washington, D. C.
25. U. S. Department of Agriculture. National School Lunch Program,
1948 Percentage of Schools and Children Participating Fiscal Year 1948. Production and Marketing Administration, Washington, D. C.
26. West, Bessie Brooks, and Wood, Levelle
1938 Food Service in Institutions. Johy Wiley and Sons, Inc., New York. 533 pp.

VIII APPENDIX

East Lansing, Michigan
March 7, 1949

To the Superintendents of
Michigan Schools

Dear Sir:

The departments of Institution Administration and of Home Economics Education at Michigan State College are interested in securing information concerning the extent to which the homemaking teachers of Michigan are assuming responsibility for the school lunch program and to what extent the total school shares in the responsibility.

Under the sponsorship of the two departments named above and as a part of my graduate work, I have prepared the enclosed check list questionnaire designed to secure data concerning the status of the situation as it exists in 1948-1949. Your answers will give us information that will help to determine the training that should be given prospective homemaking teachers in respect to their relationship to the school lunch program.

The questionnaire is in three parts. In the interest of accuracy and to conserve time, may I suggest that Part 1 contains questions that you as superintendent will be able to answer quickly. Part 2, Administration - Division of Responsibilities, can be answered in only a few minutes by the homemaking teacher and yourself jointly. Part 3 should then be completed in detail by the homemaking teacher if she has any responsibility whatsoever with the program. A self-addressed stamped envelope is enclosed in which to return the completed form.

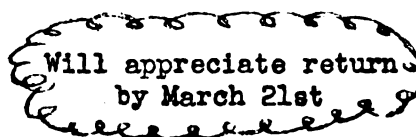
I realize that this will take time in your already full day, but I will be very grateful indeed for your help. I am anxious to have every school sponsoring a lunch program answer this questionnaire in order that the study may present an accurate picture of the situation in Michigan.

Very sincerely,



Nila Burt Laidlaw, Graduate Student
Department of Institution Administration
Michigan State College

SCHOOL LUNCH QUESTIONNAIRE



Part 1 GENERAL INFORMATION

Name of school reporting: _____

Total school enrollment: _____ Length of noon hour: _____

Do you transport students by bus? Yes _____ No _____ How many? _____

Is your homemaking program reimbursed from vocational education funds?
Yes _____ No _____

How many adult workers constitute your school lunch staff? _____

Full time: _____ Part time: _____
(5 hr. minimum day) (2½ hr. minimum day)

How many student workers assist in the lunchroom? _____

How many periods per day is the homemaking teacher scheduled for lunch-
room supervision? _____

Do you have a School Lunch Advisory Committee? Yes _____ No _____

Do you have an organized nutrition program as a part of your school
lunch? Yes _____ No _____

If "Yes", who is in charge of the program? _____

Does the program provide training in:

Food selection Yes _____ No _____ Eating habits Yes _____ No _____
Social relations Yes _____ No _____ Table manners Yes _____ No _____

TYPE OF LUNCH PROGRAM

Please check the type of lunch program which best describes
your school in the first column below. Indicate the average number of
meals served daily in January, 1949, in the blanks of the second column.

		Number Meals	
		Students	Faculty
Check			
1. Lunch program reimbursed from funds of Michigan School Lunch Program.	1. Type A B C	_____ _____ _____	_____ _____ _____
2. Lunchroom offers enough choices for a complete meal; NOT reimbursed.	2.	_____	_____
3. One hot dish prepared to supplement lunch carried from home.	3.	_____	_____
4. Briefly describe any other plan:		_____	_____

ORGANIZATION OF FOOD PREPARATION

Which of the following plans for the preparation of food best describes your situation? Please check in column at right.

The preparation of food for the school lunch is in the hands of:

1. volunteer student workers from all classes under the supervision of the homemaking teacher. ___ 1.
2. a homemaking class under the supervision of the teacher. ___ 2.
3. a homemaking class with one or more paid cooks under the supervision of the teacher. ___ 3.
4. a cafeteria class under the supervision of the teacher. ___ 4.
5. a cafeteria class with one or more paid cooks under the supervision of the teacher. ___ 5.
6. a private individual on a commercial basis; a concession. ___ 6.
7. volunteer adult workers under the supervision of the superintendent ___, homemaking teacher ___, lunchroom cook ___, any other (please name) _____.
8. paid adult workers under the supervision of the superintendent ___, homemaking teacher ___, lunchroom cook ___, any other (please name) _____.
9. Briefly describe any other plan: _____

LOCATION OF LUNCHROOM KITCHEN

What is the location of the lunchroom in relation to the homemaking department? Please check in column at right.

The lunchroom kitchen is:

1. a part of the homemaking department. ___ 1.
2. adjacent to the homemaking department. ___ 2.
3. across the hall from the homemaking department. ___ 3.
4. on the same floor but in another section of the building. ___ 4.
5. on another floor but in the same section of the building. ___ 5.
6. on another floor and in another section of the building. ___ 6.
7. in a separate building. ___ 7.
8. Describe any other location: _____

If you wish a summary of the information received from the tabulated replies to this questionnaire, please sign below.

Date returned _____ Signature _____

Part 2
ADMINISTRATION - DIVISION OF RESPONSIBILITIES

In the chart below is a breakdown of the activities related to the operation of the school lunch. As you read, will you please check in the columns at the right the person to whom each activity is assigned. If the responsibility is assumed by more than one person, indicate joint responsibility by checking each person sharing it. When checking in the column headed "Others", please be specific about naming the person in charge; i.e., secretary to superintendent, principal, grade room teacher, lunchroom worker, P.T.A. President, janitor, etc.

ACTIVITY	PERSON TO WHOM ASSIGNED				
	Supt.	Homg. Teacher	Head Cook*	Others	Not Done
1. Planning the menu					
2. Approving the menu planned by someone else					
3. Making menu substitutions					
4. Making market orders					
5. Buying staples in quantity					
6. Employing full-time workers					
7. Employing student workers					
8. Scheduling full-time workers					
9. Scheduling student workers					
10. Supervision of food preparation					
11. Supervision of counter service					
12. Supervision of dining room					
13. Supervision of food preservation					
14. Selling lunch tickets					
15. Receiving cash for meals					
16. Keeping a record of the number of persons served					
17. Keeping perpetual inventory					
18. Taking monthly physical inventory of foods					
19. Keeping financial records					
20. Preparing monthly financial reports					
21. Paying lunchroom bills					
22. Planning improvements in physical set-up					
23. Selection of equipment					
24. Care and maintenance of equipment					
25. Maintenance of sanitation					
26. Serves as chairman of Nutrition Education Committee					

* Head Cook denotes first or main cook on lunchroom staff.

When the above responsibilities are assumed by more than one person, how are their various activities co-ordinated? _____

Part 3
HOMEMAKING TEACHER - TRAINING AND SCHEDULE

Please complete facts concerning your training and experience:

<u>Degree held</u>	<u>Where received</u>	<u>Major field</u>	<u>Minor field</u>
_____	_____	_____	_____
<u>Type of teaching certificate held</u> _____			
<u>How many years (include the present) have you taught homemaking?</u> _____			

Please indicate the number of classes you teach daily:

<u>Homemaking classes</u>	<u>Other classes</u>	<u>List other subjects taught</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

Check other facts pertinent to your school activities:

	<u>Yes</u>	<u>Periods</u>	<u>No</u>		<u>Yes</u>	<u>Periods</u>	<u>No</u>
Study hall	_____	_____	_____	Play director	_____	_____	_____
Conference hour	_____	_____	_____	Dean of girls	_____	_____	_____
Free period	_____	_____	_____	School publi-	_____	_____	_____
Home room	_____	_____	_____	cations	_____	_____	_____
Noon duty	_____	_____	_____	F. H. A.	_____	_____	_____
Library	_____	_____	_____	Others: (list)	_____	_____	_____
Class sponsor	_____	_____	_____	_____	_____	_____	_____
				_____	_____	_____	_____

Does your lunchroom responsibility demand that you remain in the building during the noon hour? Yes _____ No _____ Extra remuneration? Yes _____ No _____

How much time do you spend daily in lunchroom activities? _____ hours
(Include any time spent during the noon hour)

Check any of the following courses you have had related to food service:

Quantity cookery _____	Tea Room Mgt. _____	Inst. Equipment _____
Meal planning _____	Catering _____	Inst. Marketing _____
School lunch _____	Inst. Mgt. Practice _____	Inst. Accounting _____

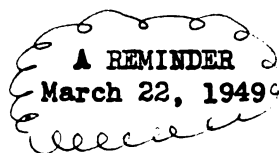
Do you have any part in training or instructing lunchroom workers in:

	<u>Yes</u>	<u>No</u>		<u>Yes</u>	<u>No</u>
Menu making	_____	_____	Food preservation	_____	_____
Menu substitutions	_____	_____	Food storage	_____	_____
Making market orders	_____	_____	Use of equipment	_____	_____
Food preparation	_____	_____	Care of equipment	_____	_____
Food service	_____	_____	Good work habits	_____	_____
			Acceptable personal habits	_____	_____

Please check any of these situations that exist in your school:

1. The lunch is prepared in the homemaking department. _____ 1.
2. A class is being taught and lunch prepared in the same room at the same time. _____ 2.
3. Lunch is prepared in a separate room but you must supervise it while teaching another class. _____ 3.
4. Class activities are limited because the equipment, linens, china, etc., must be shared with the lunchroom. _____ 4.
5. Classes are frequently interrupted by workers, salesmen, receipt of goods, signing of bills, etc. _____ 5.
6. Foods units must be scheduled to conform to the lunchroom work hours either in time of day or season of the year. _____ 6.
7. List any other situations that create management problems:

A copy of the post card mailed to all the superintendents who had not returned the questionnaires by March 22, 1949.



Dear busy superintendent:

Did you intend to let March 21st slip by without returning the School Lunch Questionnaire? We would like to have your school represented in the composite picture of Michigan schools. Won't you please look through that stack of mail on your desk, find the form, and mail it today? If you have no lunch program, we will appreciate a note to that effect.

Very sincerely yours,

Nila Burt Laidlaw, Graduate Student
Department of Institution Administration
Michigan State College, East Lansing

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~~MAR 8 1963~~

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