THE USE OF PROFESSIONAL TIME BY TEACHERS OF 
VOCATIONAL AGRICULTURE IN GEORGIA 

DISSERTATION 
Presented in Partial Fulfillment of the Requirements 
for the Degree Doctor of Philosophy in the 
Graduate School of The Ohio State 
University 

By 
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The Ohio State University 
1954 

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ACKNOWLEDGEMENTS

Many persons contributed in one way or another to this study from its conception in 1951 until its completion in 1954. First, Mr. T. G. Walters, State Supervisor of Agricultural Education in Georgia, suggested the problem. The present study may not be what he had in mind, but nevertheless, it grew from his suggestion. The assistant supervisors of Agricultural Education in Georgia, including Mr. J. N. Baker, Mr. J. L. Branch, Mr. J. H. Mitchell, and Mr. C. M. Reed, helped in providing most of the data which made this study possible. The teachers who were selected for study and whose names are listed in Appendix B were very cooperative in providing supplementary data for the study. Messrs. W. R. Brown, J. G. Bryant, F. C. Cloer, J. L. Dickerson, A. O. Duncan, E. G. Ford, V. E. Glenn, J. P. Nix, H. B. O'Kelley, and T. G. Walters, all of Georgia, served as the jury to examine, revise and approve the list of criteria used in the selection of those teachers who had made the best use of their professional time. Dr. Ira E. Aaron of The University of Georgia was most generous in helping with the statistical design and treatment. Mrs. Joan Burns, Mrs. Mary Elder, Mrs. Eureka Jackson, and Mrs. Annie Lene Webb, typists, were certainly patient and cooperative as each new deadline for the completion of copy was set. Mr. Charles Turner made the final draft of the graphs used in this report. Dr. G. E. Oliver and his staff did the photographic processes used in duplicating the graphs. Miss Ruby Anderson, teacher of English in the Athens High School, was very helpful in editing copy. My wife, Margaret Louise Tolbert, provided much valuable assistance and encouragement. My graduate
committee, consisting of Dr. W. F. Stewart, Chairman, Dr. Ralph Bender, Dr. H. Gordon Hullfish, Dr. J. I. Falconer, and Dr. Ralph Woodin, were helpful in many ways throughout the study. To each of the above persons goes the sincere thanks of the writer for the help each has given. Without this help, there would have been no study.
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CHAPTER I

INTRODUCTION

IMPORTANCE OF THE PROBLEM

The number of activities of teachers of vocational agriculture in Georgia has been increasing for the past twenty years. During this period out-of-school groups, adults and young farmers, have become an integral part of the local program of vocational agriculture. Meeting the needs of members of these groups has brought about the addition of community service facilities such as canneries, farm shops, post-treating plants, freezer-lockers, and sweet potato curing houses. Furthermore, changes in the types of farming in the State from field crops to livestock have placed more emphasis on livestock shows and fairs, especially for high school students. If this increase in the number of activities with its accompanying increase in the over-all demands for the use of the teacher's time had brought with them a decrease in the amount of time to be devoted to some other activities, the problem would probably have been taken care of satisfactorily. Such, however, was not the case. Individual activities tended to require as much time as before, with the result that teachers have been faced more and more with the problem of finding enough time to take care of the many activities for which they were held responsible.

In a few schools additional personnel have been added. This increase has been made more to take care of additional student load because of school consolidation and/or increase in school population than to distribute better the professional time of the teacher who had been working in that given school.
Teachers of vocational agriculture in Georgia have been allotted to the given school systems on the basis of average daily attendance of high school students the preceding year, just as any other high school teacher in the system. Yet, the teacher of agriculture has been expected to teach one or more out-of-school groups and supervise the farming programs of students of all groups. This policy of allotting teachers of agriculture has tended to overload many of these teachers with relatively large numbers of high school boys without giving much consideration to the out-of-school aspects of the teacher's program.

Competition for the use of the teacher's time has caused many good teachers to leave the profession in spite of the fact that they liked to teach. Yet, too little satisfaction was provided when they put in long hours without being able to feel that sufficient time was being devoted to many of their activities. The investigator has noted that a large percentage of majors in agricultural education at the University of Georgia decide, before they complete their pre-service program, that teaching agriculture is a young man's profession, and plan to go into some other profession or plan to remain in the profession of teaching vocational agriculture for only a few years. Furthermore, there is reason to believe that many good prospects for the profession decide to major in some other work in the College of Agriculture at the University because they want to get into a profession that is not so demanding of their time. The problem has become so critical that it is now a matter of concern to all members of the state staff in Agricultural Education in Georgia.

At a recent meeting of the State Board of Education the problem of setting up teacher salary scales for the initiation of the Minimum
Foundation Program for Education in Georgia was being considered. In order to help equalize the work-load for all high school teachers in the State, the Board decided to base the salary on a minimum work day of eight hours and a work week of forty hours. For teachers of vocational agriculture, however, the following policy was approved:

In view of the fact that funds are available to pay for work beyond the school day in certain vocational programs under the Smith-Hughes and George-Dean Acts, the State Board of Education authorizes the development of out-of-school youth and adult programs, project supervision and other youth activities not to exceed two hours per day or ten hours per week, for which payment may be made at the same hourly rate as the regular school day. Such extra work must be based upon a well-defined program developed cooperatively by the local administrators and the Vocational Division, State Department of Education and conforming to policies approved by the State Board of Education.¹

This policy has caused the Vocational Division of the State Department of Education of necessity to set up various combinations of "normal work-loads" and a scale of overtime work-loads of up to fifty hours per week with a corresponding salary scale. These work-loads have been temporarily set up on the basis of very few facts. This study was proposed to set up work-loads on the basis of more adequate facts.

Experience has indicated that many school situations demand more of an agriculture teacher's time than forty hours per week. The State Board of Education having decided that "such extra work must be based upon a well-defined program" places much emphasis on careful and systematic planning. Such planning can only be done in the light of

¹"Minimum Foundation Program Policies Relating to Vocational Education" (Adopted by State Board of Education, April 18, 1951). Unpublished two-page mimeographed paper sent from Dr. M. D. Collins, state superintendent of schools, to superintendents, April 19, 1951.
objective data. This study was proposed to provide objective data to help meet this need.

THE PURPOSE OF THE STUDY

The purpose of this study was to analyze the use made of professional time by teachers of vocational agriculture in Georgia during the fiscal year, 1951-52, and to make recommendations for the solution of the problems revealed by the study. The specific objectives of the study were:

1. To analyze the use made of professional time by teachers of vocational agriculture.

2. To identify those teachers in the group who were making the best use of their time.

3. To propose appropriate guides for the development of teacher loads, based upon the findings in number 2.

4. To suggest ways and means whereby local programs of vocational agriculture may be improved through better use of teacher time, including the part that supervision and teacher training can play in such improvement.

BASIC ASSUMPTIONS

Several basic assumptions underlie this study. They are as follows:

1. Teachers of vocational agriculture in Georgia can be depended upon to report accurately and honestly facts about their programs to the State Department of Education. Therefore, the facts contained in the teacher's annual report regarding the
names of individuals participating in the program and the facts contained in the monthly reports regarding the use of professional time by the teacher, are of sufficient accuracy to make this study valid and most useful in planning local programs and in developing state administrative policies to govern such programs.

2. A random sampling of 17 per cent of the teachers of vocational agriculture is of sufficient size to be valid and will provide an accurate picture of the use of professional time by teachers of vocational agriculture in Georgia.

3. The year 1951-52 is a good year for the study of professional time use by teachers of vocational agriculture in Georgia.

4. The use of data for the full twelve-month period provides a better picture of the use of professional time than would a study of selected short-period intervals distributed over the twelve months.

DEFINITIONS OF TERMS USED

The terms used in this study for which it is felt that definitions should be provided so that the reader may get the same meanings from them as that intended by the investigator are given in the ensuing paragraphs.

Agricultural education. The study of professional education courses as applied to the teaching of agriculture shall be interpreted as agricultural education.

Vocational agriculture. This term refers to a program of instruction in agriculture for persons employed in or expecting to be
engaged in farming as a vocation which is offered in the secondary schools in accordance with the provisions of the national vocational education acts.

**Teacher of vocational agriculture.** An instructor in a public high school who instructs individuals in all-day, day-unit, special farm shop, young farmer, and adult farmer classes in agriculture is a teacher of vocational agriculture. His work includes group and individual instruction in the classroom, school shop, cannery, on the farms during field trips or individual visits, and the like. His is the responsibility also to advise the local chapter of Future Farmers of America in its various activities.

**State program of vocational agriculture.** This is sometimes referred to as the state program. It has to do with the organized activities that are carried on by the Georgia State Board of Education through the Vocational Education Service of the State Department of Education.

**Supervisor.** A state school officer who is charged with the responsibility of improving instruction and performing certain administrative responsibilities shall be referred to as supervisor. In this study the term, "state supervisor," refers to the person holding the title of state supervisor of agricultural education in the State Department of Education. The term, "district supervisor," refers to his assistant who is assigned to one of the four supervisory districts in the state program.

**Teacher trainer.** As used in this study, teacher trainer refers
Class. A class shall be a specific group of individuals who are high school boys, out-of-school youth, or adults, and who are taught at one time by an individual teacher.

All-day class. High school boys who are taking vocational agriculture as one of their regular subjects form an all-day class. Each teacher in this study had two to four such classes.

Day-unit class. A group of boys in either the seventh or the eighth grade who are taking agriculture without credit under the teacher of agriculture constitute a day-unit class. One of the primary purposes of this work in agriculture, as defined by the teachers, was that of orientation. These boys were not eligible, in most schools, for membership in the F.F.A. The supervised farming program of these boys was usually much more limited in scope and size than that of the all-day class members. The day-unit class met each day.

Young-farmer class. A group of out-of-school farm youth who were farming, or were interested in becoming farmers, shall be interpreted as a young-farmer class. At least twenty class meetings were held by each teacher with this kind of class.

Adult class. A group of adult farmers enrolled in vocational agriculture shall be interpreted as an adult class. The classes met at least ten times during the fiscal year. The members of these classes were usually more mature than the young farmers, especially in schools where both kinds of classes were organized.
LIMITATIONS OF THE STUDY

This study deals only with that professional time which was reported in the monthly reports of those teachers included in the random sample. This means that the non-professional time of the teacher of vocational agriculture was not studied. Professional time not reported in the monthly reports was not included in the study.

Most teachers reported their professional time to the nearest whole hour, as 2, 4, or 5 hours. Some few teachers in the study reported their professional time to the nearest quarter-hour, as 2.25 or 4.75 hours.

In determining the number and the distribution of supervisory visits made to the homes of the all-day boys, the investigator made use of the annual reports of the individual teachers to get the names of the different boys enrolled in the all-day classes. This annual report included only those boys who were in school at the end of the school year. There was, therefore, in some schools a slight difference between the number of all-day boys reported by a given teacher in his monthly report and in his annual report. Wherever the difference occurred, the larger figure was given on the monthly report. This meant that in some places in the study the total number of all-day boys was somewhat different from the total number reported in another part of the study. The number of boys obtained from the annual reports was used only when the number and the distribution of visits were being studied.

The number and the distribution of visits could not be accurately determined for four teachers included in the study because these teachers failed to give complete names of their enrollees on their monthly
reports. This made it difficult to be accurate in tabulating the number and the distribution of visits to the farms of individual all-day class members by these four teachers; therefore, they were left out of this aspect of the study. The investigator, after all data had been analyzed and interpreted, felt that leaving out these four teachers did not affect the outcome of the study. In other words, these teachers were fairly well distributed when the ranking of the teachers was made on time-use efficiency.

Most of the study is limited to those teachers who were working in schools where there was only one teacher of agriculture in 1951-52. One aspect of the study was that of determining what differences, if any, there were in the use of professional time by the teacher in a multiple-teacher department as compared with the teacher in a single-teacher department. This was considered to be especially important in the light of the fact that the number of multiple-teacher departments in the State is increasing from year to year as consolidation of schools takes place. Since there were only eight schools which had two or more teachers for the full year in 1951-52, the reports of all the teachers in these eight schools were used in comparing the use of professional time by these teachers with that of the teachers in the single-teacher departments.

All the data dealing directly with professional time use were taken from the monthly reports of the teachers, beginning with September, 1951, and ending with August, 1952. These were the first twelve months under the Minimum Foundation Program for Education in Georgia, and were, as explained earlier in this chapter, the first twelve months during which teachers of vocational agriculture received their salaries on the
basis of the number of hours of work set up in their planned programs of work. These were, therefore, the first twelve months during which teachers kept records of the use of their professional time.

One aspect of the study involved an investigation of the distribution of visits to the individual enrollees in the all-day classes. This meant an investigation of each monthly report to determine when each boy enrolled in these classes was visited. Because of the fact that the monthly reports in use prior to September 1 also showed the names of each person visited day by day, and the fact that such data should be collected on a solid fiscal year basis, the investigator decided to begin the collection of such data as of July 1, 1951, and to continue through the fiscal year, 1951-52. For portions of the study, therefore, the investigation extended from July 1, 1951, through June 30, 1952, while in other portions the investigation covered the period from September 1, 1951, through August 31, 1952.

PREVIEW OF SUCCEEDING CHAPTERS

Chapter II outlines the procedures used in conducting this study.

Chapter III contains a statement of philosophy of education with special emphasis on vocational agriculture, as well as the implications of this philosophy for the use that a teacher of vocational agriculture should make of his professional time.

Chapter IV contains an over-all analysis of the use that the teachers in this study made of their professional time. Over-all use of time of teachers in single-teacher departments is compared with that of teachers in multiple-teacher departments.
Chapter V gives an analysis of the amount and the percentage of time the teachers devoted to the different kinds of class groups.

Chapter VI presents an analysis of the time which the teachers devoted to on-farm supervision.

Chapter VII contains a comparison of the eight teachers who were found to have made the best use of their time with the eight teachers who were found to have made the poorest use of their time.

Chapter VIII contains proposed guides for developing work-loads for teachers of vocational agriculture based upon the findings of this study.

Chapter IX presents the summary, the conclusions, and the recommendations of the study.
PROCEDURES USED IN CONDUCTING STUDY

Selecting the teachers for the study. Because of the fact that there were about 205 teachers of vocational agriculture in single-teacher departments in the State, a sampling of the teachers was necessary. After conferring with authorities in the field of statistics, the investigator decided that the study would be valid and that sufficient data could be obtained for the satisfaction of the objectives of the study if a total of 35 teachers could be included.

Since the schools offering vocational agriculture are divided into four supervisory districts, the decision was made to select the teachers for the study by districts rather than to select them from the State as a whole. A list of the teachers by districts for the year 1951-52, therefore, was procured from the office of each of the four district supervisors of agricultural education. The procedure used to select the teachers in each of the four supervisory districts is given below.

1. Schools and teachers not satisfying certain criteria were discarded. A study of professional time made on a sampling basis should not include teachers whose situations were too unusual or exceptional. Schools and teachers not satisfying the following criteria were discarded before the selection was made:
   a. Has the teacher taught in the school prior to the school year 1951-52?
   b. Is the school representative of the farming type of the immediate land-use area?
c. Are the school organization and administration representa-
tive of the district?

d. Was the school's program not handicapped by unusual circum-
stances in 1951-52; as, its loss of a building by fire?

e. Did the school have only one teacher of vocational agricul-
ture in 1951-52?

f. Considering the following factors, would this school, along
with other selected schools of the district, give a repre-
sentative sampling?

(1) Size of school.

(2) Number of all-day boys enrolled in vocational
agriculture.

(3) Tenure of the teacher.

(4) Years of experience of the teacher.

(5) Amount of time the teacher is expected to be at school
each day.

(6) Number of all-day classes per teacher.

(7) "Other duties" of the teacher of agriculture.

(8) Age of the department of vocational agriculture.

(9) Facilities of the department.

(10) Distribution over the district.

2. The names of the schools remaining on the list were arranged in
alphabetical order.

3. Every sixth school on the list was then selected.

4. The names of all schools with multiple-teacher departments were
added to the list so that comparisons could later be made of the
use of teacher time by teachers in single and multiple-teacher departments.

The location of the teachers selected for the study is shown in Figure I.

**Procuring the data for the study.** The methods employed in procuring the data for the study are outlined below.

1. Monthly reports of the teachers selected for the study were obtained from the office of the district supervisor. A copy of this report form is contained in Appendix A. From the monthly reports the following kinds of data were procured:
   a. Number of classes of various kinds.
   b. Number of class members enrolled to date, by kinds of classes.
   c. Number of organized class meetings for the month, by kinds of classes.
   d. Number of F.F.A. meetings for the month.
   e. Number of on-farm visits made, by kinds of classes.
   f. Names of persons, schools, or places visited for each day of the month.
   g. Amount of time during the month devoted to
      (1) class instruction, by kinds of classes;
      (2) supervision on farms, by kinds of classes;
      (3) individual instruction and supervision in canning plant, by kinds of classes;
      (4) individual instruction and supervision in school shop, by kinds of classes;
FIGURE I

LOCATION OF SCHOOLS WHOSE TEACHERS PARTICIPATED IN STUDY

* Single-teacher departments
** Multiple-teacher departments
(5) individual instruction and supervision in other community projects, by kinds of classes;
(6) F.F.A. meetings and other activities;
(7) preparation for teaching the different groups;
(8) keeping teacher records and making reports;
(9) professional improvement activities;
(10) working with county agricultural organizations;
(11) supervising Veterans Farm Training classes;
(12) other school activities assumed as a part of his teacher responsibility.

2. Teacher's annual reports were obtained from the district supervisor of agricultural education, from which were procured the names of the boys enrolled in all-day classes. These data were needed as a basis for determining the number of visits made to each boy's farm during the fiscal year.

3. The individual teachers in the district were visited to procure such data as the following: the daily school schedule, a judgment regarding the effectiveness of farm visitation in the establishment and the promotion of good programs of supervised farming, a judgment regarding teacher-load combinations, dates for taking annual vacation, and kinds of activities listed in the monthly report as "other school activities."

4. A jury of five teachers of vocational agriculture not included in the study, three school administrators, one supervisor, and one teacher trainer helped provide certain critical data for the study by examining, revising, and approving a list of criteria which, when applied to the data revealing the use the teachers
in the study had made of their professional time, would help determine which of the teachers had made the best use of their time.

**Summarizing and organizing the data.** Following the collection of the data, the investigator summarized the monthly reports of each teacher included in the study, including the teachers in the multiple-teachr departments. This meant that tabulation sheets for each teacher were set up which would provide for the tabulation of all the data needed in the study for the twelve months from September, 1951, through August, 1952. Pertinent data were recorded month by month for this period on these individual tabulation sheets, and summarized for the twelve-month period. The data from these tabulation sheets were then transferred to columnar pads in such a way as to be able to study the use of professional time in each of the many areas of professional activities.

Columnar pads were also used in tabulating the data concerning the individual on-farm visits made by the teachers to the home farms of the all-day boys. The method used in tabulating the data permitted a study of not only the number of visits made to the home farms of each boy but also the distribution of the visits over the twelve months.

The data gathered through personal interview with the teachers in the study were tabulated by hand on columnar pads just as were the other data.

**Summarization and organization of the data used in this study** were done by hand. A calculating machine was used both to facilitate the summarization and manipulation of the data and to promote accuracy.
Utilizing statistical methods. After certain criteria had been advanced as a basis for identifying those teachers in the study who had made the best use of their professional time, and after the eight teachers had been selected on the basis of these criteria, the investigator felt that he should determine statistically how significant the differences were between this group and a similar group at the other end of the scale. Because of the fact that the differences were measured in means and in percentages, the problem was that of testing whether or not there was a significant difference between the means of the two groups as well as a significant difference between the percentage scores of the two groups. In other words, was there a real difference between the use that the "top" group of teachers had made of their time and the use that the "bottom" group had made of their time?

The problem of determining how significant were the differences between the means of the two groups was dealt with through the use of an equation suggested by Johnson\textsuperscript{1} in his discussion of procedures for testing the difference between means. The equation is

$$t_0 = \frac{(\bar{x}_1 - \bar{x}_2)}{\sqrt{s^2 \left( \frac{1}{N_1} + \frac{1}{N_2} \right)}}$$

$$s^2 = \frac{\sum x_1^2}{N_1} - \frac{(\bar{x}_1)^2}{N_1} + \frac{\sum x_2^2}{N_2} - \frac{(\bar{x}_2)^2}{N_2}$$

$$\bar{x}_1 = \frac{\sum x_1}{N_1}; \quad \bar{x}_2 = \frac{\sum x_2}{N_2}$$

The subscripts refer to the corresponding sample. The value of $t_0$ was referred to the table of $t$ to determine the degree of significance.

The problem of determining how significant were the differences between the percentage scores of the "top" and "bottom" groups was dealt with through the use of an equation also suggested by Johnson\footnote{Ibid., p. 80.} in his discussion of procedures for testing the difference between percentages. The equation for this test is

$$X = \frac{\frac{t_1}{n_1} - \frac{t_2}{n_2}}{\sqrt{p_0q_0 \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

$$p_o = \frac{t_1 + t_2}{n_1 + n_2}; \quad q_o = 1 - \frac{t_1 + t_2}{n_1 + n_2}$$

The subscripts refer to the corresponding sample; $t$ refers to the part; and $n$ refers to the whole. The value of $X$ was referred to the normal scale to determine the degree of significance.
Since this is a study of the use of professional time by teachers of vocational agriculture in Georgia in which an attempt will be made to determine how well such time is utilized, value judgments must be made. These judgments will be meaningful only in terms of an over-all conception of how teachers of vocational agriculture should utilize their time. This part of the report, therefore, will be devoted to a statement of philosophy of secondary education, in which special emphasis will be placed on vocational education in agriculture.

There is much confusion of thought in America today regarding the function of education. This confusion seems to be due to differences in social outlook, in the conception of the nature of the individual and how he learns, or to both. This statement of philosophy of education will consider these matters and will attempt to provide a consistent approach to them in keeping with our cultural heritage.

**THE NATURE OF THE INDIVIDUAL**

A philosophy of education for the individual should be based upon discoveries regarding the nature of the individual as a human organism in his environment. In fact, the individual cannot be thought of apart from his environment. To do so would be to deal with an abstraction. The unit element for the study of the individual, however, is not the individual, nor even the individual and the environment, each considered
as a distinct entity. In the words of Kilpatrick, "The true unit of study is the organism-in-active-interaction-with-the-environment."¹

The individual is characterized by activity. Unless he is asleep, he is always in greater or lesser degree, active in the satisfaction of some urge, wish, or want. This phenomenon is clearly described by Kilpatrick in a statement in which he distinguishes between activity on the part of man and that of the lower animals.

Life for any organism consists precisely of the continual interaction between organism and environment. In any particular instance, something has happened within or without the organism -- or perhaps better between organism and environment -- to stir the organism to action. Looked at from "within" this stirring appears as want, wish, inclination. Looked at from "without" it appears as movements. These movements are not haphazard, but on the whole tend to change things in the direction of meeting the want. The hungry animal makes movements that tend to find food. In the case of man such movement may not only tend to find food, but may be intended to do so. All organisms are goal seeking; man can set up his goals consciously and seek them deliberately.²

When man seeks his goals deliberately, he may be said to have a purpose. He reorganizes the environment as the situation requires in order to achieve his goal or realize his purpose. This ability and this function distinguish man from the lower animals, and provide the school with the opportunity as well as the responsibility for the improvement of human living. The process of consciously striving through interaction with the environment to satisfy personal urges, or to achieve goals, is the distinctive feature of all human behavior.


Whenever the individual, the organism, is stirred to action, he is stirred as a whole — with his feelings, his thoughts, and bodily action. It is the whole organism that sets up his goals and works toward their attainment. Regarding the unity of the individual's personality, Alberty stated:

The physical, emotional, and intellectual aspects of behavior are a unity that cannot, except for purposes of discussion, be separated. They are present in every instance of behavior . . . . Every phase of personality is vitally dependent upon other phases, and all are acting and reacting at the same time.  

A specific situation taken from life would help, perhaps, to clarify these concepts regarding the nature of the individual. A farmer, in the course of carrying on his farming activities, discovered in the late summer that the leaves from certain of his apple trees were falling prematurely. The falling leaves were discovered to have developed yellow spots. This condition was definitely affecting the development of his fruit crop. The preceding year this situation had occurred, but the farmer had thought that it was a freak of nature. This year, however, he noted that not all his trees were equally affected. Those which were farther from the house were faring better than those nearer the farmyard. He recalled that the same general difference occurred the year before. In a day or two, the local teacher of agriculture came by to talk with him and his oldest son, who was soon to enter high school, about enrolling in the program of vocational agriculture. As the teacher was explaining how the instructional program of vocational agriculture for in-school boys was designed to help them deal with current problems in their supervised farming programs, the farmer was led to think about his

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apple-tree problem. He called the teacher's attention to his difficulty. The teacher, the farmer, and the son walked into the orchard. The teacher pulled off an affected leaf, examined it closely, surveyed the area carefully, and discovered three or four beautiful half-grown cedars in the farmyard which, incidentally, the farmer had transplanted there a few years before. Upon asking whether or not the cedars had grown "cedar balls" the winter before, the son recalled that they had and that he and the younger children had used some of them in a game one afternoon. The teacher cited the relationship between the "cedar balls" and the "rust spots" on his apples. He told them how the cedar ball cast out spores from long gummy fingers which grew out from its surface in the spring. Some of these spores were borne by the wind to the young tender apple leaves nearby. The closer trees were more infected because more spores found their way to these than to those farther away. In the fall the spores from the affected apple leaves were carried by the wind back to the cedar to complete the life cycle of this type of rust. On being asked about control measures, the teacher informed him that there was no known control measure except to destroy the cedars. The farmer, fascinated with his new knowledge of nature, destroyed the cedars before the balls matured the next spring and thereby solved his problem.

The farmer, in this case, represents the organism in active interaction with his environment, which is limited here for convenience, to his farming activities. His farming activities are the outward signs of inner urges to produce products for his family use, and for cash which he and his family can use to provide desired goods and services not produced on his farm. These farming activities, therefore, are designed to achieve certain goals. A situation, in this case, a problem
with his apple trees, arises which tends to interfere with the attainment of a goal, the production of apples. The situation stirs him to action designed to remove the interference and to achieve his goal in spite of the situation. The farmer is stirred as a whole — with his feelings, his thoughts, and his physical efforts. In the words of Kilpatrick:

The thinking interpenetrates the feeling and guides it effectively, and the feeling suffuses and supports the thinking, while thinking and feeling support, direct, and interpenetrate the effort. 4

The next section of this chapter will be devoted to the investigator's beliefs regarding the nature of learning, in which these concepts of the nature of the individual will be used.

THE NATURE OF LEARNING

Living, as has been shown, is a continual interactive process between the individual and the environment. The individual, continually dominated by some urge to action, finds that there are certain difficulties or problems which tend to prevent the attainment of his goal. The individual seeks to overcome these difficulties in order to achieve his aims. He is, in the words of Bode, "progressively shaping up the environment so as to bring an ongoing activity to a successful termination." He makes choices and movements to bring about the attainment of his goals. Along with success in the attainment of a given goal brought about through certain choices and movements, the individual may discover that the goal was reached with more ease or greater confidence than

4 Kilpatrick, op. cit., p. 21. (Underlined in italics in original.)
usual because of a change in technique or method; he may even recognize
certain marks of distinction, relationships, or truths which make it
possible for him to attain the goal more efficiently and with greater
satisfaction on the next try. If so, learning may be said to have taken
place. The individual has produced a "change in an experience whereby
it becomes more serviceable for the guidance of behavior." 5

An example should help to explain this meaning of learning.

Henry, a student in shop, is laboriously planing a board which is to go
into his farrowing house. He is anxious to complete the house before
his brood sow farrows. His teacher discovers that what makes Henry's
planing laborious is a dull plane. The teacher borrowing a sharp plane
from a neighboring student asks Henry to try it out on his board. Henry
discovers that the borrowed plane does the work much more effectively
and smoothly, and with much less effort on his part. The teacher asks
Henry if he would like to sharpen his own plane so that it would operate
like the one he had just used. Henry is interested but tells the teacher
that he does not know how to sharpen the plane. The teacher explains to
Henry that he can learn how to sharpen the plane without much difficulty.
Henry sharpens his plane under the instruction of his teacher. Again he
takes up his work of planing the board, but this time, with a sharp
plane which he himself has sharpened. He receives much satisfaction
from his experience. He has learned how to sharpen a plane iron, but he
has also learned that it is easier to plane a board with a sharp plane
than with a dull one, and that the results are much more satisfying. He

5Boyd H. Bode, How We Learn (Boston: D. C. Heath and Company,
1940), p. 274.
has developed a better attitude toward this shop project; he feels better about this phase of shop work; and he now has more confidence in his ability to run his own affairs.

Another look at the total picture shows that Henry was dominated by an urge to action -- he had a purpose or goal of providing a new farrowing house for his sow. He was anxious to get it completed in time to use it for his sow's next farrowing. His experience resulted not only in progress toward the completion of his house, but also in several learnings. These learnings were emotional as well as intellectual and physical. Henry's learnings are all the more significant because he was acting with reference to his interest and his recognized needs. The teacher helped him to evaluate his present way of dealing with his problem, to sense a need for a new way of coping with his situation, to create new interests, and to reconstruct his means of solving the difficulty. Henry's experience exemplified what Alberty so well said:

The goals of the individual in large measure determine his behavior and these are highly charged with emotional components. The way the individual feels about what he does is inseparably bound up with the learning products, as well as with the way he goes about learning. And because the physical cannot be separated from the emotional and intellectual, the context of the learning act is very significant. To divorce intellectual products in the form of generalizations, facts, and information, from the total process of experiencing is to make of learning a very pale affair indeed.  

THE PURPOSE AND FUNCTION OF THE SCHOOL

IN A DEMOCRACY

Sound educational theory and practice should be in harmony not only with the latest findings of scientists in regard to the nature of

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6 Alberty, loc. cit.
the individual and how he learns but also with the predominant ideals of the society in which they function. The idea that the purposes of the school should be in accord with the broader purposes of the society in which it has its being has been well expressed as follows: "Every system of thought and practice in education is formulated with some reference to the ideas and interests dominant or widely cherished in society at the time of its formulation." 

Kilpatrick states specifically this generalization and its implications for democracy as contrasted with totalitarianism:

... Each type of world outlook demands its consistent type of education. The autocrat wishes docile followers; he therefore wishes a type of education to build docility and obedience. Democracy wishes all the people to be both able and willing to judge wisely for themselves and for the common good as to the policies to be approved; it will accordingly seek a type of education to build responsible, thinking public-spirited citizenship in all its people.

In America, where democracy is the avowed ideal social order, education should promote the ideals of democracy. Those in the business of education should, therefore, seek to discover the meaning of democracy and its implications for the program of the school. As Alberty very well states:

If ... what we strive to accomplish in education is to make our schools the finest possible exemplification of democratic living, and an agency for the understanding and continuous re-interpretation and refinement of the ideals that characterize our way of life as unique and distinctive, those who are concerned with the program of the school -- administrators, teachers, pupils, and community groups

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8Kilpatrick, op. cit., p. 5.
must seek to discover the deeper ideals and values to which we as a people give our wholehearted allegiance.  

Democracy is not easy to define. The very nature of democracy makes it impossible to establish a permanent meaning to the term. In a democracy the people themselves determine their ideals for the social order. As people change, their values also change. Furthermore, conditions change to such an extent that what a people accept as a "good" in one era may not be considered as such in another. This was exemplified by Walker, Beach, and Jamison when they showed that, because there existed in this country in its earlier years an abundance of agricultural land and unused natural resources, the idea of democracy became more or less identified with freedom from legislative control and with the doctrine of economic individualism. Gradually, however, as population increased and the country's land and other natural resources became owned and controlled, more and more people came to understand that "economic individualism — freedom from governmental control — was a temporary characteristic of our earlier history, that it is not essential to democracy, but on the contrary its continuance may easily become the destroyer of democracy itself."

It seems evident, therefore, that leaders in education should clearly distinguish between the vital aspects of democracy and those which are somewhat temporary aspects of it. If educational leaders are

9 Alberty, op. cit., p. 54.


11 Loc. cit.
to help in the maintenance of democratic values, they should give much thought to what these values are and which are vital to democratic living.

The following is believed to be a concise and basic statement of the meaning of democracy:

Democracy ... means voluntary choice, based on an intelligence that is the outcome of free association and communication with others. It means a way of living together in which mutual and free consultation rule instead of force, and in which cooperation instead of brutal competition is the law of life; a social order in which all the forces that make for friendship, beauty, and knowledge are cherished in order that each individual may become what he, and he alone, is capable of becoming.12

Another statement which further contributes to an understanding of the meaning of democracy is:

Democracy is not a mere association of individuals whose purposes or acts are individualistic in the laissez faire sense. It is not even primarily a form of government. It is an intelligent use of cooperative means for the progressive attainment of significant personalities. Significant personalities cannot be unfolded from within; they must be acquired by individuals in union with other individuals intent upon a similar quest.13

These statements disclose at least three basic ideals of democratic living which have implications for the school program: (1) respect for personality, (2) intelligence as a basis of choice and action, and (3) a way of living together characterized by cooperation and mutual welfare. Although these ideals are intimately related, they are isolated here for discussion and clarification.

The ideal of the dignity and the worth of every individual is probably the most distinctive and basic characteristic of democratic

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living. For the teacher of vocational agriculture this ideal has several important implications. The school's program of vocational agriculture will be designed for all individuals who want, need, and can profit by the program regardless of social and economic status. It means that the ability of individuals to think and to plan for themselves is definitely recognized. Once an individual is enrolled in the program, the teacher will do all in his power to see that he is dealt with in such a way as to give him a feeling of belonging to the group and of having his ideas welcomed and his abilities recognized by other members of the group; to develop his own abilities as far as he is capable; to share with others in directing affairs which are common to members of his group; and, in general, to enjoy freedom to live his own life as to him shall seem good, as long as doing so does not affect adversely the welfare and the happiness of others.

A second ideal fundamental to the refinement of democratic living is the use of intelligence as a basis of choice and action. Kilpatrick provides a definition for intelligence and means for its development when he says:

By intelligence, both individual and group, we mean the capacity to learn and use this learning in behalf of ends sought. Though man's native capacity forms the essential basis, effective intelligence is built up from experience, from study of situations, search for means of control, testing results by their consequences. A program of vocational agriculture can build up effective intelligence by helping each farmer or farm boy enrolled grapple with his on-going farm situations, search continuously for better means of dealing with those situations, and prove the worth of the means which

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14 Kilpatrick, op. cit., p. 423.
seem to be the most promising for each individual case. Furthermore, such a program could be effective in building up group intelligence by helping farmer and farm-boy groups grapple with the vocational problems which they have in common, and those which they have individually but can best solve through group action; for example, procuring fertilizer cooperatively.

Cooperation and mutual welfare were the third democratic ideal listed above. From the beginning our American way of life was concerned with cooperation for mutual welfare. In the early years of this country, cooperation took the form of log rollings, house raisings, corn shuckings, and the organization of military forces to fight off the Indians. All except the last of these were not only social affairs in those early days, but were also socially and economically desirable means of solving individual and group problems. The last was an essential means of solving a problem common to the people of the community as a whole. In modern America these and similar services have taken such forms as the Farm Bureau Federation, the local farmers' cooperative, civic clubs, the Soil Conservation Service, the Production and Marketing Administration, and the United Nations.

Increasingly, the conditions of modern life call for the re-interpretation of the concepts of individualism and associated living. In this era of fewer frontiers, of denser populations, of faster transportation and atomic energy, there is a need for reexamination of our concepts of individualism and cooperation. Over the years we live less and less to ourselves alone. More and more our individual actions affect the welfare of others. Yet, to an increasing degree, the individual profits from the contributions of others to his welfare.
Democracy recognizes the interdependence of individuals and holds that its organization should be such that it will further the good of all individuals. In this connection it recognizes that men possess increased opportunities for abundant living because of their working with other men, and because of the work of other men.\textsuperscript{15}

There is increasing need, therefore, for extension of cooperation in which each individual will see the significance of working together for the common good, will recognize one's own contribution to the group welfare, and will see not only the advantages to be obtained through group action but also the importance of assuming individual responsibilities for the attainment of the common good.

The teacher of vocational agriculture, in helping farmers and farm boys deal intelligently with their problems in farming and family living, has a great opportunity to participate in the promotion of the spirit and the meaning of cooperation. For example, through the established national organization, Future Farmers of America, farm boys can experience cooperation and what it means in the attainment of this democratic ideal.

There are many institutions in our social order that exercise an educative function. The more important ones are the home, the church, civic organizations, the neighborhood, and the vocations. The one institution in America charged exclusively with educative responsibility, however, is the school. If democracy is to survive, the school must be concerned with promoting the democratic way of life. It is imperative for democracy that individuals be trained to think for themselves. Dewey once said: "Democracy will be a farce unless individuals are

\textsuperscript{15}Alberty, op. cit., p. 294.
trained to think for themselves, to judge independently, to be critical, to be able to detect subtle propaganda and the motives which inspire it.  

The major function of the school, therefore, should be that of striving toward the democratic ideal by placing emphasis upon reflective thinking in all basic aspects of life and by promoting group living on an intelligent basis of cooperation. One of the major aspects of life in the rural community is that of farm and community living. Through its program of vocational agriculture the school should help farmers and farm boys to use intelligence in the solution of their many farm and community problems, and to promote group activities on an intelligent basis of cooperation. This means that the vocational problems of farmers and farm boys will be discovered and incorporated into instructional programs in which the respective participants will be led to think reflectively in dealing with these problems. The school, through the teacher of vocational agriculture, will work with farmers and farm boys as they actively engage in their farming activities. The problems of these individuals who are in active interaction with their farming environment will be incorporated into a program of group instruction designed to help them build up individual and group intelligence through discovering better means of dealing with each problem, trying and proving those means which appear to be best in the light of all the pertinent facts which they can muster, and evaluating the means in the light of how well they work in practice.

Instruction in vocational agriculture will of necessity be centered at two points: developing plans and developing the manipulative skills which may be needed by the individual to carry out those plans. The effectiveness of an excellent plan may, in actual practice, be no better than the ability of the individual to execute the plan effectively.

Although the emphasis in this point of view has been placed upon educational objectives, it is not difficult to recognize the prospect that the execution of these objectives will result in improvement of human living among those families participating. A rise in the standard of living for the farm group should result in an improved standard of living for the remainder of the total population.

**SUMMARY**

There are no sharp lines of demarcation between the three sections which have been considered up to now in this chapter. They have been considered separately for the sake of developing the primary concepts upon which the thesis of this chapter is based. As has been shown, learning takes place when the individual in active interaction with his environment discovers ways in which he can successfully cope with the situations which present themselves in that environment. He learns through the utilization of the powers and the habits of thinking. He learns through the application of intelligence to the on-going activities in which he is engaged in his environment. In a democratic society the chief function of the school is that of promoting intelligent action and developing good habits of thinking in which each individual through
experience learns that the greatest good for the individual is co-existent with the greatest good for society as a whole.

IMPLICATIONS OF THIS PHILOSOPHY FOR THE USE OF PROFESSIONAL TIME

The philosophy of education defined in this chapter has certain implications for the use of professional time by teachers of vocational agriculture. These implications and their relationship to the principles of democracy and learning are outlined below.

1. The teacher of vocational agriculture should devote a relatively large percentage of his time to work with members of organized groups. The purpose of the school through vocational agriculture as implied in this chapter can be realized only if the teacher of agriculture is to develop his instructional program around the wants and needs of individuals who have joined with other individuals in a learning program in the area of agriculture. As has been shown, interaction in such an environment is essential to the development of significant personalities. Learning is greatly facilitated when individuals with common problems and goals join together for the utilization of such knowledge in the solution of their problems for the attainment of their goals. Group learning activities become socially and economically desirable means of solving individual as well as group problems. On the other hand, the teacher of agriculture could utilize a large percentage of his time in helping individuals, particularly adults, who are not members of organized class groups, deal with isolated individual problems which are not a part of a systematically established program of learning.
The teacher of agriculture should see that his professional time is utilized in promoting the learning activities of individuals who are members of organized class groups in vocational agriculture.

2. The teacher of vocational agriculture should devote a large percentage of his out-of-class time to the supervision of farming activities of class members. The teacher should utilize his out-of-class time in those activities which contribute most to the attainment of good educational objectives. As has been pointed out, the main objective of the teacher of vocational agriculture is to promote intelligent action on the part of farmers and Future Farmers through the development of good thinking habits. The supervised farming program (projects and improved practices) is essential to the attainment of this purpose through vocational agriculture. Dewey emphasizes the idea that "there is an intimate and necessary relation between the process of actual experience and education."\(^{17}\) Supervised farming in vocational agriculture provides actual experience. The individual with a challenging farming program finds himself in an environment which is conducive to learning. In active interaction with this environment with rather definite goals for himself, the individual learner continuously finds himself faced with challenging problems which call forth thinking. Thus, the stage is set for a properly planned and effective program of instruction designed to help the individual think through these problems, develop plans of action, test these plans in an on-going farming program, evaluate the plans in terms of how well they work, and utilize the

experiences in still better solutions to these and similar problems as they tend to recur in the on-going activities of farming.

If the teacher of agriculture is to be a vital factor in the educational process outlined above, he must see that appropriate on-going farming experiences are provided. This means that the teacher will be genuinely concerned with a good understanding of the enrollee and his total environment, and will see that appropriate experiences are planned for the instructional program. Dewey emphasized the need for activities of these kinds when he outlined the following activities as incumbent upon the general educator:

He must survey the capacities and needs of the particular set of individuals with whom he is dealing and must at the same time arrange the conditions which provide the subject-matter or content for experiences that satisfy these needs and develop these capacities.\(^{18}\)

In a program of education which is so activity filled, there is a great need for the teacher of agriculture to lay strong foundation stones for a dynamic program of instruction in agriculture through properly instituting the supervised farming program.

Probably the best understanding regarding the institution of the supervised farming program for an in-school boy can be developed if the first-year boy is used as an example. During the summer months prior to school opening, the teacher of vocational agriculture should visit the prospective first-year boys. Doubtless, more than one visit should be made. On these visits one or more of the following things will be done: get acquainted with the prospective student and his family, particularly the father and mother; help the boy and his parents decide whether or

\(^{18}\)Ibid., p. 65.
not the boy will take vocational agriculture; study the home farm situation as a basis for planning a program of supervised farming; gain the confidence, respect, and cooperation of the boy and others directly affected by a supervised farming program; determine the interests of the boy in various aspects of supervised farming; help the boy and others directly affected select the various components of a program of supervised farming; and get the business arrangements made for the program, including an understanding with the parents and others directly affected in regard to the boy’s having responsibility for management.

For those individuals who are already established in farming as are the adults and many of the young farmers, the problems of laying the foundation for a strong and an effective instructional program are largely those of surveying the capacities, needs, and interests of the individuals of each class group, getting a first-hand knowledge of the problem situations which should become a part of the instructional program for that group, and getting the individuals concerned about their problem situations and desirous of doing something about them. They will be encouraged to join other individuals in seeking better ways of dealing with their problems through group discussion in a class of vocational agriculture. These professional activities of the teacher of

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19 In a study by Phipps, cooperation of parents was found to be the most essential requisite for successful supervised farming programs in the opinion of 285 teachers of agriculture. Furthermore, in-school students in vocational agriculture rated the farm visits of the teacher as the most important factor in obtaining the cooperation of their parents in the development of their farming programs. Lloyd J. Phipps, Supervised Farming Programs in Illinois, University of Illinois Bulletin, Vol. 46, No. 83 (Urbana, Illinois: University of Illinois, 1949), pp. 26-27.
vocational agriculture take time and require that visits be made to the farms of the young and adult farmers to initiate properly a program of either young-farmer or adult education in agriculture.

After the visits for the initiation of programs of supervised farming have been made, others are required if the instructional programs are to achieve the purposes which have been stated in this chapter. Instruction does not end in the classroom with the development of plans for dealing with the problems of farming. Frequent visits to the farms will be needed (1) to find out how well the plans are being followed and whether or not new and unexpected problems have arisen, (2) to develop certain manipulative abilities needed for the execution of the plans which have been made, (3) to help individuals to remake plans which would not work, and (4) to help individuals test the conclusions reached in the classroom by carefully determining how well they worked in practice, a most important phase of reflective thinking. The function of the teacher on such visits, just as in the classroom, is not that of providing the answers or even of indoctrinating for given answers, but that of providing the leadership in developing the ability of individuals to think reflectively through their problems with the help of all the resources available.

As is evident from what has been said, there are many purposes of supervisory visits to the farms of the individuals enrolled in classes of vocational agriculture. These purposes cannot all be met with one visit, or even two visits, if the affected individuals are to be a part of a dynamic program of vocational agriculture. Frequent visits distributed more or less throughout the calendar year are needed. Not all individuals will need the same number of visits because their educational
needs will be different. All individuals will need some visits, not only to help them with their problems of farming, but also to demonstrate the teacher's belief in the dignity and the worth of every individual in his classes. This implication was drawn from the principle of democracy that emphasized the value which is placed upon the individual human being. It is definitely implied in the point of view regarding learning in that "the way the individual feels about what he does is inseparably bound up with the learning products, as well as with the way he goes about learning." The teacher, therefore, must so utilize his time as to cause each student, regardless of social and economic status, to have not only a feeling of belonging to the group but also a feeling that the teacher is just as interested in his situation and in his personal growth as in those of anyone else. This means that the teacher must show enough interest in each individual to visit him on his home farm, to discover his problems, and to help him deal with them intelligently.

3. The teacher should help individuals work together toward the solution of common problems. One of the three basic ideals of democratic living emphasized in this chapter was that democracy is a way of living together characterized by cooperation and mutual welfare. Although opportunities are provided for progressing toward this ideal in all groups taught by the teacher, no group provides a better opportunity for the teacher, in this respect, than the in-school boys as members of the local F.F.A. chapter. One of the stated purposes of the F.F.A. organization, which is a part of a total program of vocational agriculture, is

20 Alberty, op. cit., p. 47.
"to practice brotherhood." Brotherhood and cooperation cannot be learned in a vacuum, but must be learned in group activities which can best be achieved through cooperative activity. Rural farm boys at the high school age have needs which can be met through cooperative activity. The teacher of vocational agriculture, therefore, should utilize the opportunities afforded in a program of vocational agriculture and the F.F.A. organization to lead his students to work together to attain goals which can best be achieved through cooperative activity. This means that the teacher of vocational agriculture should devote some of his time in the development of those abilities which can best be achieved through F.F.A. or similar activities.

4. The teacher of vocational agriculture should devote a sufficient amount of time to insure adequate preparation for teaching. If the instructional program is to be built around the current needs of the individuals enrolled rather than an established body of subject matter in the field of agriculture, the teacher of vocational agriculture will need to devote much time to preparation for teaching. Each teacher will have the responsibility of providing appropriate teaching materials and facilities. Some of these can be provided ready prepared, like bulletins, books, magazines, visual aids, hammers, saws, and the like. On the other hand, others will need to be prepared locally, like human and agricultural resource studies, current practices of farmers in regard to the different problems with which they deal, current prices of commodities which farmers have to buy, and special facilities to meet peculiar local conditions.

Furthermore, much time is required to maintain the materials and the facilities which have been provided. Bulletins, books, and other
sources of information, in a dynamic program of vocational agriculture, quickly get out-of-date, and need to be discarded and replaced with up-to-date materials. These materials, if they are to be utilized well, must be filed systematically in such a way that they can be found readily when they are needed by the students as well as by the teacher. The equipment must be maintained in good working order. In many schools, this is a responsibility which requires teacher time for supervision if not for actual maintenance.

One of the most important functions of the teacher of vocational agriculture is that of making appropriate plans for teaching. Since the teaching program is to be geared to local situations, there is much that the teacher needs to do to prepare for teaching his individual classes. The teacher of agriculture is justified in the use of much time for preparation, if such time is being used for increasing his ability to lead groups to deal more intelligently with their problems in farming and farm living.

5. The teacher of vocational agriculture should spend a relatively large percentage of his time inside the school community. The teacher is employed to serve the community. There are times, however, when his work for the community calls for his being outside the community's bounds. Many of the activities which promote the professional growth of the teacher can be engaged in only through working with other teachers of vocational agriculture who have similar interests and needs. There are times, too, when the teacher finds it necessary to leave the community for facilities needed in his instructional program inside the community. The teacher who makes the best use of his time will do all
in his power to plan his trips out of the community in such a way that each trip satisfies as many current and anticipated needs as possible. The investigator thinks that the teachers who make the best use of their professional time will tend to spend relatively more time inside the community than those who give less attention to the use of their time.

6. **The teacher of vocational agriculture should work intelligently and cooperatively with other teachers in the school system in helping to plan and to promote the educational program of the entire school to the end that it may make its maximum contribution to a dynamic, modern world.** The activities of the teacher of vocational agriculture may be quite different from those of the other members of the faculty. He may be the only member who works the year round. He may be the only teacher who gets a travel allowance to carry on his educational activities. Yet, he should not forget that he is a teacher in the school with a responsibility to work with other members of the faculty to plan and promote a more dynamic and functional school program which takes into account the present-day needs of the people of the area as they function not only as citizens of the community but also as citizens of the world. This means that the teacher should devote time to working with other teachers in the attainment of these common goals. He should be willing to assume his proportionate part of the responsibilities for planning and for promoting the total school program. He should assume his proportionate part of the responsibilities which other teachers assume because they are teachers in the school. This does not mean, however, that the teacher of vocational agriculture does not have his special problems and that his share of these total-school responsibilities should not be planned with these special responsibilities in mind.
CHAPTER IV

AN ANALYSIS OF THE OVER-ALL USE OF TIME
FOR PROFESSIONAL ACTIVITIES

Total time devoted to professional activities during the year, for teachers in single-teacher and multiple-teacher departments. One of the purposes of the study was to determine the amount of time teachers of vocational agriculture devote to their professional activities. As stated in Chapter I, the salary of a teacher of vocational agriculture in Georgia is based upon the kind of certificate held, the number of years of teaching experience, and the approved number of hours to be devoted by that teacher to the school's program of vocational agriculture. All teachers in this study were engaged in programs which called for a minimum of 2,500 hours of time per year.

This chapter is devoted to an analysis of the teachers' over-all use of time for professional activities.

Furthermore, the use of time of those teachers in multiple-teacher departments is compared with that of those teachers who work alone in their departments.

Table I shows the total time devoted to professional activities by both the "single" and the "multiple" teachers. It may be noted that the "single" teachers devoted an average total of 2,016 hours per year to professional activities. This was 12 per cent more time than the minimum amount of time they were expected to devote to such activities. On the average, they devoted 56 hours per week to professional activities. This latter figure agrees closely with the findings of
Purkey\textsuperscript{1} who found that teachers of vocational agriculture in Ohio were spending an average of 56.10 hours in their professional activities. Sweany\textsuperscript{2} found that teachers of agriculture in Michigan were devoting 58.5 hours per week to their work, and Hill\textsuperscript{3} found that such teachers in West Virginia devoted 54.2 hours to professional duties. All three of these studies were limited to teachers in single-teacher departments.

**TABLE I**

TIME DEVOTED TO ALL PROFESSIONAL ACTIVITIES FOR THE YEAR AND PER WEEK, SINGLE AND MULTIPLE-TEACHER DEPARTMENTS

<table>
<thead>
<tr>
<th>Single or multiple-teacher department</th>
<th>Number of teachers</th>
<th>Twelve months Number</th>
<th>Range</th>
<th>Per week Number</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>35</td>
<td>2810</td>
<td>2391-3272</td>
<td>56</td>
<td>47-65</td>
</tr>
<tr>
<td>Multiple</td>
<td>17</td>
<td>2697</td>
<td>2251-3034</td>
<td>54</td>
<td>45-61</td>
</tr>
</tbody>
</table>

The average number of hours per week spent in professional activities by "single" teachers ranged from 47 to 65. Only one of the 35 teachers had a record of less than 50 hours per week devoted to his professional activities.

\textsuperscript{1}Dorris R. Purkey, "Time Used for Professional Activities by Teachers of Vocational Agriculture in Ohio" (unpublished Master's thesis, The Ohio State University, Columbus, 1951).

\textsuperscript{2}Harvey P. Sweany, Use of Time by Teachers of Vocational Agriculture in Michigan." Division of Education, Michigan State College, Research Bulletin No. 2 (Lansing: Michigan State Board of Control for Vocational Education, 1945).

work. It should be kept in mind, however, that this part of the study did not cover one fiscal year of twelve months, but twelve months from September 1, 1951, through August 31, 1952. This means that this teacher could have devoted an average of 50 hours per week to professional activities for each of the two fiscal years 1951-52 and 1952-53.

In this study the seventeen teachers in the multiple-teacher departments devoted an average of 2697 hours per year or 54 hours per week to their professional duties. In this group two teachers spent less than 50 hours per week in professional activities. The range in time per week for the group was 45 to 61 hours.

Teachers in multiple-teacher departments, therefore, spent somewhat less time (2 hours per week), on the average, in professional duties than the 35 teachers who were in schools to themselves.

Table II shows, for 35 teachers in the single-teacher departments, the actual and relative amounts of time devoted to the twelve major activity areas included in this study. More time during the year was devoted to instructing class groups than to any other area of activities, as shown by the fact that an average of 723 hours, or 26 per cent of professional time, was spent in this area. The second-ranking area was that of on-farm supervision, to which 25 per cent of teacher time was devoted. This means that half of the total teacher time was devoted to group instruction and on-farm supervision. Preparation for teaching took up 10 per cent of teacher time. This means that 36 per cent of teacher time was devoted to group instruction and preparation for it. An average of 7 per cent of professional time was devoted to other school activities such as playground duties, lunch-period supervision, gate
<table>
<thead>
<tr>
<th>Activities</th>
<th>Teachers in single-teacher departments</th>
<th>Rank</th>
<th>Teachers in multiple-teacher departments</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average hours</td>
<td>Per cent of total time</td>
<td></td>
<td>Average hours</td>
</tr>
<tr>
<td>Instructing class groups</td>
<td>723</td>
<td>26</td>
<td>1</td>
<td>793</td>
</tr>
<tr>
<td>Supervising on farms</td>
<td>697</td>
<td>25</td>
<td>2</td>
<td>625</td>
</tr>
<tr>
<td>Preparing for teaching</td>
<td>282</td>
<td>10</td>
<td>3</td>
<td>276</td>
</tr>
<tr>
<td>Other school activities</td>
<td>195</td>
<td>7</td>
<td>4</td>
<td>183</td>
</tr>
<tr>
<td>Professional improvement activities</td>
<td>169</td>
<td>6</td>
<td>5</td>
<td>161</td>
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<tr>
<td>Supervising in school shop</td>
<td>160</td>
<td>6</td>
<td>6</td>
<td>83</td>
</tr>
<tr>
<td>Supervising in canning plants</td>
<td>159</td>
<td>6</td>
<td>7</td>
<td>140</td>
</tr>
<tr>
<td>F.F.A. activities</td>
<td>141</td>
<td>5</td>
<td>8</td>
<td>159</td>
</tr>
<tr>
<td>Keeping records and making reports</td>
<td>137</td>
<td>5</td>
<td>9</td>
<td>153</td>
</tr>
<tr>
<td>Supervising other community projects</td>
<td>75</td>
<td>3</td>
<td>10</td>
<td>46</td>
</tr>
<tr>
<td>Working with county agricultural organizations</td>
<td>43</td>
<td>2</td>
<td>11</td>
<td>55</td>
</tr>
<tr>
<td>Supervising V.F.T.P. classes</td>
<td>26</td>
<td>1</td>
<td>12</td>
<td>23</td>
</tr>
<tr>
<td>Total professional time</td>
<td>2810</td>
<td>102</td>
<td></td>
<td>2697</td>
</tr>
</tbody>
</table>

TABLE II
COMPARISON OF THIRTY-FIVE TEACHERS IN SINGLE-TEACHER DEPARTMENTS WITH SEVENTEEN TEACHERS IN MULTIPLE-TEACHER DEPARTMENTS WITH REGARD TO AMOUNT AND PERCENTAGE OF TIME DEVOTED TO VARIOUS ACTIVITIES
keeping at athletic events, home room, supervision of the loading or
unloading of buses, and keeping study hall. These 35 teachers spent an
average of 6 per cent of their time on professional-improvement activi-
ties. The next three areas of activities, in order of rank, were
individual instruction and supervision in the school shop, individual
instruction and supervision in the canning plant, and F.F.A. activities.
These areas took up 6, 6, and 5 per cent of teacher time, respectively.
Keeping records and making reports was the ninth-ranking area of activi-
ties and consumed 5 per cent of teacher time. The remaining three areas
took up a total of 5 per cent of professional time.

One of the purposes of this study was that of determining how
differently the time of teachers in multiple-teacher departments is
spent in professional activities as compared with that of teachers in
single-teacher departments. Further analysis of Table II reveals that
teachers in multiple-teacher departments spent relatively more time in
class instruction, 793 hours, as compared with 727 hours for the single-
teachers. On the other hand, teachers in multiple-teacher departments
devoted relatively less time in supervising farming programs, 625 as
compared with 697. Teachers in multiple-teacher departments spent some-
what more time as a group in F.F.A. activities and in keeping records
and making reports, but only about half as much time in supervising
activities in shop, in comparison with the teachers in the single-teacher
departments.

When the rank of the various activities for the two groups of
teachers is compared, one finds that the individual activities for the
two groups are no more than one rank removed from one another except for
such activities as supervising in school shop, F.F.A. activities, and
keeping records and making reports.

In the light of the fact that the over-all use of time by these
two groups was so similar, no further analysis was included in this
study. The investigator did make further analysis but found that what-
ever significant differences existed were fairly well reflected in
Tables I and II.

Utilization of professional time during nine school months. Data
in this study were analyzed to reveal the differences in the use of time
by the teachers during the school year and during the three summer
months. Table III shows how the 35 teachers in the single-teacher
departments spent their time during the school year of nine months,
beginning in September.

Each of the 35 teachers devoted time to all those activities
normally expected of teachers of vocational agriculture during the
school year. Every teacher spent time in class instruction, on-farm
supervision, F.F.A. activities, preparing for teaching, keeping records
and making reports, professional improvement, and other school acti-
vities.

On the other hand, not all the teachers devoted time to those
activities which might be considered by some to be non-essential.
Twenty-five teachers spent time during the school year in the community
cannery, 34 in the school shop at other times than the regular class
period, 31 in other community project activities, 33 in activities in
cooperation with county agricultural agencies, and 33 in supervision of
the Veterans Farm Training Program.
TABLE III
HOW THE THIRTY-FIVE TEACHERS USED THEIR PROFESSIONAL TIME
DURING NINE SCHOOL MONTHS

<table>
<thead>
<tr>
<th>Activity</th>
<th>Number teachers reporting</th>
<th>Total amount of time in hours</th>
<th>Average time devoted to activity</th>
<th>Range in number hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class instruction</td>
<td>35</td>
<td>25,073</td>
<td>716</td>
<td>500-962</td>
</tr>
<tr>
<td>On-farm supervision</td>
<td>35</td>
<td>18,128</td>
<td>518</td>
<td>194-805</td>
</tr>
<tr>
<td>Individual instruction and supervision</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canning plant</td>
<td>25</td>
<td>794</td>
<td>23</td>
<td>0-102</td>
</tr>
<tr>
<td>Shop</td>
<td>34</td>
<td>4,408</td>
<td>126</td>
<td>0-418</td>
</tr>
<tr>
<td>Other community projects</td>
<td>31</td>
<td>1,794</td>
<td>50</td>
<td>0-245</td>
</tr>
<tr>
<td>F.F.A. Activities</td>
<td>35</td>
<td>3,140</td>
<td>90</td>
<td>15-177</td>
</tr>
<tr>
<td>Other activities (total)</td>
<td>35</td>
<td>23,221</td>
<td>663</td>
<td>478-836</td>
</tr>
<tr>
<td>Preparation for teaching</td>
<td>35</td>
<td>8,291</td>
<td>237</td>
<td>11</td>
</tr>
<tr>
<td>Keeping records and making reports</td>
<td>35</td>
<td>3,557</td>
<td>101</td>
<td>40-194</td>
</tr>
<tr>
<td>Professional improvement</td>
<td>35</td>
<td>3,371</td>
<td>96</td>
<td>46-172</td>
</tr>
<tr>
<td>Working with county agricultural agencies</td>
<td>33</td>
<td>1,126</td>
<td>32</td>
<td>0-103</td>
</tr>
<tr>
<td>Supervising Veterans Farm Training Program</td>
<td>33</td>
<td>797</td>
<td>23</td>
<td>0-56</td>
</tr>
<tr>
<td>Other school activities</td>
<td>35</td>
<td>6,079</td>
<td>174</td>
<td>6-320</td>
</tr>
<tr>
<td>Total professional time</td>
<td>35</td>
<td>76,498</td>
<td>2186</td>
<td>1902-2518</td>
</tr>
</tbody>
</table>
Although more time was devoted to classroom instruction by these 35 teachers of vocational agriculture during the school months than to any other area of activities, twice as much time at work was spent outside the classroom during this period as was spent inside the classroom. On the average, these teachers spent 33 per cent of their time inside the classroom and 67 per cent of their time outside. Less time was spent in on-farm supervision by these 35 teachers than was spent in "other activities" including preparation for teaching, keeping records and making reports, professional improvement, working with county agricultural agencies, supervising the Veterans Farm Training Program, and other activities carried on as a member of the high school faculty. Furthermore, 38 per cent as much time was devoted to individual instruction and supervision in community projects during the school year as was devoted to on-farm supervision of farming programs of the enrollees.

On-farm supervision ranked second in the utilization of teacher time, 24 per cent of the time being devoted to activities in this area. This means that during the school year, 57 per cent of the time of these 35 teachers was spent in classroom instruction and on-farm supervision. Preparation for teaching ranked third in the use of time during this period with 11 per cent, while other school activities ranked fourth and consumed 8 per cent of the teachers' time. The only other activity that absorbed more than 5 per cent of teacher time during the school year was individual instruction and supervision in school shop, which used up 6 per cent of such time.

One of the significant things revealed by these data was the range in the number of hours devoted to a given activity by the individual teachers in the study. The range in the number of hours devoted to class
instruction was 500 to 962, or 462 hours. Still greater was the spread in the number of hours devoted to on-farm supervision, where one teacher at one end of the scale devoted only 124 hours and another teacher devoted 805 hours to this activity, a range of 681 hours. Although the average amount of time devoted to individual instruction and supervision in the school shop was 126 hours, one teacher devoted a total of 418 hours to activities in this area.

Utilization of professional time during three summer months. In this study the months of June, July, and August were considered as the three summer months. Only a few of the 35 teachers indicated that all-day classes were taught in June, and these for only one or two days. A few of the teachers indicated that their schools had opened for classes before September 1, 1952, and these taught for two to three days in August. Therefore, except for the extreme ends of this three-month period, the teachers were not engaged in in-school activities in the usual sense of the term.

Table IV shows an analysis of the use of professional time by the 35 teachers in this study during the three summer months of 1952. In interpreting the data contained in this table one should keep in mind that this was the period in which most of the teachers took at least one week of their vacation.

As was found in a study of the use of time during the school months, 35 teachers were found to spend their time in all those activities which would normally be expected of them during these three summer months. Such activities were on-farm supervision, preparation for teaching, keeping records and making reports, and professional
<table>
<thead>
<tr>
<th>Activity</th>
<th>Number teachers reporting</th>
<th>Total amount of time in hours</th>
<th>Average time devoted to activity Number hours</th>
<th>Per cent</th>
<th>Range in number hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class instruction</td>
<td>24</td>
<td>234</td>
<td>7</td>
<td>1</td>
<td>0-36</td>
</tr>
<tr>
<td>On-farm supervision</td>
<td>35</td>
<td>6,282</td>
<td>179</td>
<td>29</td>
<td>16-380</td>
</tr>
<tr>
<td>Individual instruction and supervision</td>
<td>33</td>
<td>4,774</td>
<td>136</td>
<td>22</td>
<td>0-324</td>
</tr>
<tr>
<td>Canning plant</td>
<td>33</td>
<td>1,193</td>
<td>24</td>
<td>5</td>
<td>0-103</td>
</tr>
<tr>
<td>Shop</td>
<td>33</td>
<td>886</td>
<td>25</td>
<td>4</td>
<td>0-239</td>
</tr>
<tr>
<td>Other community projects</td>
<td>21</td>
<td>886</td>
<td>25</td>
<td>4</td>
<td>0-239</td>
</tr>
<tr>
<td>F.F.A. activities</td>
<td>33</td>
<td>1,787</td>
<td>51</td>
<td>8</td>
<td>0-177</td>
</tr>
<tr>
<td>Other activities (total)</td>
<td>35</td>
<td>6,708</td>
<td>192</td>
<td>31</td>
<td>103-301</td>
</tr>
<tr>
<td>Preparation for teaching</td>
<td>35</td>
<td>1,568</td>
<td>45</td>
<td>7</td>
<td>8-163</td>
</tr>
<tr>
<td>Keeping records and making reports</td>
<td>35</td>
<td>1,238</td>
<td>35</td>
<td>6</td>
<td>11-90</td>
</tr>
<tr>
<td>Professional improvement</td>
<td>35</td>
<td>2,559</td>
<td>73</td>
<td>12</td>
<td>16-128</td>
</tr>
<tr>
<td>Working with county agricultural agencies</td>
<td>30</td>
<td>390</td>
<td>11</td>
<td>2</td>
<td>0-48</td>
</tr>
<tr>
<td>Supervising Veterans Farm Training Program</td>
<td>26</td>
<td>198</td>
<td>6</td>
<td>1</td>
<td>0-17</td>
</tr>
<tr>
<td>Other school activities</td>
<td>27</td>
<td>754</td>
<td>22</td>
<td>3</td>
<td>0-152</td>
</tr>
<tr>
<td>Total professional time</td>
<td>35</td>
<td>21,862</td>
<td>624</td>
<td>100</td>
<td>415-777</td>
</tr>
</tbody>
</table>
improvement. Only 24 of the 35 teachers were found to carry on any class instruction during this period. Thirty-three of the 35 teachers devoted at least some time to F.F.A. activities and to individual instruction and supervision in the canning plant and shop. Only 21 of the teachers were engaged in "other community projects" during the summer. Twenty-seven spent some time in "other school activities." Twenty-six of the 35 teachers devoted time to the Veterans Farm Training Program.

Although the 35 teachers, on the average, devoted more time to on-farm supervision than to any other one area of activities, less time was devoted to on-farm supervision than to individual instruction and supervision in community projects like the canning plant, shop, and other community projects. While 31 per cent of teacher time was devoted to community projects, only 29 per cent of teacher time was devoted to on-farm supervision of farming programs of in-school and out-of-school class members.

Individual instruction and supervision in the canning plant ranked second to on-farm supervision in the amount and percentage of time devoted to a professional activity. A total of 176 hours, or 22 per cent of teacher time, on the average, was devoted to this area, which is the equivalent of almost 3 weeks.

Professional Improvement, F.F.A. activities, keeping records and making reports, and individual instruction and supervision in shop followed the time spent in the canning plant, in that order, with 12, 8, 6, and 5 per cent of time, respectively, being spent in those areas. Each of the other areas of activities used up less than 5 per cent of teacher time during the summer months.
The range in the number of hours devoted to each of the areas of activities during the summer months by the teachers in this study was somewhat surprising. Whereas one teacher devoted 380 hours to on-farm supervision, another teacher spent only 16 hours. While one teacher was spending 324 hours in the canning plant, two other teachers devoted no time to this area. One teacher was spending 239 hours in "other community projects," while fourteen others were devoting no time to such projects. While one teacher was devoting 163 hours to preparation for teaching, another was devoting only 8 hours to this activity. One teacher was devoting 16 hours to professional improvement; during the same period another teacher was spending 128 hours in professional improvement. There is no intention to imply that teachers in different situations, as these teachers were, should devote their time to the same activities with approximately the same concentration of effort. There is some reason to believe, however, that there should not have been the wide variation in the amount of time different teachers devoted to certain of these activities. More systematic planning of summer activities might tend to eliminate this wide divergence in the amount of time devoted to the various activities during the three summer months.

Distribution of time devoted to various activities between the nine school months and the three summer months. Not only is it important in this study to determine how the teachers of vocational agriculture utilized their time during the nine school months and how they utilized their time during the three summer months, but it also is important to determine how their time devoted to a given area of activities is divided between the nine school months and the three summer months. Table V is
### Table V

**How time of thirty-five teachers devoted to various professional activities was divided between nine school months and the three summer months**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Total time twelve months (hours)</th>
<th>Time during nine school months (hours)</th>
<th>Time during three summer months (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Per cent</td>
<td>Number</td>
</tr>
<tr>
<td>Class instruction</td>
<td>72</td>
<td>100</td>
<td>71</td>
</tr>
<tr>
<td>On-farm supervision</td>
<td>69</td>
<td>100</td>
<td>52</td>
</tr>
<tr>
<td>Individual instruction and supervision</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canning plant</td>
<td>16</td>
<td>100</td>
<td>23</td>
</tr>
<tr>
<td>Shop</td>
<td>16</td>
<td>100</td>
<td>12</td>
</tr>
<tr>
<td>Other community projects</td>
<td>8</td>
<td>100</td>
<td>10</td>
</tr>
<tr>
<td>F.F.A. activities</td>
<td>29</td>
<td>100</td>
<td>23</td>
</tr>
<tr>
<td>Other activities (total)</td>
<td>19</td>
<td>100</td>
<td>17</td>
</tr>
<tr>
<td>Preparation for teaching</td>
<td>23</td>
<td>100</td>
<td>23</td>
</tr>
<tr>
<td>Keeping records and making reports</td>
<td>16</td>
<td>100</td>
<td>10</td>
</tr>
<tr>
<td>Professional improvement</td>
<td>16</td>
<td>100</td>
<td>9</td>
</tr>
<tr>
<td>Working with other agricultural agencies</td>
<td>4</td>
<td>100</td>
<td>3</td>
</tr>
<tr>
<td>Supervising Veterans Farm Training Program</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other school activities</td>
<td>19</td>
<td>100</td>
<td>17</td>
</tr>
<tr>
<td>Total professional time</td>
<td>2,810</td>
<td>100</td>
<td>2,186</td>
</tr>
</tbody>
</table>
organized in such a way as to reveal how time spent in a given activity is distributed between these two periods. In addition, Figure II shows graphically how the percentage of time devoted to the different areas of activities was divided between the nine school months and the three summer months. Discounting the factor of vacation time, which was relatively heavier during the three-month summer period than during the nine-month school period, an area of activities to which the teacher devotes a uniform amount of time throughout the year would use up 75 per cent of the time to be devoted to it for the nine-month period, and 25 per cent of the time to be devoted to it for the three-month period. With this gauge in mind a better understanding of the distribution of time for the given activities can be attained.

Several of the activities of a teacher of vocational agriculture as subdivided in this study receive a relatively uniform amount of attention as far as time is concerned throughout the fiscal year. Such activities, or areas of activities, are on-farm supervision, individual instruction and supervision in school shop, keeping records and making reports, and working with agricultural agencies.

There are certain activities, or areas of activities, which received a relatively heavy concentration of time during the nine-month school term; namely, class instruction, preparation for teaching, supervising the Veterans Farm Training Program, and other activities which the teacher of agriculture engages in as a regular teacher in the school. The teacher of vocational agriculture devoted more than 75 per cent of the total time devoted to those activities during the nine-month school period, and less than 25 per cent of the total time devoted to those activities during the three-month summer period.
HOW PERCENTAGE OF TIME DEVOTED TO VARIOUS PROFESSIONAL ACTIVITIES WAS DIVIDED BETWEEN THE NINE SCHOOL MONTHS AND THE THREE SUMMER MONTHS
On the other hand, there were certain activities, or areas of activities, which received relatively heavy concentration of teacher time during the three-month summer period. Such activities, arranged in the order of their concentration, were individual instruction and supervision in the canning plant, with 86 per cent of the total time devoted to it being spent during the summer; professional improvement, with 43 per cent; F.F.A. activities, with 36 per cent; and other community projects, with 34 per cent. In the light of the fact that a very large percentage of the products canned in the canning plants is either fruits or vegetables, it is not surprising that this area of activities received such a heavy concentration of teacher time during the summer months when the bulk of these products is available. In the light of the fact that the State Conference of Teachers of Vocational Agriculture was held during the summer of 1956 and used up one week of the teacher's time, it is not surprising that a relatively larger proportion of the time devoted to this area was spent during the summer months. Furthermore, since many of the chapters of Future Farmers of America represented by the teachers in this study either spent a week in summer camp or took an educational tour of a week or ten days, one would expect the amount of time devoted to this area to be somewhat more heavily concentrated in the three-month summer period.

Amount of time spent outside the community. Many individuals in the field of vocational agriculture have recognized the fact that the teacher of vocational agriculture has many decisions to make to see that all his responsibilities are properly taken care of, and that he has enough time to do those things which mean most to the attainment of
sound educational objectives. One of the factors which affects the amount of time the teacher has for his educational program is the time he spends outside the community, even though these trips may be essential to the attainment of sound educational objectives.

Table VI contains an analysis of the number and the percentage of work days the 35 teachers spent at least in part outside the school community. The percentages are based upon a work month of 21 days and a work year of 250 days.

The teachers, on the average, were out of their communities 72 days for at least some of their professional time. This means that at least a portion of 29 per cent of their work days for the year was spent outside their communities.

For the 35 teachers the number of days outside the community ranged from 29 to 135 days, or from 12 to 54 per cent of the work days for the year.

An analysis of the number and the percentage of work days outside the community by months indicates that there were two peak periods during the year for the teachers to be outside the community: summer and fall. The summer peak is somewhat higher than that of the fall, as would normally be expected. It was within this period that teachers were attending a teachers' conference for one week, and many were outside the community for F.F.A. camps or trips. The high month for this period was July when the teachers were outside the community on average of 42 per cent of the work days. The fall peak period was centered on October when 37 per cent of the work days found the teachers outside the community for at least a part of the day. One of the chief factors contributing to this peak was that many of the teachers in the study were participating...
TABLE VI
NUMBER AND PERCENTAGE OF WORK DAYS AT LEAST PART OF WHICH WERE SPENT OUTSIDE COMMUNITY, BY MONTHS, BY THE THIRTY-FIVE TEACHERS

<table>
<thead>
<tr>
<th>Month</th>
<th>Total number days outside community</th>
<th>Average number days outside community</th>
<th>Percentage of days outside community</th>
<th>Range in number days outside community</th>
</tr>
</thead>
<tbody>
<tr>
<td>September</td>
<td>188</td>
<td>5</td>
<td>26</td>
<td>0-16</td>
</tr>
<tr>
<td>October</td>
<td>271</td>
<td>8</td>
<td>37</td>
<td>0-14</td>
</tr>
<tr>
<td>November</td>
<td>172</td>
<td>5</td>
<td>23</td>
<td>0-14</td>
</tr>
<tr>
<td>December</td>
<td>147</td>
<td>4</td>
<td>20</td>
<td>0-9</td>
</tr>
<tr>
<td>January</td>
<td>168</td>
<td>5</td>
<td>23</td>
<td>0-14</td>
</tr>
<tr>
<td>February</td>
<td>186</td>
<td>5</td>
<td>25</td>
<td>1-12</td>
</tr>
<tr>
<td>March</td>
<td>198</td>
<td>6</td>
<td>27</td>
<td>1-10</td>
</tr>
<tr>
<td>April</td>
<td>207</td>
<td>6</td>
<td>28</td>
<td>1-16</td>
</tr>
<tr>
<td>May</td>
<td>233</td>
<td>7</td>
<td>32</td>
<td>1-13</td>
</tr>
<tr>
<td>June</td>
<td>225</td>
<td>6</td>
<td>31</td>
<td>0-15</td>
</tr>
<tr>
<td>July</td>
<td>307</td>
<td>8</td>
<td>42</td>
<td>3-14</td>
</tr>
<tr>
<td>August</td>
<td>217</td>
<td>6</td>
<td>30</td>
<td>0-19</td>
</tr>
<tr>
<td>Total</td>
<td>2519</td>
<td>72</td>
<td>29</td>
<td>29-135</td>
</tr>
</tbody>
</table>
in local, county, or state fairs held outside their communities. There was a range of 106 days between the smallest and the largest number of days outside the community reported by the 35 teachers, the smallest number being 29, and the largest being 135. The teacher reporting 135 days was outside his community on more than half his work days.

The average number of days outside the community varied greatly between the different months of the year. The month of July led all the others in number of days these teachers were outside their school areas. This was probably due in part to the fact that all but one of the 35 teachers were in attendance at the State Conference of Teachers of Vocational Agriculture for one week during July. Another peak month was October when, on the average, 8 days were spent at least in part outside the community. During this month fairs, shows, and the state F.F.A. rally were held, in which these teachers participated. Another peak month was May when, on the average, these teachers were outside the community 7 days. This peak was probably due to livestock shows, judging contests, and district F.F.A. rallies.

Summary of over-all use of professional time. All teachers in this study were engaged in programs which called for a minimum of 2,500 hours of professional time for the year, or 50 hours per week. Yet, the facts showed that, on the average, the teachers in single-teacher departments spent 2,810 hours, or over 56 hours per week, in professional activities.

A comparison of the amount of time put in by teachers in single-teacher departments with that put in by teachers in multiple-teacher departments revealed that, on the average, the teachers in single-teacher
departments devoted 2 hours more per week to their professional duties than did the teachers in multiple-teacher departments. The teachers in single-teacher departments put in less time in classroom teaching, more time in supervising farming programs, more time in the canning plant, almost twice as much time in the school shop (at other than class periods), more time in supervising other community projects, and somewhat less time in F.F.A. activities and in keeping records and making reports. When the different areas of activities were ranked for the two groups in the order of the amount of time devoted to them, there was, however, surprisingly little difference in the relative positions of the different areas for the two groups.

An analysis was made of the utilization of professional time by the 35 teachers in single-teacher departments during the nine months when school was in session. The data revealed that the teachers, on the average, devoted twice as much time to activities outside the classroom as they did to activities inside the classroom. This means that the work-load of a teacher of vocational agriculture cannot be adequately judged on the basis of the number of hours he is spending on in-school class activities. Approximately one-fourth of his time was devoted to on-farm supervision of farming programs. Nine per cent of the teacher's time, on the average, was devoted to individual instruction and supervision in the canning plant, school shop, and other community projects. Four per cent of the teacher's time was devoted to F.F.A. activities. About a third of the teacher's time was devoted to all other activities, including preparation for teaching, regular school duties other than teaching, professional improvement, working with county agricultural organizations, and supervising the Veterans Farm Training Program.
An analysis was also made of the amount and percentage of time devoted to professional duties during the three summer months. One of the most significant findings was that there was a wide variation among the 35 teachers in the distribution of their professional time among the different areas of activities. On the average, 29 per cent of the teacher's time was devoted to on-farm supervision of farming programs for the largest proportion of total time. The canning plant took the second largest portion of the teacher's time, 22 per cent. Professional improvement used up 12 per cent of the time of these teachers, on the average. F.F.A. activities received 8 per cent of the teacher's time. Less time was devoted to on-farm supervision during the summer months, on the average, than was devoted to community projects, like the canning plant and the shop.

Analysis of the relative amount and percentage of time devoted to the various areas of activities provides some facts which are very important in this study. Although the nine school months cover 75 per cent of the year, this period consumed, on the average, 78 per cent of the teacher's total time; 99 per cent of his time he devoted to class instruction, 84 per cent of the time he devoted to preparing for teaching, and 89 per cent of the time he devoted to regular school duties other than teaching and preparing for teaching. On the other hand, the three summer months consumed, on the average, 86 per cent of the time the teacher devoted to the canning plant, 47 per cent of the time he devoted to professional improvement, 36 per cent of the time he spent in F.F.A. activities, and 24 per cent of the time he devoted to other community projects than the canning plant and the shop. Other areas of activities like on-farm supervision, shop, keeping records and making
reports, and working with other agricultural agencies demanded about as much of the time during the summer months as during the other months of the year.

The number and the percentage of work days spent inside the school community have much to do with the over-all accomplishments in a dynamic program of vocational agriculture. The study showed that a relatively large percentage of a teacher's time is spent outside the school community. For the twelve months of the study, the teachers, on the average, spent at least part of 72 work days, or 29 per cent, outside the community. There were two peak months during the year, which represented two peak periods during the year when the teachers are out of their communities more than they are at other seasons of the year: July and October. There was wide variation among the teachers in the number of days out of the community, with a range of from 29 to 135 days.
TIME DEVOTED TO ORGANIZED CLASS ACTIVITIES

This chapter presents an analysis of the findings regarding the time devoted to organized class activities. Class activities as interpreted in this chapter will consist of the activities the teacher devoted time to, which directly contribute to the learning activities of given organized class groups with the exception of preparation for teaching. Since the time for this activity was not broken down by class groups, this item could not be included in this part of the study. This means that not only time devoted to the classroom will be considered but also time devoted to such activities as on-farm supervision, individual instruction and supervision in shop for members of given class groups, and (for the all-day classes) F.F.A. activities. The time devoted to F.F.A. activities was included because many of the objectives of good teaching were believed by the investigator to be attained through many of the activities being carried on in the local chapters of this organization. Each of the teachers included in this study devoted time to the development of F.F.A. programs for the all-day group of boys.

As has been stated earlier in this report, a program of vocational agriculture should be built around the needs of individuals. These needs can best be met through organized class group activities, because learning best takes place when individuals with common interests and needs work together in planning to meet those needs. Many of the problems which become a part of the instructional program for organized class groups can best be solved through group action as well as group planning. Since organized class activities, according to this point of
view, play such an important part in a good program of vocational agricul-
ture, this chapter is devoted to a study of the time these 35 teachers
dedicated to organized class activities. Furthermore, this analysis should
throw light on the amount of time teachers need for teaching different
organized class groups.

**Time devoted to organized class activities, by kinds of classes.**

Data with regard to the amount and the percentage of professional time
the teachers devoted to organized class activities for each of the
different kinds of class groups are presented in Table VII. All the
teachers in the study had organized class groups of all-day boys at the
high school level. Slightly more than half of them worked with organized
groups of day-unit boys. Nine, or 26 per cent, of the teachers worked
with special farm shop groups. Five of the 35 teachers organized and
carried on an educational program with young farmers. One of these
teachers taught young farmers but no adults in organized groups. Thirty-
four of the 35 teachers worked with organized groups of adult farmers.

More all-day classes were found in the schools taught by the 35
teachers than any other kind of classes, a total of 107, or an average of
three classes per teacher. The adult classes were second in number with
51, or one and one-half classes per teacher in the 34 schools with such
classes. The third most common was the day-unit class, of which there were
19, one of the 18 teachers having two such classes. Ten farm-shop classes
were taught by nine teachers. The young-farmer classes were least fre-
quently in that only 5 were found in the 35 schools represented in the study.

The enrollment in the different kinds of classes was somewhat
proportional to the number of class groups. At least the rank order of
<table>
<thead>
<tr>
<th>Kind of class</th>
<th>Teachers with class</th>
<th>Number class groups</th>
<th>Number enrolled</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Per cent</td>
<td>Total</td>
<td>Average per teacher</td>
</tr>
<tr>
<td>All-day</td>
<td>35</td>
<td>100</td>
<td>107</td>
<td>3.1</td>
</tr>
<tr>
<td>Day-unit</td>
<td>18</td>
<td>51</td>
<td>19</td>
<td>1.1</td>
</tr>
<tr>
<td>Special farm shop</td>
<td>9</td>
<td>26</td>
<td>10</td>
<td>1.1</td>
</tr>
<tr>
<td>Young farmer</td>
<td>5</td>
<td>14</td>
<td>5</td>
<td>1.0</td>
</tr>
<tr>
<td>Adult</td>
<td>34</td>
<td>97</td>
<td>51</td>
<td>1.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Kind of class</th>
<th>Total</th>
<th>Average per teacher</th>
<th>Per class group</th>
<th>Per enrollee</th>
<th>Percentage of total time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All classes</td>
<td>Per class group</td>
<td>Per enrollee</td>
<td>All classes</td>
<td>Per class group</td>
</tr>
<tr>
<td>All-day</td>
<td>39,420</td>
<td>1,126</td>
<td>369</td>
<td>24</td>
<td>40</td>
</tr>
<tr>
<td>Day-unit</td>
<td>4,435</td>
<td>246</td>
<td>235</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>Special farm shop</td>
<td>2,712</td>
<td>301</td>
<td>272</td>
<td>19</td>
<td>10</td>
</tr>
<tr>
<td>Young farmer</td>
<td>748</td>
<td>150</td>
<td>150</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>Adult</td>
<td>9,907</td>
<td>291</td>
<td>194</td>
<td>7</td>
<td>10</td>
</tr>
</tbody>
</table>
the enrollment was the same as the rank order of the number of classes reported in the study. The number of enrollees per teacher ranked in the same order, with an average of 47 all-day boys per teacher, 43 adults, 23 day-unit boys, 16 special farm-shop boys, and only 11 young farmers per teacher.

Table VII provides data regarding the average enrollment per class for the different kinds of class groups. The largest groups were found in the adult classes, where there were, on the average, 29 adults per class. The day-unit classes were second in average enrollment with 22 students per class. The all-day classes were third in average enrollment with 15 students per class. The special farm-shop classes had almost as many, with 14 students. The smallest average enrollment was found in the young-farmer classes where there were 11 students enrolled per class.

The teachers of vocational agriculture in this study devoted more time to their work with all-day boys than with any other class group. The nine teachers with special farm-shop classes devoted an average of 301 hours during the year to their work with these groups. Adult class teaching and supervision consumed an average of 291 hours of the 74 teachers' time who carried on work with adult groups. The 18 teachers who organized and taught day-unit groups spent an average of 246 hours with individuals enrolled in these classes. The young-farmer classes required the least amount of time (150 hours) as determined by the five teachers who had classes of this kind. This is, doubtless, due to three causes: the fact that there was only one class per teacher, the fact that there was the smallest average enrollment in these classes, and the fact that much less time was devoted to group instruction in
this kind of class than for any other group except the adult classes.

Table VII also presents an analysis of the average number of hours the teachers in this study devoted to the different individual class groups. Most time per class group, 369 hours, was given the all-day classes. This is probably accounted for in the facts that more time was devoted to the supervision of farming programs of members of this group and that the time devoted to the F.F.A. activities was credited to this group. The special farm-shop classes received the second largest amount of teacher time, 272 hours. The day-unit class groups were given almost as much time as the special farm-shop, 235 hours. The adult and young-farmer classes received relatively less time per class than the others, 194 and 150 hours, respectively. These classes, being made up of out-of-school groups, were not given nearly so much class time as the other three groups.

An analysis of the amount of time per enrollee the teachers devoted to the various kinds of classes revealed that the 35 teachers with all-day classes spent an average of almost 24 hours per enrollee in the various activities connected with that kind of class. The special farm-shop enrollees received an average of 19 hours of teacher time. The young farmers, on the average, received 13 hours of their teachers' professional time. The day-unit boys were given an average of 11 hours of teacher time, while the adult farmer enrollee received an average of 7 hours of teacher time.

Table VII also shows the percentage of total professional time the teachers, on the average, devoted to each of the five kinds of classes. The all-day activities took 40 per cent of the time of the 35 teachers included in this study, each class taking
13 per cent of teacher time. Adult farmer class activities consumed 10 per cent of the time of the 34 teachers with such classes, or 7 per cent for each class taught. The day-unit class activities received 9 per cent of the time of teachers who participated in those classes, each class receiving 8 per cent of teacher time. The special farm-shop classes took up 10 per cent of the time of the 9 teachers who carried on these classes, or 9 per cent for each class taught. The young-farmer classes consumed only 6 per cent of the professional time of the 5 teachers who taught young farmers, which represent the average percentage for each class taught. The adult class work received 10 per cent of the time of the 34 teachers who taught adults, an average of 7 per cent of teacher time per class.

**Time devoted to all-day classes.** As was found in Table VII, the teachers in this study taught an average of over three all-day classes. Many school leaders evaluate a program of vocational agriculture in terms of how well this particular group is provided for in the program of instruction.

An analysis of the time devoted by the 35 teachers to the all-day aspect of their programs of vocational agriculture is shown in Table VIII. The teachers in this study devoted an average of 1,126 hours to their work with their all-day groups. This comprised 40 per cent of the time devoted to all professional activities by this group.

Classroom instruction consumed practically half of the total time devoted to all-day groups; 545 hours, on the average, were devoted to this activity. Classroom instruction with these groups consumed almost one-fifth of the total teacher time. The teachers in this study spent
TABLE VIII

ANALYSIS OF TIME DEVOTED TO ALL-DAY CLASSES BY THIRTY-FIVE TEACHERS

<table>
<thead>
<tr>
<th>Time devoted to all professional activities</th>
<th>Number of teachers reporting</th>
<th>Total time</th>
<th>Average time</th>
<th>Percentage of total time</th>
<th>Percentage of time devoted to all-day classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time devoted to all all-day activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instruction</td>
<td>35</td>
<td>39,420</td>
<td>1,126</td>
<td>40</td>
<td>100</td>
</tr>
<tr>
<td>On-farm supervision</td>
<td>35</td>
<td>14,041</td>
<td>401</td>
<td>14</td>
<td>36</td>
</tr>
<tr>
<td>Individual instruction and supervision in shop</td>
<td>25</td>
<td>1,392</td>
<td>40</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>F.F.A. activities</td>
<td>35</td>
<td>4,927</td>
<td>141</td>
<td>5</td>
<td>12</td>
</tr>
</tbody>
</table>

98,361
an average of 401 hours, or 14 per cent of their time, in on-farm supervision of all-day boys. An average of 141 hours, or 5 per cent of total teacher time, was devoted to F.F.A. activities. The remainder of the time devoted to all-day groups was spent in individual instruction and supervision of all-day boys in school shop.

**Time devoted to day-unit classes.** As was discovered in Table VII, 18 of the 35 teachers in the study reported a total of 19 day-unit class groups. A total of 411 boys were enrolled in these classes, an average of 23 boys per teacher. The range in the number of boys per teacher was 12 to 43.

An analysis of the time devoted to day-unit classes is presented in Table IX. The 18 teachers devoted an average of 246 hours to day-unit class work, which represented 8.8 per cent of their total professional time. A total of 4,435 hours was devoted to 411 boys, an average of 11 hours per boy.

The total time devoted to day-unit work was divided among the various types of activities as follows: group instruction, 72 per cent; on-farm supervision of the individuals' farming programs, 25 per cent; and individual instruction and supervision in shop activities at other than the regular class period, 3 per cent.

**Time devoted to special farm-shop classes.** Nine teachers of the 35 in this study were found to have taught special farm-shop classes during 1951-52. An analysis of the time devoted to this aspect of their vocational agriculture program is made in Table X. A total of 143 boys were enrolled in 10 classes taught by the nine teachers. This meant that there was an average of 16 boys in special farm-shop classes
<table>
<thead>
<tr>
<th>Time devoted to all professional activities</th>
<th>Total time (hours)</th>
<th>Average time (hours)</th>
<th>Percentage of total time</th>
<th>Percentage of time devoted to day-unit classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time used in day-unit activities</td>
<td>4,435</td>
<td>246</td>
<td>8.8</td>
<td>100</td>
</tr>
<tr>
<td>Instruction</td>
<td>3,179</td>
<td>177</td>
<td>6.3</td>
<td>72</td>
</tr>
<tr>
<td>On-farm supervision</td>
<td>1,129</td>
<td>63</td>
<td>2.2</td>
<td>25</td>
</tr>
<tr>
<td>Individual instruction and supervision in shop</td>
<td>127</td>
<td>7</td>
<td>.2</td>
<td>3</td>
</tr>
</tbody>
</table>
### TABLE X

**ANALYSIS OF TIME DEVOTED TO SPECIAL FARM-SHOP CLASSES BY NINE TEACHERS**

<table>
<thead>
<tr>
<th>Time devoted to all professional activities</th>
<th>Total time (hours)</th>
<th>Average time (hours)</th>
<th>Percentage of total time</th>
<th>Percentage of time devoted to shop classes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>26,115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time used with special shop classes</td>
<td>2,712</td>
<td>301</td>
<td>1.0</td>
<td>100</td>
</tr>
<tr>
<td>Instruction</td>
<td>1,631</td>
<td>181</td>
<td>.6</td>
<td>60</td>
</tr>
<tr>
<td>On-farm supervision</td>
<td>530</td>
<td>59</td>
<td>.2</td>
<td>20</td>
</tr>
<tr>
<td>Individual instruction and supervision in</td>
<td>552</td>
<td>61</td>
<td>.2</td>
<td>20</td>
</tr>
<tr>
<td>shop</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
per teacher. A total of 2,712 hours, or an average of 301, was spent in special farm-shop activities, which represented 1 per cent of the teachers' total professional time. An average of 19 hours per boy was devoted to the 143 boys enrolled in the 10 classes taught by the nine teachers.

The time devoted to the activities connected with the special farm-shop classes was divided as follows: group instruction, 60 per cent; on-farm supervision of the shop programs of the enrollees, 20 per cent; and individual instruction and supervision in shop activities at other than the regular class period, 20 per cent. It can be seen, therefore, that as much time was devoted to individual instruction and supervision in school shop as was devoted to on-farm supervision, and a third as much as was devoted to group instruction at the regular class period.

**Time devoted to young-farmer classes.** Analysis of the time given to young-farmer teaching is contained in Table XI. Only five of the 35 teachers in the study conducted a complete young-farmer class. Table XI shows that three teachers devoted an average of 150 hours, or 5.5 per cent of their professional time to the young-farmer program.

The total time devoted to the young-farmer program was divided among the different types of activities as follows: instruction, one-fifth; on-farm supervision of farming programs, two-thirds; and individual instruction and supervision of enrollees in shop at other than regular class period, approximately one-eighth.

**Time devoted to adult classes.** As was shown in Table VII, 1,467 adults were enrolled in 51 classes in 34 schools. This represented the
<table>
<thead>
<tr>
<th>Activity</th>
<th>Total time (hours)</th>
<th>Average time (hours)</th>
<th>Percentage of total time</th>
<th>Percentage of time devoted to young-farmer classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total time devoted to all professional activities</td>
<td>13,508</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time devoted to young-farmer classes</td>
<td>748</td>
<td>150</td>
<td>5.5</td>
<td>100</td>
</tr>
<tr>
<td>Instruction</td>
<td>150</td>
<td>30</td>
<td>1.1</td>
<td>20</td>
</tr>
<tr>
<td>On-farm supervision</td>
<td>503</td>
<td>101</td>
<td>3.7</td>
<td>67</td>
</tr>
<tr>
<td>Individual instruction and supervision in shop</td>
<td>95</td>
<td>19</td>
<td>.7</td>
<td>13</td>
</tr>
</tbody>
</table>
largest enrollment of any class group except the all-day. Table XII presents an analysis of the professional time the 34 teachers devoted to activities which were definitely a part of their instructional program for the adults who were enrolled in their adult classes. These teachers, on the average, devoted 291 hours to adult class activities, which represented 10.4 per cent of their professional time. They averaged spending 38 hours in in-class instruction, 199 hours in on-farm supervision, and 54 hours in individual instruction and supervision in shop which was scheduled at hours other than class. This means that 68 per cent of the time devoted to adult teaching was spent in supervising farming programs on the home farms of the adult enrollees; that almost one-fifth of the time was devoted to instructing individuals of the group in shop work, which was equivalent to somewhat more than one hour per week throughout the year; and that 13 per cent of the time was devoted to in-class instruction.

**Time devoted to professional activities with adults which could not definitely be classified as work with organized groups.** Leaders in the field of vocational agriculture have, for some time, been concerned about what amount and percentage of time devoted to adult work is spent in work with organized groups. There has been a feeling that a very large percentage of the time devoted to adult work is spent in activities of a service nature on the farm and in community projects without reference to whether or not such service is a part of a systematically organized instructional program.

Table XIII shows how the 34 teachers with adult classes spent that portion of their time with adults which could not be classified as
### TABLE XII

**ANALYSIS OF TIME DEVOTED TO ADULT CLASSES BY THIRTY-FOUR TEACHERS**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Total time (hours)</th>
<th>Average time (hours)</th>
<th>Percentage of total professional time</th>
<th>Percentage of time devoted to adult classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time devoted to all professional activities</td>
<td>95,729</td>
<td>2,816</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total time devoted to adult class activities</td>
<td>9,907</td>
<td>291</td>
<td>10.4</td>
<td>100</td>
</tr>
<tr>
<td>Instruction</td>
<td>1,287</td>
<td>38</td>
<td>1.3</td>
<td>13</td>
</tr>
<tr>
<td>On-farm supervision</td>
<td>6,779</td>
<td>199</td>
<td>7.1</td>
<td>68</td>
</tr>
<tr>
<td>Individual instruction and supervision in shop</td>
<td>1,841</td>
<td>54</td>
<td>1.9</td>
<td>19</td>
</tr>
</tbody>
</table>
work with organized groups. The reason for not including the time spent by the teacher who did not have an adult class in this table is that comparisons with the facts contained in Table XII could not be made if the data for that teacher were to be included.

Table XIII shows that the 34 teachers, on the average, devoted 329 hours, or 12 per cent of their professional time, to work with adults who were not necessarily members of organized adult classes. This means that they actually devoted, as a group, more time to this phase of adult instruction than to that which was integrally a part of organized class instruction, as can be verified by referring to Table XII. Almost half (48 per cent) of the time devoted to individual (non-class) instruction was devoted to individual instruction and supervision in the canning plant. Almost one-fourth (24 per cent) of the time was spent in other community projects, like post-treating plants, freezer-locker plants, potato-curing houses, as well as community enterprises not necessarily developed around established facilities. The remaining 28 per cent devoted to non-class activities was equally divided between individual instruction and supervision in school shop and on-farm supervision.

Summary of time devoted to organized class activities. Each of the 35 teachers in this study had all-day classes. They had, on the average, 47 boys in slightly over three classes, or 15 boys per class. The teachers as a group spent 40 per cent of their professional time carrying on an instructional program with the all-day groups. Each all-day class group received 369 hours of teacher time, or 13 per cent of his total professional time. Of the total time devoted to all-day
TABLE XIII

ANALYSIS OF TIME THIRTY-FOUR TEACHERS DEVOTED TO INSTRUCTION OF ADULTS WHO WERE NOT NECESSARILY PARTICIPATING IN ORGANIZED CLASS INSTRUCTION

<table>
<thead>
<tr>
<th>Activity</th>
<th>Total time (hours)</th>
<th>Average time (hours)</th>
<th>Percentage of total professional time</th>
<th>Percentage of time spent with non-organized individuals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time devoted to all professional activities</td>
<td>95,729</td>
<td>2816</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total time devoted to individual instruction and supervision (non-class)</td>
<td>11,182</td>
<td>329</td>
<td>12</td>
<td>100</td>
</tr>
<tr>
<td>On-farm supervision</td>
<td>1,579</td>
<td>46</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>Individual instruction and supervision in shop</td>
<td>1,580</td>
<td>46</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>Individual instruction and supervision in cannery</td>
<td>5,392</td>
<td>159</td>
<td>6</td>
<td>48</td>
</tr>
<tr>
<td>Individual instruction and supervision in other community projects</td>
<td>2,631</td>
<td>77</td>
<td>3</td>
<td>24</td>
</tr>
</tbody>
</table>
activities, instruction received the greatest share, almost 50 per cent; on-farm supervision was next with 36 per cent; F.F.A. activities received 12 per cent; and individual instruction and supervision in school shop received 4 per cent.

The adult class was the second most frequently found kind of organized class group among the schools studied. Thirty-four teachers reported 51 classes, an average of 1.5 classes per teacher. An average of 43 adults per teacher was enrolled in the adult instructional program, or 29 adults per class group. The teachers, on the average, devoted 291 hours to organized adult instruction, or 194 per class group. The teachers devoted 10 per cent of their time to organized adult instruction, or 7 per cent of teacher time per class group. Of the total amount of time devoted to organized adult classes, two-thirds of it was spent in on-farm supervision; almost one-fifth was spent in individual instruction and supervision in the school shop; and one-eighth was spent in in-class instruction. All teachers in the study carried on activities for adults which did not necessarily bear a relation to an organized instructional program. When all such adult activities are considered along with those which were carried on as a part of an organized group instructional program, one finds that the teachers, on the whole, spent more time in non-class activities than they did in class activities. Less time was devoted to on-farm supervision of adult class members than was devoted to individual instruction and supervision in the canning plant.

Eighteen of the teachers reported day-unit classes. The enrollment per class for the day-unit group was greater than for any other class group except the adult class group. An average of 235 hours was
spent on teaching and supervising each day-unit class, or 8 per cent of the teacher's total professional time. Seventy-two per cent of the time devoted by these teachers to day-unit work was devoted to class teaching, while only 25 per cent of the time was devoted to on-farm supervision.

Ten teachers reported special farm-shop classes. They devoted 272 hours, on the average, for each class group, or 9 per cent of teacher time. The time devoted to special farm-shop classes was divided as follows: three-fifths was devoted to class instruction and the other two-fifths was equally divided between on-farm supervision and individual instruction and supervision in the school shop.

Five of the teachers were found to be conducting young-farmer classes. The enrollment was uniformly small in each of the five classes, with an average of 11 members per class. The teachers devoted an average of 150 hours to teaching and supervising the young farmers, or 5.5 per cent of their total professional time. Two-thirds of the time devoted to young-farmer classes, on the average, was devoted to on-farm supervision; one-fifth was devoted to classroom instruction; and one-eighth was devoted to individual instruction and supervision in the school shop.
CHAPTER VI

ANALYSIS OF TIME DEVOTED TO ON-FARM SUPERVISION

As shown in Chapter III regular and systematic visits should be made to the home farms of the enrollees in the different classes of vocational agriculture for the purposes of providing a better understanding of the individual and his environment, planning supervised farming programs, teaching, and following up to help the individuals evaluate and plan for future actions. Frequent visits are needed throughout the year, if functional, comprehensive farming programs are to be carried on, and if the teacher is to be an important factor in helping these individuals deal intelligently with their current problems in farming. Table II, page 47, revealed that teachers in this study devoted one-fourth of their time to on-farm supervision, which was within one percentage point of the professional time devoted to instruction.

Chapter VI will deal with the amount of time devoted to the on-farm supervision of individual enrollees in various classes, the amount of time spent on each visit, the number of visits made to the farm of each enrollee, the number and the percentage of working days during the year in which supervisory visits were made, distribution of visits among all-day boys, how the number of visits made to the farms of first-year boys compares with the number made to the farms of other boys in the same schools, how these visits were distributed throughout the year, and how early in the school year visits were made to the farms of first-year boys.
Amount of time per enrollee devoted to on-farm supervision.

Table XIV deals with the amount of time the teachers in the study devoted to on-farm supervision of the different kinds of groups taken care of in the programs of vocational agriculture represented in the study. From the total amount of time devoted to on-farm supervision of the different groups and the number of enrollees in the different groups, the average amount of time spent with each enrollee was determined.

The enrollees in the young-farmer classes received more time in on-farm supervision than the enrollees in any other kind of classes represented. These enrollees received an average of nine hours of supervision. As shown in Chapter V, two-thirds of the time devoted to young-farmer classes was devoted to supervision. If the teacher is to be a vital factor in helping the young-farmer group with their problems of farming, including those of becoming established in farming, probably more time for supervision will be required by members of this group than by those of any other group. A factor, however, in the amount of time that can be devoted to the individual in on-farm supervision is the number of individuals the teacher has to supervise. The fact that there were only 11 young farmers per teacher, on the average, the lowest of any group, may have had something to do with the relative amount of time given each enrollee.

The largest number of enrollees per teachers was found in the all-day classes. Yet, as has been stated earlier, the school administrator generally is more concerned about the time the teacher spends with this group than he is about any other group with which the teacher deals. The all-day enrollees received an average of 8.5 hours of on-farm
<table>
<thead>
<tr>
<th>Kind of group</th>
<th>Number teachers reporting</th>
<th>Total number of enrollees</th>
<th>Total amount of time devoted to on-farm supervision in hours</th>
<th>Average amount of time per enrollee devoted to on-farm supervision in hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>All-day</td>
<td>35</td>
<td>1,645</td>
<td>14,041</td>
<td>8.5</td>
</tr>
<tr>
<td>Adult</td>
<td>34</td>
<td>1,467</td>
<td>6,779</td>
<td>4.6</td>
</tr>
<tr>
<td>Day-unit</td>
<td>18</td>
<td>411</td>
<td>1,129</td>
<td>2.8</td>
</tr>
<tr>
<td>Special farm shop</td>
<td>9</td>
<td>143</td>
<td>530</td>
<td>3.7</td>
</tr>
<tr>
<td>Young farmer</td>
<td>5</td>
<td>56</td>
<td>503</td>
<td>9.0</td>
</tr>
</tbody>
</table>
supervision, the second largest number of any group in the study. The
range in the number of hours per enrollee for the 35 teachers in the
study was from 2.5 to 15.2. The distribution of these averages was
approximately normal. The fact that there were certain other teachers
in the study whose average time per enrollee approached 2.5 tends to
indicate that there were some teachers who were not so strong a factor
in helping boys functionally with problems in farming as they might have
been.

Thirty-four of the 35 teachers reported adult classes. The
enrollment was almost as great for this group as for the all-day. As a
group, the teachers spent a little less than half as much time in on-
farm supervision with this group as with the all-day boys. On the
average, the enrollees received 4.6 hours of on-farm supervision. The
range in the number of hours per trainee for the 34 teachers in this
aspect of the study was from .02 to 14.78 hours. The distribution of
the time for on-farm supervision of adults was approximately normal.
Four teachers in the group reported less than one hour per trainee,
while four teachers reported more than twelve hours. There appeared to
be a fairly close correlation between the number of hours devoted to
all-day supervision and adult supervision. The teacher that reported
the highest average amount of time for all-day supervision also reported
the highest amount for adult supervision. There were a few teachers,
however, who seemed to concentrate their efforts on one or the other
group.

The other two groups reported by certain teachers in this study
received relatively much less attention in on-farm supervision than the
other groups already discussed; namely, the special farm shop and the
day-unit groups. As was described earlier in this study, these two groups have been recently introduced or reintroduced in local programs of vocational agriculture in Georgia.

The day-unit classes were reintroduced with the advent of the twelve-grade program. In some schools the eighth grade has been retained in the high school, but the course work is taken by the students without credit. In many of these schools the work in agriculture was reported as a day-unit class.

The special farm-shop course became a part of the curriculum in vocational agriculture in the local schools for one or more reasons. Many of the schools where vocational agriculture is offered are too small to provide both a program in vocational agriculture and a program in industrial arts. In some schools where industrial arts could be offered in addition to vocational agriculture, a special industrial arts shop could not be provided in addition to the farm shop used in vocational agriculture. Leaders in the field of vocational agriculture and some local school leaders recognized the problems that might occur if dual-purpose shops should be installed. Furthermore, the rapid changes in farming have brought with them an increased need for training in the field of agricultural engineering including farm shop. This combination of circumstances has brought about the special farm-shop course which carries a unit of credit, which was to be taken primarily by those advanced students in vocational agriculture who needed these extra experiences to further their vocational objectives. In some schools, however, other students than those already taking vocational agriculture have been enrolled. These students have generally been those who would be especially interested in industrial arts; but, without
such opportunity, they have chosen to take the special farm-shop course.

Table XIV shows that the students enrolled in these two courses received less on-farm supervision than those enrolled in the regular all-day classes. Those in special farm shop received an average of 3.7 hours, while those in day-unit classes received only 2.8 hours. Probably one reason for this lack of on-farm supervision for the special farm-shop students was that those who were at the same time all-day pupils were receiving their supervision as all-day enrollees and not as farm-shop enrollees. In other words, the teacher reported supervision of such students as all-day and not as special farm-shop supervision. One would question whether 2.8 hours or less of on-farm supervision would be adequate for a functional program of education based on real problems and designed to help individuals deal intelligently with such problems. The range in the number of hours of supervision for the nine teachers of special farm-shop classes was from .0 to 11.3. Three of the nine teachers reported less than one hour per student. The range in the number of hours of supervision for the 18 teachers of day-unit classes was from .0 to 6.6. Six of the 18 teachers reported an average of less than one hour per student for on-farm supervision. Six reported more than five hours per student.

Amount of time per visit devoted to on-farm supervision. One of the purposes of this study was that of determining guides for appropriate teacher loads. One factor in the matter of determining appropriate teacher loads is the time required for individual on-farm visits. For example, if the number of visits needed, on the average, for each
individual enrolled in the kinds of classes to be provided can be
determined, the amount of time required for each visit provides a gauge
for determining the amount of time required for on-farm supervision for
a given number of students. Table XV shows the time spent by the
teachers in this study in individual on-farm visits for the different
kinds of class groups.

The data revealed that the teachers in this study utilized most
time on their individual visits with all-day students. One and one-half
hours, on the average, were utilized on each all-day visit. As much
time was utilized on the special farm-shop visits. One and one-third
hours were used up on the individual adult visits. Relatively less time
was utilized in the individual day-unit and young-farmer visits, where
1.2 hours were spent for each group. The most surprising thing about
these data was the relatively small amount of time spent in each young-
farmer visit. Possibly the small number of cases contributed to the
relative size of this figure. Probably the number of cases is too
small to be used as a basis of planning teacher loads for the young-
farmer aspect of the program.

**Number of supervisory visits per enrollee.** The number of
different visits an enrollee receives of the teacher during the year
is also important in determining how well teachers utilize their pro-
fessional time. Enrollees need visits from time to time if a dynamic
program of supervised farming is to be carried on. Some indication of
how well the enrollees were visited by the teachers in this study is
given in Table XVI, which shows the average number of visits made to the
farms of the enrollees in the different kinds of classes.
<table>
<thead>
<tr>
<th>Number teachers reporting</th>
<th>Type of class</th>
<th>Time devoted to supervising class group in hours</th>
<th>Number of visits made class group</th>
<th>Average time per visit spent in supervision in hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
<td>All-day</td>
<td>14,041</td>
<td>9,434</td>
<td>1.5</td>
</tr>
<tr>
<td>34</td>
<td>Adult</td>
<td>6,779</td>
<td>5,116</td>
<td>1.3</td>
</tr>
<tr>
<td>16</td>
<td>Day-unit</td>
<td>1,129</td>
<td>982</td>
<td>1.2</td>
</tr>
<tr>
<td>7</td>
<td>Special farm shop</td>
<td>530</td>
<td>360</td>
<td>1.5</td>
</tr>
<tr>
<td>5</td>
<td>Young farmer</td>
<td>503</td>
<td>414</td>
<td>1.2</td>
</tr>
<tr>
<td>29</td>
<td>No organized class</td>
<td>1,608</td>
<td>1,259</td>
<td>1.3</td>
</tr>
</tbody>
</table>
### TABLE XVI

AVERAGE NUMBER OF VISITS MADE IN SUPERVISION OF FARMING PROGRAMS

<table>
<thead>
<tr>
<th>Number schools reporting</th>
<th>Type of class</th>
<th>Total enrollment</th>
<th>Average enrollment</th>
<th>Total number visits</th>
<th>Average number visits per teacher</th>
<th>Average number visits per enrollee</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
<td>All-day</td>
<td>1,645</td>
<td>47</td>
<td>9,434</td>
<td>270</td>
<td>5.7</td>
</tr>
<tr>
<td>34</td>
<td>Adult</td>
<td>1,467</td>
<td>43</td>
<td>5,116</td>
<td>150</td>
<td>3.5</td>
</tr>
<tr>
<td>18</td>
<td>Day-unit</td>
<td>411</td>
<td>23</td>
<td>982</td>
<td>55</td>
<td>2.4</td>
</tr>
<tr>
<td>9</td>
<td>Special farm shop</td>
<td>143</td>
<td>16</td>
<td>360</td>
<td>40</td>
<td>2.5</td>
</tr>
<tr>
<td>5</td>
<td>Young farmer</td>
<td>56</td>
<td>11</td>
<td>414</td>
<td>83</td>
<td>7.4</td>
</tr>
</tbody>
</table>
The enrollees in the young-farmer classes in the five schools conducting such classes received the highest average number of visits with 7.4. The all-day enrollees received an average of 5.7 visits, for the second highest average. This group received by far the highest aggregate number of visits, but it must be remembered that this group had the largest number of enrollees. The 1,467 adults received 5,116 visits for an average of 3.5 visits per enrollee, the third highest average for any group. The special farm-shop and the day-unit groups received an average of 2.5 and 2.4 visits, respectively, roughly a third of the average number of visits received by the young farmers, and roughly half as many as the all-day boys received on the average.

Number and percentage of working days in which supervisory visits were made. Another important factor in determining how well a teacher utilizes his professional time is the number and the percentage of working days in which supervisory visits are made to the farms of enrollees. The data with regard to the number and the percentage of working days in which supervisory visits were made by the teachers in the study are presented in Table XVII. These data are given by months and for the year. The work month was considered to be 21 days, which meant approximately a five-day week. In interpreting these data, however, one should know that many of these teachers devoted at least a part of Saturdays to professional duties.

The 35 teachers made at least one farm visit on an average of 172 days during the year. This meant that farm visits were made on 68 percent of the work days during the year, on the average. The range in the number of days during the year on which visits were made was from 79 to
<table>
<thead>
<tr>
<th>Month</th>
<th>Total number days of supervisory visits</th>
<th>Average number days of supervisory visits</th>
<th>Percentage of days in which supervisory visits are made</th>
<th>Range in number days supervisory visits are made</th>
</tr>
</thead>
<tbody>
<tr>
<td>September</td>
<td>513</td>
<td>15</td>
<td>73</td>
<td>5-24</td>
</tr>
<tr>
<td>October</td>
<td>508</td>
<td>15</td>
<td>71</td>
<td>5-26</td>
</tr>
<tr>
<td>November</td>
<td>533</td>
<td>16</td>
<td>75</td>
<td>8-24</td>
</tr>
<tr>
<td>December</td>
<td>462</td>
<td>14</td>
<td>65</td>
<td>3-21</td>
</tr>
<tr>
<td>January</td>
<td>577</td>
<td>17</td>
<td>81</td>
<td>7-26</td>
</tr>
<tr>
<td>February</td>
<td>541</td>
<td>16</td>
<td>76</td>
<td>4-23</td>
</tr>
<tr>
<td>March</td>
<td>549</td>
<td>16</td>
<td>77</td>
<td>5-26</td>
</tr>
<tr>
<td>April</td>
<td>548</td>
<td>16</td>
<td>77</td>
<td>4-24</td>
</tr>
<tr>
<td>May</td>
<td>529</td>
<td>16</td>
<td>74</td>
<td>8-23</td>
</tr>
<tr>
<td>June</td>
<td>421</td>
<td>12</td>
<td>59</td>
<td>2-22</td>
</tr>
<tr>
<td>July</td>
<td>406</td>
<td>12</td>
<td>57</td>
<td>2-23</td>
</tr>
<tr>
<td>August</td>
<td>443</td>
<td>13</td>
<td>62</td>
<td>4-22</td>
</tr>
<tr>
<td>Total for the year</td>
<td>6,030</td>
<td>172</td>
<td>68</td>
<td>79-247</td>
</tr>
</tbody>
</table>
247. This means that while one teacher was making farm visits on less than one-third of the work days, another teacher was making farm visits on nearly every work day and using Saturdays for visits as well.

The best month for the number and the percentage of working days in which supervisory visits were made was January, when an average of 17, or 81 per cent, of the working days were at least partially spent for this purpose. The poorest month was July, when only 12, or 57 per cent, of the days were devoted at least in part to on-farm supervision. Doubtless, one of the main reasons for the poor showing in July was that practically all the teachers spent one week at a teachers' conference that month. The best over-all period during which a large number and percentage of days were devoted to on-farm supervision was the period from January through May. The poorest period for farm visitation was the summer vacation period, or that extending from June through August. During the summer months, 58 per cent of the work days were used at least partially for on-farm supervision of organized-class members. Doubtless, some of the principal factors in this decline in the number of days on which farm visits were made were as follows: vacation periods, teachers' conference, canning activities, and F.F.A. camps.

Examination of the range in the number of days on which supervisory visits were made by months shows that certain teachers visited on as little as two days during a month; other teachers visited on as many as 26 days during a month. This means that some of the teachers in this study were working Saturdays, on which day they are not required to work in Georgia.

Up to this point this chapter has dealt with on-farm supervision of farming programs as it affected all class groups. Analyses have been
made of the amount of time spent in supervision per enrollee, amount of
time per supervisory visit, the average number of visits per enrollee,
and the average number and percentage of working days in which the
teachers visited class members' farms; and these analyses have been
made with regard to the different class groups. The remainder of this
chapter, however, will be limited to further analysis of on-farm super­
vision with regard to the all-day class members only. These data were
procured through special tabulation of information contained in the
monthly reports of the teachers.

Distribution of visits among the all-day boys. Table XVIII
presents the distribution of on-farm supervisory visits by 31 teachers
among 1,401 all-day boys. These teachers had an average of 45.3 boys
each. A total of 235, or 16.8 per cent, of the boys were not visited at
all. Another 162, or 11.6 per cent, of the boys were visited only once
during the twelve-month period. This means that 28.4 per cent of the
boys were not visited more than once during the year. Another 150 boys
were visited twice, while 126, or 9 per cent, were visited threetimes.

It can be seen, therefore, that 48 per cent of the 1,401 boys were
visited not more than three times during the twelve months covered by
this study. Still another 45 per cent of the boys received from four to
twelve visits from their teachers. At the upper end of the scale 101
boys, or 7 per cent, received thirteen or more visits. Observation of
the frequency distribution of the students on the basis of the number of
visits they received from their vocational agriculture teacher reveals
that these frequencies tend to pile up at zero and at four to six visits
with fairly large percentages receiving, in decreasing proportions, from
TABLE XVIII

DISTRIBUTION OF SUPERVISORY VISITS AMONG THE ALL-DAY STUDENTS BY THIRTY-ONE TEACHERS

<table>
<thead>
<tr>
<th>Number of times individual students were visited</th>
<th>Total number students</th>
<th>Average number students</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>235</td>
<td>7.6</td>
<td>16.8</td>
</tr>
<tr>
<td>1</td>
<td>162</td>
<td>5.2</td>
<td>11.6</td>
</tr>
<tr>
<td>2</td>
<td>150</td>
<td>4.8</td>
<td>10.7</td>
</tr>
<tr>
<td>3</td>
<td>126</td>
<td>4.1</td>
<td>9.0</td>
</tr>
<tr>
<td>4-6</td>
<td>300</td>
<td>9.7</td>
<td>21.4</td>
</tr>
<tr>
<td>7-9</td>
<td>195</td>
<td>6.3</td>
<td>13.9</td>
</tr>
<tr>
<td>10-12</td>
<td>132</td>
<td>4.3</td>
<td>9.4</td>
</tr>
<tr>
<td>13-15</td>
<td>57</td>
<td>1.8</td>
<td>4.1</td>
</tr>
<tr>
<td>16-18</td>
<td>24</td>
<td>.8</td>
<td>1.7</td>
</tr>
<tr>
<td>19-21</td>
<td>9</td>
<td>.3</td>
<td>.6</td>
</tr>
<tr>
<td>22-24</td>
<td>8</td>
<td>.3</td>
<td>.6</td>
</tr>
<tr>
<td>25 and over</td>
<td>3</td>
<td>.1</td>
<td>.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,401</strong></td>
<td><strong>45.3</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
seven to twelve visits. In other words, a large percentage of the all-day boys received none, one, or two visits; still another large percentage of the boys received from four to twelve visits.

How all-day supervisory visits were distributed over twelve months. Table XIX was developed to discover what amount of fluctuation there was in the intensity of on-farm supervision of the all-day boys from month to month during the school year. The 35 teachers in the study reported a total of 6,993 on-farm visits to the farms of all-day boys during the twelve-month period, or an average of 200 visits per teacher. This means that the average number of visits per month for the twelve-month period was 16.67.

Figure III shows graphically the data contained in Table XIX regarding the average number of visits per month per teacher to the home farms of the all-day boys. A line was drawn across the figure at 16.67 visits to represent the average number of visits made by the teachers per month. It can be seen that for eight of the months the number of visits was above average and for four of the months the number of visits was below average. The months below average were July, August, December and June. The seasonal peak months were September, January and April. The seasonal troughs were July, December and March. As would be expected, there is a close relationship between the data regarding the number of days out of the community and the number of visits made to the farms of all-day boys. A comparison of Tables VI and XIX will reveal this close relationship.

A comparison of first year and other all-day boys with regard to number of supervisory visits. Because of the fact that visitation is
TABLE XIX

HOW SUPERVISORY VISITS TO FARMS OF ALL-DAY BOYS WERE DISTRIBUTED OVER THE TWELVE MONTHS BY THE THIRTY-FIVE TEACHERS

<table>
<thead>
<tr>
<th>Month of year</th>
<th>Number supervisory visits</th>
<th>Average number supervisory visits</th>
<th>Percentage supervisory visits for year</th>
</tr>
</thead>
<tbody>
<tr>
<td>July</td>
<td>298</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>August</td>
<td>442</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>September</td>
<td>636</td>
<td>18</td>
<td>9</td>
</tr>
<tr>
<td>October</td>
<td>625</td>
<td>18</td>
<td>9</td>
</tr>
<tr>
<td>November</td>
<td>589</td>
<td>17</td>
<td>8</td>
</tr>
<tr>
<td>December</td>
<td>509</td>
<td>15</td>
<td>7</td>
</tr>
<tr>
<td>January</td>
<td>694</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>February</td>
<td>663</td>
<td>19</td>
<td>10</td>
</tr>
<tr>
<td>March</td>
<td>619</td>
<td>18</td>
<td>9</td>
</tr>
<tr>
<td>April</td>
<td>709</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>May</td>
<td>666</td>
<td>19</td>
<td>10</td>
</tr>
<tr>
<td>June</td>
<td>543</td>
<td>15</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total for year</strong></td>
<td><strong>6,993</strong></td>
<td><strong>200</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
FIGURE III

HOW SUPERVISORY VISITS TO FARMS OF ALL-DAY BOYS
WERE DISTRIBUTED OVER THE TWELVE MONTHS

Average number of visits per month
most pressing for a systematic establishment of a first-year student in
the all-day program in vocational agriculture, as was brought out in
Chapter III, the investigator made a special study to determine rela-
tively how well these students were visited as compared with the second,
third, and fourth-year students in the all-day program in vocational
agriculture. Data with regard to the number and the percentage of
visits made to the home farms of the first-year students as compared
with the number and the percentage of visits made to the home farms of
other students in the all-day program are given in Table XX. In that
part of the monthly reports which showed the individuals visited day by
day, six of the teachers either failed to give the first name of the
individuals or gave only one initial. It was necessary, therefore, to
eliminate the reports of these teachers from this part of the study.
The data given in Table XX are limited to 29 teachers.

Of the 1,356 students in the 29 schools, 522, or 38 per cent,
were first-year boys; 834, or 62 per cent, were second, third, or fourth-
year boys. The findings showed that the total group of 1,356 boys
received 6,599 visits, for an average of 4.9 visits per boy. The first-
year boys, 38 per cent of the total group, were given 29 per cent of the
total visits, for an average of 3.6 visits per first-year boy. On the
other hand, the second, third, and fourth-year boys, 62 per cent of the
total group, were given 71 per cent of the total visits, for an average
of 5.7 visits per boy. It is to be seen, therefore, that the first-year
boys were not, as a group, visited as often as the second, third, and
fourth-year boys. For every visit paid the first-year boy, on the
average, the other boys were visited 1.6 times.
TABLE XX

A COMPARISON OF FIRST-YEAR AND OTHER ALL-DAY STUDENTS WITH REGARD TO THE NUMBER OF SUPERVISORY VISITS THEY RECEIVED DURING THE YEAR FROM TWENTY-NINE TEACHERS

<table>
<thead>
<tr>
<th></th>
<th>Students</th>
<th>Visits</th>
<th>Average number of visits per student</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Per cent</td>
<td>Number</td>
</tr>
<tr>
<td>All students</td>
<td>1,356</td>
<td>100</td>
<td>6,599</td>
</tr>
<tr>
<td>First-year students</td>
<td>522</td>
<td>38</td>
<td>1,886</td>
</tr>
<tr>
<td>Other students</td>
<td>834</td>
<td>62</td>
<td>4,713</td>
</tr>
</tbody>
</table>
Comparison of first-year and other all-day boys with regard to how well supervisory visits were distributed over the year. Once the fact had been established that the first-year boys were not visited so intensively as the other boys in the all-day program, the investigator became curious to learn whether or not there was the same degree of difference throughout the year; and, if not, at what period of the year was the difference greater. He compared these two groups in the number and the percentage of visits paid by the teachers during the first six months and the last six months of the fiscal year. Table XXI and Figure IV contain the findings.

Of the 6,599 visits made by the 29 teachers to the homes of 1,356 students during the twelve months of the study, 2,868 visits, or 43 per cent, were made the first six months, and 3,731, or 57 per cent, were made the last six months of the fiscal year. This means that the all-day students as a group were visited 30 per cent more intensively the last six months than they were the first six months of the year. The 522 first-year students, 38 per cent of the total group, received 23 per cent of the on-farm visits made the first six months, and 33 per cent of the visits made the last six months. On the other hand, the 834 second, third, and fourth-year students, 62 per cent of the total group, received 77 per cent of the on-farm visits made to the homes of all-day students the first six months, and 67 per cent of the visits made the last six months. While the 29 teachers made 30 per cent more visits to all students the last six months than they made the first six months, they made 88 per cent more visits to the homes of first-year students the last six months than they made the first six months as compared with 13 per cent more for the second, third, and fourth-year students. Yet,
TABLE XXI
A COMPARISON OF FIRST-YEAR AND OTHER ALL-DAY STUDENTS WITH REGARD TO DISTRIBUTION OF VISITS OVER THE YEAR
BY TWENTY-NINE TEACHERS

<table>
<thead>
<tr>
<th>Classification of students</th>
<th>Students</th>
<th>Visits</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>Per cent</td>
<td>Total No.</td>
<td>Per cent</td>
<td>First 6 months No.</td>
</tr>
<tr>
<td>All students</td>
<td>1,356</td>
<td>100</td>
<td>6,599</td>
<td>100</td>
<td>2,868</td>
</tr>
<tr>
<td>First-year students</td>
<td>522</td>
<td>38</td>
<td>1,886</td>
<td>29</td>
<td>654</td>
</tr>
<tr>
<td>Other students</td>
<td>834</td>
<td>62</td>
<td>4,713</td>
<td>71</td>
<td>2,214</td>
</tr>
</tbody>
</table>
FIGURE IV

A COMPARISON OF FIRST-YEAR AND OTHER ALL-DAY STUDENTS WITH REGARD TO DISTRIBUTION OF TEACHER VISITS OVER TWELVE MONTHS
in spite of the greater percentage gain during the last six months for
the first-year group, the data show that this group was not visited as
intensively the last six months of the year as were the second, third,
and fourth-year groups.

Accumulative number and percentage of first-year boys visited
month by month. As was emphasized in Chapter III, there is a great need
for the teacher to visit the home farms of the prospective first-year
boys as early as possible after the close of the preceding school term.
On these visits he would become acquainted with the boy, his parents,
and the home farm situation, discover whether or not the boy should
choose to take vocational agriculture, acquaint the boy and his parents
with vocational agriculture and the relationship between the supervised
farming program and the instructional program in vocational agriculture
as a basis for their deciding whether or not the boy should take voca­
tional agriculture, and, if so, help the boy and his parents decide what
he might have in his supervised farming program. As a basis of deter­
mining how well the teachers in this study were getting out to the home
farms early in the fiscal year to do the things outlined above, a study
was made to determine in what month during the year the teacher made his
first visit to each first-year boy’s home farm. A total of 495 boys in
28 different schools were studied. The findings were brought together
in Table XXII.

Prior to September 1, the approximate date for the opening of
school in Georgia, a total of 57, or 12 per cent, of the first-year boys
had been visited by their teachers of vocational agriculture. This
meant that up to 88 per cent of the first-year boys in this study
### TABLE XXII

ACCUMULATIVE NUMBER AND PERCENTAGE OF 495 FIRST-YEAR BOYS VISITED MONTH BY MONTH IN TWENTY-EIGHT SCHOOLS

<table>
<thead>
<tr>
<th>Month</th>
<th>Boys visited before end of month Number</th>
<th>Per cent</th>
<th>Number boys visited first time during month</th>
<th>Teachers having visited at least 50 per cent of boys by end of month Number</th>
<th>Per cent</th>
<th>Total number boy visits made by end of month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before September 1</td>
<td>57</td>
<td>12</td>
<td>4</td>
<td>14</td>
<td>67</td>
<td></td>
</tr>
<tr>
<td>September</td>
<td>142</td>
<td>29</td>
<td>85</td>
<td>9</td>
<td>32</td>
<td>193</td>
</tr>
<tr>
<td>October</td>
<td>206</td>
<td>42</td>
<td>64</td>
<td>14</td>
<td>50</td>
<td>352</td>
</tr>
<tr>
<td>November</td>
<td>246</td>
<td>50</td>
<td>40</td>
<td>15</td>
<td>54</td>
<td>492</td>
</tr>
<tr>
<td>December</td>
<td>282</td>
<td>57</td>
<td>36</td>
<td>18</td>
<td>64</td>
<td>640</td>
</tr>
<tr>
<td>January</td>
<td>317</td>
<td>64</td>
<td>35</td>
<td>20</td>
<td>71</td>
<td>809</td>
</tr>
<tr>
<td>February</td>
<td>332</td>
<td>67</td>
<td>15</td>
<td>20</td>
<td>71</td>
<td>1,061</td>
</tr>
<tr>
<td>March</td>
<td>347</td>
<td>70</td>
<td>15</td>
<td>21</td>
<td>75</td>
<td>1,260</td>
</tr>
<tr>
<td>April</td>
<td>359</td>
<td>73</td>
<td>12</td>
<td>24</td>
<td>86</td>
<td>1,465</td>
</tr>
<tr>
<td>May</td>
<td>369</td>
<td>75</td>
<td>10</td>
<td>24</td>
<td>86</td>
<td>1,661</td>
</tr>
<tr>
<td>June</td>
<td>379</td>
<td>77</td>
<td>25</td>
<td>25</td>
<td>89</td>
<td>1,842</td>
</tr>
</tbody>
</table>
registered for the program without the teacher having been on the boys' farms to help them decide whether or not they should take vocational agriculture and to help them set up a program of supervised farming so that the program of instruction could get off to an early start. Only four of the 28 teachers had visited as many as half of their first-year boys before school opened. Incidentally, these four teachers had been teaching only two to four years, indicating that this practice might have been a carry-over from their program of pre-service teacher training in the Department of Agricultural Education at The University of Georgia. All but one of the others had been trained at The University of Georgia but, for some reason or reasons, they had failed to hold fast to the practice.

Further analysis of Table XXII reveals that by the end of September less than a third of the first-year boys had been visited the first time. December 1 had arrived before more than one-half of the boys had been visited, and March 1 had almost arrived before two-thirds of the group had received their first visit. At the end of the school year only 369 of the 495 boys, 75 per cent, had had their teacher of agriculture visit them. A total of 126, or 25 per cent, had not received their first visit; yet, many of them were sitting in the same classroom with other boys who were being visited regularly. In fact, the 369 boys who had been visited had received an average of 4.5 visits each.

As has already been pointed out, four teachers had seemed to make a concerted effort to visit their first-year boys before school opened. Only 11 of the 28 teachers had visited any first-year boys before September 1. At the end of the first month of school only 32 per cent
of the teachers had visited at least one-half of the new boys in their
classes. At the end of the second month only 50 per cent of the
teachers had seen one-half of their first-year boys on their farms. In
fact, it was well into the third month before the first teacher in this
group had visited every first-year boy. On the other hand, February 1
arrived before one teacher made his first visit to a first-year boy.
The year ended with four of the 28 teachers not having visited one-half
of their first-year boys.

Summary of time devoted to on-farm supervision. Teachers in this
study, on the average, devoted one-fourth of their professional time, or
about 700 hours, over a twelve-month period to on-farm supervision of
farming programs of class members. This chapter was devoted to analyzing
this time to discover how it was spent in the promotion of programs of
vocational agriculture.

The young-farmer and all-day class members received individually,
on the average, almost twice as many hours of teacher time on their
farms as were received by individuals in any other class group. Indi-
dividuals in these groups received an average of 9.0 and 8.5 hours,
respectively, of teacher time on their farms. The adults were third
with 4.6 hours. Individuals in the special farm-shop and day-unit
classes received an average of 3.7 and 2.8 hours, respectively.

An analysis of the amount of time devoted to individual super-
visory visits revealed that the teacher spent an average of 1.5 hours
on all-day and special farm-shop visits, 1.3 hours on adult visits,
and 1.2 hours on young-farmer and day-unit visits.
A study of the average number of supervisory visits made to the farms of class members revealed that the 56 young farmers enrolled in five classes received the highest average number of visits with 7.4. Second in the average number of visits were the all-day boys who received 5.7. The adults were third with an average of 3.5. The special farm-shop and day-unit enrollees received an average of somewhat over two visits each.

One indication of how well teachers of vocational agriculture spend their time is the number of days during the month and during the year on which they devote some time to supervisory visits. The 35 teachers, on the average, made supervisory visits on 172 days during the twelve-month period. For a 250-day year this meant that supervisory visits were made on somewhat over two-thirds of the work days during the year. The range, however, in the number of days the 35 teachers engaged in farm visitation was from a low of 72 to a high of 247. The period for most farm visitation was that extending from January to May. The period during the year for the least amount of visitation was the summer months. The best month for visitation was January when an average of almost 81 per cent of the work days were devoted to this activity. The poorest month was July when less than 57 per cent of the work days were devoted to on-farm supervision.

An analysis of the distribution of the on-farm supervisory visits among the all-day boys reveals that there was a rather wide range in the number of visits received by the boys — from none to 35. When classified by number of visits received, the largest number of boys were found in the group that received from four to six visits. The second largest number of boys were found in the group that were not visited at all by
their teacher. One of every six boys, on the average, was in this

group. The imaginary curve which might represent the frequency distri-
bution of the individuals with regard to the number of visits received
from their teacher would show a bimodal effect, with the primary mode at
about six visits and the secondary mode at zero.

An analysis designed to discover the months and the seasons of
the year, if any, when more or fewer visits were made, revealed that the
months and the seasons vary in the number of supervisory visits made.
The number of supervisory visits made in a given period seems to be
somewhat closely related to the number of days in which supervisory
visits are made. The summer months showed the smallest number of visits
for any given three-month period. The period in which the most visits
were made ran from January through May. The peak month was found to be
April, and the month for the lowest average number of visits was July.

This study showed that the first-year all-day boys, as a group,
were not visited nearly so often as other all-day boys. They were
visited more in the second six months than in the first six months of
the fiscal year. In fact, they received 88 per cent more visits the
second six months than they received the first six months. Even during
the second six months, however, the first-year boys were not visited so
well as the other boys in the all-day program.

An investigation to discover how early in the school year the
first-year boys were visited revealed that teachers of vocational agri-
culture in Georgia do not as a group follow the practice of visiting
first-year boys before school opens as a basis for helping them get
started early in their instructional program. Only four teachers had
made a concerted effort to visit their first-year boys before school
opened, as revealed by the fact that only four teachers had visited as many as 50 per cent of their first-year boys before September 1.

October 31 had arrived before half of the teachers had visited 50 per cent of their first-year boys. The latter part of March had arrived before three-fourths of the teachers had visited 50 per cent of their first-year group. Only one boy out of nine had been visited before school opened. December had arrived before 50 per cent of the boys had been visited. School was out before three-fourths of the first-year group had been visited once. This means that one-fourth of the first-year boys were not visited during their first school year in vocational agriculture. Yet, these boys were in classes with other boys who were visited. In fact, the average number of visits received by those who were visited before May 31 was 4.5.
CHAPTER VII

A COMPARISON OF THE EIGHT TEACHERS WHO MADE THE BEST USE OF THEIR TIME WITH THE EIGHT TEACHERS WHO MADE THE POOREST USE OF THEIR TIME

Criteria used as basis for selecting teachers. One of the objectives of this study was that of identifying those teachers in the selected group who were making the best use of their time in 1951-52. As stated in Chapter II, this selection was made on the basis of certain criteria which had been examined, revised, and finally approved by a jury of ten leaders in the field of education in Georgia. These criteria were suggested on the basis of the point of view regarding the use of professional time on the part of teachers of vocational agriculture which is contained in Chapter III.

The following were the criteria which were finally adopted for use in selecting the eight teachers who had made the best use of their professional time during 1951-52:

1. Has the teacher devoted a comparatively large percentage of his time to work with organized groups?

2. Has the teacher devoted a comparatively large percentage of his time to supervision of farming programs of class members?

3. Has the teacher made a comparatively adequate number of visits to the farms of members of his all-day classes?
   a. Total number of visits.
   b. Average number of visits per boy.
   c. Percentage of boys visited more than twice.
   d. Percentage of first-year boys visited before October 1.
4. Has the teacher made a comparatively adequate number of visits to the farms of his adult class members?
   a. Total number of visits.
   b. Average number of visits per adult member.

5. Has the teacher devoted a comparatively large percentage of time to preparation for each hour of classroom instruction?

6. Has the teacher devoted a comparatively large percentage of his time to F.F.A. activities?

7. Has the teacher spent a comparatively large percentage of his work days inside his school community?

One might observe that no direct attention was given in the criteria to work in organized classes other than all-day and adult. There were two reasons for this decision. First, only five of the 35 teachers were found to be conducting young-farmer classes and this number was not considered to be large enough to use as a basis for the selection of those teachers who were making the best use of their professional time. Second, the other class groups were not considered to be a permanent part of a local program of vocational agriculture. There was a question in regard to whether the so-called day-unit class was really a day-unit class at all in the light of the definition of such a class as defined by the United States Office of Education. There was also a prevalent belief that the special farm-shop class, as found in nine schools represented in this study, should become a more integral part of a program of training for prospective farmers by limiting the enrollees to those who need this educational experience in addition to that which they might be getting in the regular all-day shop work.
Selection of teachers. The decision was made to select eight teachers as those who had made the best use of teacher time rather than some other because this number represented roughly the upper quartile of the total group studied, because there appeared to be a somewhat sudden break in the quality of time use when another teacher or two were added to the list, and because this number was believed to provide a statistically sound basis for the determination of significantly different patterns of time use.

In selecting the eight teachers who had made the best use of their time in the light of the criteria, the teachers were first ranked on the basis of each of the criteria. The teachers were then ranked on the basis of the totals of their individual rank scores. The eight with the lowest totals were declared the eight teachers who had made the best use of their professional time for the year.

Because of the fact that so much of the value of this study would depend upon how well the eight teachers had been selected, the decision was made to determine how real the difference was between the eight teachers and others in the group. Consultation with statisticians resulted in the decision to compare these selected teachers with the eight teachers who, on the basis of the same criteria, were found to have made the poorest use of their professional time during 1951-52.

Once the eight teachers who had made the poorest use of their time had been selected, the observation was made that there were more well-known teachers in this group than there were at the other end of the scale. In other words, more well-known teachers were believed to be in the group who had made the poorest use of their professional time than were in the group who were found to have made the best use of their
time. As a follow-up of this belief, five members of the state staff in agricultural education in Georgia, two persons from the supervisory staff and three persons from the teacher-training staff, were asked to check the alphabetically arranged names of the sixteen teachers comprising the two groups, who, in their judgment, were best known for their work as teachers of agriculture. Seven names were checked by the five individuals. Each of the seven teachers received at least four checks. Five of the seven were checked as well known by all five staff members. Two men who had, according to the criteria, made the best use of their time were said to be well known by five members of the state staff, while five of the eight men whose use of professional time had been found to be poorest were said to be well known. Doubtless, one of the reasons for their being well known was that each of the seven teachers had taught for at least eleven years. Some had taught for almost 25 years. While six of the eight teachers who had made the best use of their professional time were post-war teachers, only two of the teachers who had made the poorest use of their time were post-war teachers. Hereafter, in this report, the eight teachers who were found to have made the best use of their time will be referred to as the "top" teachers, and the eight who were found to have made the poorest use of their time will be referred to as the "bottom" teachers.

Testing the significance of differences between the top and the bottom teachers. In an effort to determine whether or not the use that the eight top teachers had made of their professional time was really different from that of the eight bottom teachers, two different statistical methods were used: one, where the differences were measured in
means; and two, where the differences were measured in percentages. The equations found in Chapter II were used to test these differences. Statistical computations used for testing the significance of the difference between both the means and the percentages are found in Appendix C. A summary of the findings is presented in Tables XXIII and XXIV. These tables present data with regard to certain items of time use which are considered to be significant in the development of programs of vocational agriculture in Georgia. Although items representing the criteria which were used in the selection of the top teachers are included, some items of time use are included because teachers spent time in the activities represented by those items.

Table XXIII presents data with regard to certain items denoting over-all use of professional time except for on-farm supervision, and Table XXIV presents data with regard to on-farm supervision.

As has been pointed out earlier in this study, the teacher of vocational agriculture should devote much of his time to work with organized class groups. His time will be absorbed very largely, therefore, in those activities which contribute to the learning experiences of individuals who are banded together for the solution of individual and group problems. Table XXIII reveals that the eight top teachers devoted an average of 2,042 hours during the year to work with organized groups; at the same time the eight bottom teachers were devoting an average of 1,171 hours to such work. The value of $t_0$ in the test of significant difference was found to be 2.17. When this value was referred to the table of $t$, and the row corresponding to $n = N_1 + N_2 - 2 = 14$, it is found that the chance of getting a value of $t$ greater than or equal to +2.17 in repeated sampling is somewhere about four per cent.
TABLE XXIII

COMPARISON OF THE EIGHT TOP TEACHERS WITH THE EIGHT BOTTOM TEACHERS IN CERTAIN ITEMS DENOTING OVER-ALL USE OF PROFESSIONAL TIME

<table>
<thead>
<tr>
<th>Items</th>
<th>Teachers who made best use of time</th>
<th>Teachers who made poorest use of time</th>
<th>Measurement of significant difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. hours devoted to work with organized groups</td>
<td>2,042</td>
<td>1,771</td>
<td>2.17</td>
</tr>
<tr>
<td>Percentage of time devoted to work with organized groups</td>
<td>72</td>
<td>66</td>
<td>.43</td>
</tr>
<tr>
<td>No. work days spent inside community</td>
<td>202</td>
<td>170</td>
<td>1.16</td>
</tr>
<tr>
<td>Hours devoted to preparation for teaching</td>
<td>301</td>
<td>296</td>
<td>.11</td>
</tr>
<tr>
<td>No. hours devoted to classroom instruction</td>
<td>731</td>
<td>718</td>
<td>.07</td>
</tr>
<tr>
<td>Hours devoted to records and reports</td>
<td>125</td>
<td>152</td>
<td>1.58</td>
</tr>
<tr>
<td>Hours devoted to professional improvement</td>
<td>170</td>
<td>157</td>
<td>.59</td>
</tr>
<tr>
<td>Hours spent in work with county agricultural organizations</td>
<td>44</td>
<td>29</td>
<td>1.16</td>
</tr>
<tr>
<td>Hours spent in supervising veterans' classes</td>
<td>35</td>
<td>33</td>
<td>.19</td>
</tr>
<tr>
<td>Hours spent in other school activities</td>
<td>181</td>
<td>193</td>
<td>.30</td>
</tr>
<tr>
<td>Hours devoted to F.F.A.</td>
<td>105</td>
<td>179</td>
<td>2.63</td>
</tr>
<tr>
<td>Hours spent in community projects</td>
<td>320</td>
<td>473</td>
<td>1.52</td>
</tr>
<tr>
<td>Hours spent in canning plant</td>
<td>128</td>
<td>191</td>
<td>1.56</td>
</tr>
<tr>
<td>Hours spent in school shop</td>
<td>144</td>
<td>140</td>
<td>.13</td>
</tr>
<tr>
<td>Hours spent in other community projects</td>
<td>48</td>
<td>143</td>
<td>1.52</td>
</tr>
</tbody>
</table>
Since the chance of getting such a value in repeated sampling is above one per cent, the level used by statisticians to determine whether or not a significant difference exists, the conclusions is that the significance of the difference is at least in doubt, in that the chances are between one and five per cent. A difference, therefore, between the number of hours which the eight top teachers devoted to work with organized groups and the number devoted to such work by the bottom teachers does exist, but the difference is not great enough to be declared significant.

Reference to the table of \( t \) reveals that when \( n = 14 \) (obtained thus: \( n = 8 + 8 - 2 = 14 \)), as it does in most cases in these comparisons, a value of \( t_0 = 2.977 \) or greater must be had before the differences can be said to be significant at the one per cent level. In interpreting Table XXIII when the difference of means is involved and eight teachers are in either group, a \( t_0 \) value of 2.977 or greater means that the given differences are significant; if, on the other hand, that value is less than 2.977, the difference may exist but is not great enough to be declared significant.

Table XXIII also shows other comparisons of the eight top teachers and the eight bottom teachers in the over-all use of professional time other than on-farm supervision. One comparison reveals that while the top teachers were spending an average of 202 days inside their communities during 1951-52, the bottom teachers were spending 170 days inside the community, a difference of 32 days. The \( t_0 \) score for the test of this difference was 1.16, which was not sufficiently great to be called significant.

The data show little difference in the amount of time devoted to preparation for teaching, 301 against 296 hours. The top teachers
devoted an average of only five hours more to this activity than the bottom teachers. As has been stated earlier, however, teachers were asked to place in this category of activities all that was done by the teacher not only to provide lesson plans and teaching aids, but also to prepare equipment and provide facilities of all kinds. This category of activities did provide opportunities for teachers to get credit toward their program of work for at least some "busy work," or activities that allowed individual teachers to pass the time away, if they saw fit.

Although the top teachers devoted 13, or 8.5 per cent, more hours during the year to professional improvement than did the bottom teachers, the value of $t_0$ was only .59, which means that although the difference exists, the difference is not great enough to be considered significant.

The top and bottom teachers were compared on the basis of the number of hours each group devoted to county agricultural organizations and agencies. Data revealed that the top teachers spent 15 more hours in this area of activities than did the bottom teachers, and that the value of $t_0$ was 1.16, which was not great enough to be declared significantly different.

Other activities in which the top teachers devoted more time than did the bottom teachers were supervising veterans' classes and individual instruction and supervision in school shop, but these differences were so small that neither drew a $t_0$ value greater than .19. This meant that neither difference was great enough to be significant.

There were certain activities, or areas of activities, to which the bottom teachers devoted more time than the top teachers. While the bottom teachers were devoting an average of 179 hours to F.F.A. activities, the top teachers were devoting 105 hours to this area of activities.
This meant that the bottom teachers were devoting, on the average, 70 per cent more time to F.F.A. activities than the top teachers. The $t_0$ value of this difference, however, was 2.63, which, being less than the 2.977, the minimum score for significant difference at the one per cent level, indicates that the difference was not great enough to be concluded as significant.

The bottom teachers also spent, on the average, more time in community projects other than the canning plant and the school shop than did the top teachers. While the bottom teachers averaged spending 143 hours in "other community projects," the top teachers spent an average of only 48 hours. Although this represented a very large percentage of difference, probably due to the small sample and the wide variation among the teachers in the amount of time devoted to this area of activities, the $t_0$ value amounted to only 1.52, which means that the difference is not to be considered as significant.

One of the unexpected findings of this study was the fact that the top teachers, as selected through an application of criteria including that of the amount of time devoted to the F.F.A., actually did not devote as much time to F.F.A. activities as did the teachers who were classified as bottom teachers. A more detailed analysis of the data than that contained in the table revealed that the average amount of time devoted to F.F.A. activities for the 16 teachers in this aspect of the study was 142 hours. Seven of the eight bottom teachers surpassed this figure, while six of the eight top teachers devoted less than that amount of time to the F.F.A. The results, therefore, did not come about because one or two teachers were so exceptional in the amount of time devoted to this area of activities. On the other hand, there is indication that there
was at least a fair degree of consistency in the relative amounts of
time individuals in the two groups devoted to F.F.A. activities. There
may be at least two explanations for these results: first, the bottom
teachers may have devoted their own time to certain activities, which
the top teachers would have delegated to the members, themselves, with
the justification that such delegation of responsibilities contributes
to the personal growth of the individuals; and, second, F.F.A. activi­
ties could have been used as time-filling activities for those who may
be somewhat less concerned about how their professional time should be
utilized. This latter explanation could possibly explain why the bottom
teachers devoted relatively more time to such activities as keeping
records and making reports, the activities associated with the community
projects, as well as those activities which the teacher assumes as a
regular teacher in the school. Some of the top teachers had been able
to use other means than the use of their own time to get the same kinds
of services rendered. For example, at least two of the top teachers had
been able to have provided the services of other trained individuals to
deal with the problems of supervising the activities in the community
canning plant. It is even possible that the teacher who has a dynamic
program of vocational agriculture under way, which is appreciated by the
administration, the teachers, and the people of the community, can, in
many cases, be relieved of bus duties, keeping home room, and other
responsibilities which conflict with other activities that contribute
more to the attainment of good educational objectives.

Because of the fact that on-farm supervision holds such an
important place in a strong program of vocational agriculture, a com­
parison was made of the quality of the on-farm supervision done by the
top and the bottom teachers. Table XXIV presents a comparison on the basis of certain items which were believed to reveal quality of on-farm supervision with regard to the use of professional time.

The top teachers devoted an average of 811 hours to on-farm supervision as compared with 456 hours for the bottom teachers, a difference of 355 hours, or 78 per cent. The $t_0$ value for this difference was found to be 3.19, which, for this number of cases, means that the chance of getting a value of greater than or equal to 3.19 in repeated sampling is somewhere between 1.0 per cent and 0.1 per cent. The conclusion is, therefore, that the data could not be samples drawn from the same population or, in other words, that the averages of the two groups are significantly different.

The top teachers devoted 71 per cent more days during the year to on-farm supervision than did the bottom teachers -- 203 and 119 days, respectively. The value of $t_0$ in this case was found to be 5.27. Reference to the table of $t$ shows that for samples of $n = 14$ (as is true in this instance), a value of $t_0$ greater than 4.140 means that one would expect to find values greater than or equal to that number in repeated sampling from that population in less than 0.1 per cent of cases. A value of 5.27 indicates, therefore, that the difference is virtually certain.

As would be expected when such a vast difference was found in the number of days devoted to on-farm supervision, the difference in the total number of supervisory visits made by the two groups of teachers was also found to be great. In fact, the top teachers made, as a group, more than twice as many supervisory visits during the twelve-month period as did the bottom teachers -- 629 and 265, respectively. The $t_0$ value of 4.79 means that this difference is virtually certain.
<table>
<thead>
<tr>
<th>Items</th>
<th>Teachers who made best use of time</th>
<th>Teachers who made poorest use of time</th>
<th>Measurement of significant difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours devoted to on-farm supervision</td>
<td>811</td>
<td>456</td>
<td>3.19</td>
</tr>
<tr>
<td>Days in which supervisory visits were made</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. supervisory visits</td>
<td>203</td>
<td>119</td>
<td>5.27</td>
</tr>
<tr>
<td>No. all-day supervisory visits</td>
<td>628</td>
<td>265</td>
<td>4.79</td>
</tr>
<tr>
<td>Percentage of all visits to farms of class members</td>
<td>366</td>
<td>177</td>
<td>3.83</td>
</tr>
<tr>
<td>Percentage of adult visits to farms of class members</td>
<td>96</td>
<td>92</td>
<td>3.45</td>
</tr>
<tr>
<td>Percentage of all-day boys visited</td>
<td>98</td>
<td>68</td>
<td>10.10</td>
</tr>
<tr>
<td>No. supervisory visits per boy</td>
<td>8.0</td>
<td>3.4</td>
<td>4.61</td>
</tr>
<tr>
<td>No. supervisory visits per first-year boy</td>
<td>6.5</td>
<td>2.0</td>
<td>5.53</td>
</tr>
<tr>
<td>Percentage of first-year boys visited</td>
<td>98</td>
<td>57</td>
<td>7.91</td>
</tr>
<tr>
<td>Percentage of first-year boys visited by October 1</td>
<td>47</td>
<td>16</td>
<td>5.35</td>
</tr>
<tr>
<td>No. supervisory visits per boy other than first-year</td>
<td>7.7</td>
<td>3.5</td>
<td>4.68</td>
</tr>
<tr>
<td>Percentage of boys visited three or more times</td>
<td>86</td>
<td>41</td>
<td>12.03</td>
</tr>
<tr>
<td>Percentage of boys visited seven or more times</td>
<td>51</td>
<td>16</td>
<td>9.61</td>
</tr>
<tr>
<td>Percentage of first-year boys visited three or more times</td>
<td>78</td>
<td>27</td>
<td>8.19</td>
</tr>
<tr>
<td>Percentage of first-year boys visited seven or more times</td>
<td>42</td>
<td>5</td>
<td>6.83</td>
</tr>
<tr>
<td>No. adult supervisory visits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. visits per adult class member</td>
<td>5.6</td>
<td>1.0</td>
<td>4.14</td>
</tr>
</tbody>
</table>
A comparison closely related to the relative amount and percentage of time devoted to work with organized groups is that of the percentage of all supervisory visits made to the farms of class members. The top teachers made 96 per cent of their visits to the farms of class members as compared with 92 per cent for the bottom teachers. A value of X amounting to 3.45 means that the difference is significant.

Since practically all the individuals visited, who were not class members, were adults, the top and the bottom groups were compared as to the percentage of adult visits which were made to farms of class members. Facts showed that 88 per cent of the adult visits made by the top teachers were to the farms of class members as compared with 66 per cent for the bottom teachers. With an X value of 11.22, this difference was considered to be very significant.

As has already been pointed out in this study, frequent visits to the farms of individual class members are necessary if the kind of learning situations needed are to be developed. This is especially true for the all-day boys who are in class for 180 days of the year. The top and the bottom teachers were compared as to the relative percentage of their all-day boys who were visited one or more times during the twelve-month period. As a group, the top teachers visited 98 per cent of their boys one or more times, while the bottom teachers visited 68 per cent of their all-day boys one or more times. This difference made for a value of X of 10.10, an especially significant value. As for the first-year all-day boys, 98 per cent of those in the top teachers' classes were visited one or more times, as compared with 57 per cent of those in the bottom teachers' classes. An X value of 7.91 indicates that the difference was very significant.
Another indication of the frequency of visits to the farm homes of all-day members is the number of visits made per enrollee. For the all-day boys comparisons were made of the average number of visits per enrollee, both to the farms of the members as a whole and to the farms of the first-year boys. While the top teachers were making an average of 8.0 visits per boy for the total group, the bottom teachers were making an average of only 3.4 visits per boy. While an average of 6.5 visits per first-year boy were being made by the top teachers, an average of 2.0 visits were being made to the farms of this group by the bottom teachers. Furthermore, while the top teachers were visiting their all-day boys other than first-year an average of 7.7 times, the bottom teachers were visiting their boys other than first-year an average of 3.5 times. The t₀ values for these three comparisons were found to be as follows: for all all-day boys, 4.61; for the first-year boys, 5.53; and for the boys other than first year, 4.68. All three of these differences were, therefore, great enough to be considered as statistically significant.

Another indication of the quality of the on-farm supervisory program for the all-day class groups was considered to be the percentage of the boys visited three or more times. Data with regard to the percentage of all-day boys who were visited three or more times are presented in Table XXIV. The top teachers visited 86 per cent of their all-day boys three or more times, while the bottom teachers visited 41 per cent of their all-day boys three or more times. Singling out the first-year boys for this same comparison, the data show that while the top teachers were visiting 78 per cent of their first-year boys three or more times, the bottom teachers visited 27 per cent that number of
times. The $X$ values of 12.03 for the difference in the percentage of all all-day boys visited three or more times, and 8.19 for the difference in the percentage of first-year boys visited three or more times indicate that both are much more than the minimum necessary to signify significance of difference.

The comparison described above was carried one step further to ascertain what difference existed between the top and the bottom teachers with regard to the percentage of all all-day boys visited seven or more times during the twelve-month period. Data in Table XXIV reveal that 51 per cent of all all-day boys were visited seven or more times by the top teachers, as compared with 16 per cent for the bottom teachers. Too, while 42 per cent of the first-year boys were being visited seven or more times by the top teachers, only five per cent of the first-year boys were being visited seven or more times by the bottom teachers. The $X$ values of 9.61 for the difference in the percentage of all all-day boys visited seven or more times, and 6.83 for the difference in the percentage of first-year boys visited seven or more times, show that both are more than enough to signify significance of difference.

As was pointed out earlier, first-year boys should be visited before school opens, if possible; if not, visits should be made early after school opens. These visits should be made so that the teacher might get acquainted with the boy, his parents, and the farm itself, and might develop a supervised farming program which becomes an integral part of a dynamic instructional program. One indication of relatively how well this need was being taken care of by the two groups of teachers is the percentage of first-year boys visited by October 1. Data in Table XXIV show that the top teachers as a group visited 47 per cent of
their first-year boys by October 1. The bottom teachers, during the same period, were visiting only 16 per cent of their first-year boys. An X value of 5.35 indicates that this difference is very significant.

Comparisons were made between the top and the bottom teachers with regard to the relative quality of their adult programs of on-farm supervision. The two groups were compared with regard to the over-all number of supervisory visits to adult class members' farms, as well as the number of visits per adult class member. Data in Table XXIV show that the top teachers made an average of 211 visits to the farms of adult class members, while the bottom teachers made an average of 40 such visits. The top teachers made an average of 5.6 visits per adult class member, and the bottom teachers made an average of 1.0 per member. Respective t0 values of 3.13 and 4.14 were more than the minimum necessary to be classified as significant at the one per cent level. In fact, the difference in the number of visits per adult class member was sufficient to be significant at the 0.1 per cent level.

A comparison of the top and the bottom teachers with regard to how well all-day visits were distributed. In addition to the comparisons which are presented in Tables XXIII and XXIV, the top and the bottom teachers were compared with regard to how well their all-day visits were distributed among the class members. Table XXV and Figure V provide a presentation of the findings. On the average, the top teachers had 46 all-day boys, as compared with 50 for the bottom teachers. Figure V shows that, while the frequency distribution of visits for the top teachers resembles somewhat a normal curve, the distribution of the visits for the bottom teachers piles up at zero and recedes rather
### TABLE XXV

**COMPARISON OF TOP AND BOTTOM TEACHERS WITH REGARD TO DISTRIBUTION OF VISITS AMONG ALL-DAY BOYS**

<table>
<thead>
<tr>
<th>Number of times individual boys were visited</th>
<th>Top teachers (per cent)</th>
<th>Bottom teachers (per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2.5</td>
<td>31.4</td>
</tr>
<tr>
<td>1</td>
<td>5.0</td>
<td>14.1</td>
</tr>
<tr>
<td>2</td>
<td>6.0</td>
<td>13.1</td>
</tr>
<tr>
<td>3</td>
<td>10.0</td>
<td>8.0</td>
</tr>
<tr>
<td>4</td>
<td>10.3</td>
<td>8.0</td>
</tr>
<tr>
<td>5</td>
<td>7.2</td>
<td>6.0</td>
</tr>
<tr>
<td>6</td>
<td>8.1</td>
<td>3.3</td>
</tr>
<tr>
<td>7</td>
<td>7.8</td>
<td>5.3</td>
</tr>
<tr>
<td>8</td>
<td>8.5</td>
<td>3.8</td>
</tr>
<tr>
<td>9</td>
<td>6.2</td>
<td>1.5</td>
</tr>
<tr>
<td>10</td>
<td>6.0</td>
<td>1.7</td>
</tr>
<tr>
<td>11</td>
<td>5.6</td>
<td>1.5</td>
</tr>
<tr>
<td>12</td>
<td>5.0</td>
<td>0.7</td>
</tr>
<tr>
<td>13</td>
<td>4.4</td>
<td>1.0</td>
</tr>
<tr>
<td>14</td>
<td>3.1</td>
<td>0.2</td>
</tr>
<tr>
<td>15</td>
<td>0.9</td>
<td>0.0</td>
</tr>
<tr>
<td>16</td>
<td>1.6</td>
<td>0.2</td>
</tr>
<tr>
<td>17</td>
<td>0.6</td>
<td>0.3</td>
</tr>
<tr>
<td>18</td>
<td>0.3</td>
<td>0.0</td>
</tr>
<tr>
<td>19</td>
<td>0.3</td>
<td>0.0</td>
</tr>
<tr>
<td>20 and over</td>
<td>0.3</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Total 100 100
FIGURE V

COMPARISON OF TOP AND BOTTOM TEACHERS WITH REGARD TO DISTRIBUTION OF VISITS AMONG ALL-DAY STUDENTS

- Teachers who had made best use of time
- Teachers who had made poorest use of time
rapidly as the number of visits is increased. Reference to Table XXV shows that, while 31.4 per cent of the boys taught by the bottom teachers were not visited at all, only 2.5 per cent of the boys taught by the top teachers were not visited. While 58.6 per cent of the boys taught by the bottom teachers were being visited less than three times during the twelve-month period, 13.5 per cent of the boys taught by the top teachers were being visited less than three times. While 7.2 per cent of the boys taught by the bottom teachers were being visited more than eight times, 34.3 per cent of the boys taught by the top teachers were visited more than eight times. The median number of visits for the bottom teachers was 1.35, as compared with 6.08 for the top teachers.

Summary of the comparisons of the top and the bottom teachers.

One of the objectives of this study was that of determining what teachers of the group to be studied had made the best use of their professional time. The purpose of the selection was to utilize their use of professional time as a basis for suggesting guides for teacher loads for use in planning local programs of vocational agriculture in Georgia. The actual selection of the teachers who had made the best use of their time was to be made on the basis of criteria growing out of the point of view stated in Chapter III and approved by a jury of school leaders. These criteria were listed in the second paragraph of this chapter.

After the teachers in this study had been arranged in rank order on the basis of the criteria selected for use in determining those who had made the best use of their time, the top eight teachers in this list were selected as the group of teachers who had made the best use of professional time. As a basis for determining how statistically significant
the difference was between the use that this group had made of their professional time and that of other teachers in the study, a second group of eight teachers was selected from the bottom of the list of ranked teachers. In other words, the eight teachers who were thought to have made the best use of their time would be compared with the eight teachers who were thought to have made the poorest use of their professional time.

These two groups, of eight teachers each, were compared with regard to certain items of time use which were considered to be significant in the development of programs of vocational agriculture in Georgia. Although items representing the criteria which had been used in the selection of the top teachers were included, some items of time use were included because teachers spent time in the activities represented by those items.

Two statistical methods were used in testing the significance of the difference between the top and the bottom groups with regard to the items representing use of professional time. One of these methods was that of discovering the value of $t_0$ where the differences were measured in means, and the other was that of discovering the value of $X$ when the differences were measured in percentages. The degrees of significance were determined through reference to the table of $t$ and the normal probability table, respectively.

A summary of the findings will be organized into three parts: one, with regard for those items where little or no difference was found both in the use of teacher time and in the $t_0$ or $X$ values; two, with regard for those items where teacher time was somewhat different, but $t_0$ or $X$ values do not show a statistically significant difference; and
three, with regard to those items which do show a sufficient difference to call for $t_0$ or $X$ values which indicate a significant difference.

In six items or areas of activities, the eight top teachers showed little actual difference from the eight bottom teachers in the amount of time devoted to those activities. These areas of activities are: classroom teaching, preparation for teaching, professional improvement, supervision of Veterans Farm Training classes, individual instruction and supervision in school shop, and other school activities which the teacher does as a member of the school faculty.

In three items or areas of activities, the top teachers devoted more time than did the bottom teachers, on the average; but the difference was not great enough to provide a statistically significant difference. These areas were work with organized groups, number of work days spent inside the school community, and work with county agricultural organizations. In three areas of activities the bottom teachers devoted more time than did the top teachers, but the difference was not great enough to justify a conclusion of significant difference. These areas were keeping records and making reports, F.F.A. activities, and activities connected with the canning plant and other community projects. In some of these the difference approached rather closely the province of significant difference, particularly the time devoted to F.F.A. activities.

One of the most significant findings of this study was that, although the top teachers had been selected on the basis of criteria which represented a rather broad base, the only area of activities where there was a statistically significant difference between the top and the bottom teachers with regard to time use was that of on-farm supervision.
Here, however, definite superiority was shown on the part of the top teachers, and the difference was great enough in almost all items to justify a conclusion of virtual certainty.

In a comparison not involving the test for significance of difference, the top and the bottom teachers were studied with regard to the distribution of their visits among their all-day boys. After grouping the boys on the basis of the number of times they were visited by their teacher of vocational agriculture and arranging the data into a frequency distribution, the discovery was made that the top teachers' visits were distributed in a manner resembling a normal curve with the median at 6.08 visits per boy. On the other hand, the bottom teachers' visits were distributed quite differently, in that the crude mode was at zero and the size of the frequencies dropped off rapidly as the number of visits was increased. While almost one-third of the boys taught by the bottom teachers were not visited by their teacher, only 2.5 per cent of the boys taught by the top teachers were not visited. While well over half of the boys taught by the bottom teachers were not visited more than twice, less than one-seventh of the boys taught by the top teachers were not visited more than twice. While seven per cent of the boys taught by the bottom teachers were visited more than eight times during the twelve-month period, over a third of the boys taught by the top teachers were visited more than eight times.
PROPOSED GUIDES FOR THE PLANNING AND THE DEVELOPMENT OF
TEACHING LOADS FOR TEACHERS OF VOCATIONAL
AGRICULTURE IN GEORGIA

The need for appropriate teaching loads. The establishment of appropriate teaching loads can contribute to the program of vocational agriculture in at least three ways: first, it can contribute to stabilization of the profession of teaching by providing a greater degree of personal satisfaction to those engaged in teaching vocational agriculture; second, it can contribute to the realization of improved programs of vocational agriculture and the attainment of good educational objectives; and third, it can be of much value to administrators, supervisors, teachers, and lay members of planning groups engaged in the process of planning local and state programs of vocational education in agriculture.

Data have already been shown in this report to indicate there was not a problem of lack of teacher time devoted to programs of vocational agriculture in Georgia. On the other hand, data have been presented to show that the teachers, as a whole, go far beyond the call of duty in devoting time to professional duties. In fact, there was very little difference between the top and the bottom teachers with regard to the number of hours per year devoted to professional duties. Each was devoting more than 2,500 hours, or 50 hours per week, to his program of vocational agriculture. The group, as a whole, devoted 12.4 percent more than that amount of time to their programs of vocational agriculture. One teacher devoted an average of 66.4 hours to his
professional duties, or 31 per cent more than that specified in his program of work.

Even after having devoted an average of 56.2 hours per week to the duties of a teacher of vocational agriculture, many of the teachers were not satisfied with the quality of work done because they recognized that they were not devoting enough time to many aspects of their individual programs. Many teachers of vocational agriculture in Georgia, like those in Idaho as described by Stucki, have "that feeling of always being overburdened."

... As a teacher of vocational agriculture, the writer has had an opportunity to discuss some of these vital problems with other cultural teachers in the state of Idaho. Several discussions have been centered around the activities performed by vocational agricultural instructors. Many instructors have freely admitted that at times they were so "bogged down" with activities that they wondered which way to turn. Some teachers expressed themselves as always being overburdened and never quite getting the desired job done. This has been, and continues to be, common talk among agricultural instructors.¹

There is evidence to show that this problem in vocational agriculture is not limited to the states of Idaho and Georgia, alone, because Purkey, of Ohio, has discovered this problem in his state and proposes that something be done about it.

The heavy load some teachers are carrying is not conducive to the development of a proper attitude toward the profession and their work. Administrators and supervisors should recognize this and help them to plan a more reasonable working schedule.²


²Dorris R. Purkey, "Time Used for Professional Activities by Teachers of Vocational Agriculture in Ohio" (unpublished Master's thesis, The Ohio State University, Columbus, 1951), p. 48.
If each teacher of vocational agriculture in Georgia were working in a situation where the teaching load was limited more nearly to what he could do within a fifty-hour week, there is reason to believe that improved programs of vocational agriculture could result. Teachers, who, as a group, are willing to spend more professional time than that which is expected of them would doubtless be stimulated to attain higher professional standards if they were working in situations where such standards were more easily attainable from the standpoint of time. Many of the teachers who considered that they were overloaded, in the interviews with the investigator, indicated an interest in higher educational standards for their local programs.

Many leaders in the field of agricultural education have for many years been interested in more comprehensive facts with regard to teacher time so that more appropriate teaching loads could be determined. One of the main reasons for this interest has been the felt need for better planning of local programs of vocational agriculture in keeping with what the teacher of vocational agriculture can do within a normal working day. Teaching loads based upon such data as those which were included in this study should contribute much to better planning of local and state programs of vocational education in agriculture. Such planning is very important at this time when the salaries of teachers of vocational agriculture are based upon a scale of overtime work-loads of up to fifty hours per week. Because such extra work is based upon a well-defined program, a committee, composed of teachers, supervisors, and teacher trainers, has worked to provide appropriate work-loads for teachers. This committee is to be commended for its contribution to the program of
vocational agriculture in Georgia. It has, however, worked without the benefit of data which the investigator has attempted to provide in this study.

Bases for the proposed teaching loads. As was stated in Chapter II, the teachers who had made the best use of their time were selected so that their teaching loads could be used as guides in determining better standards for the development of teaching loads in Georgia. The eight teachers who were selected as the top teachers in this study represent roughly the upper quartile of the teachers of the State. Here was a group of teachers who had made a better use of professional time, because in general they had chosen to devote a larger proportion of their time to those activities which contribute most to the attainment of good educational objectives. They, along with the other teachers in the study, had been selected on the basis that their teaching situations were fairly representative of their geographical area. The fact that they had made better use of their professional time in situations which were assumed to be representative was considered by the investigator as good reason for the utilization of their loads as a basis for proposing the teaching loads contained in this chapter.

Teaching loads should be based not only on what good teachers are doing but also on the basis of what good teachers should do. In other words, activities for teaching loads should be selected on the basis of how much such activities contribute to the attainment of good educational objectives.

The teaching loads of all the teachers included in the study. The data with regard to the number and the kinds of classes, as well as
the number of individuals enrolled by classes, are presented in Table XXVI. These data indicate the kinds and the size of the teaching loads of those teachers that were included in this study.

Each of the teachers had from 2 to 4 all-day classes. The average number for the group was 3.1. Two-thirds of the teachers had 3 all-day classes. Seven had 4 such classes. Only five of the group had 2. The average all-day enrollment per teacher was 47. The number enrolled per teacher ranged from 19 to 78. That the distribution of the enrollment was fairly normal is indicated by the fact that the median enrollment was almost the same as the mean.

All but one of the 35 teachers had at least 1 adult class. Eighteen of the teachers had only 1 class; fifteen had 2; and one had 3 adult classes. The average number of such classes for the group as a whole was 1.5. On the average, the teachers in the study taught 43 adult farmers in their classes. Because of the fact that a few of the teachers showed very high enrollment, 112 for one teacher, the median probably represents a better picture of the load with regard to the number of adults the individual teachers taught. The average enrollment per class was 29. The median could not be obtained because the individual class enrollments were not available.

Although the all-day and adult classes comprised the major part of the teacher's load, over three-fourths of the teachers had at least one group of the following kinds of classes: day-unit, special farm-shop, and young-farmer. The day-unit class was found most often of these three minor class groups. Eighteen of the teachers had at least one such class. Only one teacher, however, had more than one day-unit group. The day-unit classes were, on the whole, larger than
### TABLE XXVI
THE TEACHING LOADS OF TEACHERS INCLUDED IN THE STUDY

<table>
<thead>
<tr>
<th>Kinds of classes</th>
<th>Teachers reporting</th>
<th>Average number of groups</th>
<th>Range in number of groups</th>
<th>Enrollment per teacher</th>
<th>Average enrollment per class group</th>
<th>Range in enrollment per teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>All-day</td>
<td>75</td>
<td>3.1</td>
<td>2-4</td>
<td>46</td>
<td>47</td>
<td>15</td>
</tr>
<tr>
<td>Day-unit</td>
<td>18</td>
<td>1.1</td>
<td>0-2</td>
<td>23</td>
<td>23</td>
<td>22</td>
</tr>
<tr>
<td>Special farm-shop</td>
<td>9</td>
<td>1.1</td>
<td>0-2</td>
<td>17</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td>Young-farmer</td>
<td>5</td>
<td>1.0</td>
<td>0-1</td>
<td>11</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Adult</td>
<td>34</td>
<td>1.5</td>
<td>0-3</td>
<td>34</td>
<td>43</td>
<td>29</td>
</tr>
</tbody>
</table>

140
any other kind of class group with the exception of the adult classes.

Nine teachers reported at least one farm-shop class. Only one teacher, however, reported as many as two such classes. On the whole, these classes were somewhat smaller than the all-day classes.

Five teachers in the study reported young-farmer classes. These groups were the smallest of any represented in the study. The average number in a class was 11.

All teachers in this study organized and taught in-school and out-of-school class groups. All but one of the teachers had at least one adult class, and that teacher had a young-farmer class. As has been said, over three-fourths of the teachers had other classes than the all-day and the adult. Only one teacher in the study had at least one of each of the five kinds of classes represented in the study. The most common work-load pattern seemed to be for the teacher to have three all-day classes, either a day-unit or a special farm-shop class, and from one to two adult classes.

The teaching loads of the top teachers. One of the principal hypotheses of this study was that the use of teacher time on the part of those who would be found to have made the best use of their time would be a good guide for determining appropriate teaching loads. Table XXVII presents data that reveal the kinds of teaching loads the eight top teachers had during the year 1951-52. A comparison of the findings of this table with those of Table XXVI reveals that the top teachers, on the average, had a slightly higher than average number of all-day classes, but had the same total number of all-day boys. Although they had 1.1 adult classes per teacher as compared with 1.5 for the group as


<table>
<thead>
<tr>
<th>Kinds of classes</th>
<th>Number teachers reporting class</th>
<th>Total number classes</th>
<th>Average number classes per teacher reporting</th>
<th>Total number enrollees</th>
<th>Average number enrollees Per teacher</th>
<th>Average number enrollees Per class</th>
</tr>
</thead>
<tbody>
<tr>
<td>All-day</td>
<td>8</td>
<td>26</td>
<td>3.2</td>
<td>376</td>
<td>47</td>
<td>14</td>
</tr>
<tr>
<td>Day-unit</td>
<td>3</td>
<td>3</td>
<td>1.0</td>
<td>54</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Special farm-shop</td>
<td>3</td>
<td>3</td>
<td>1.0</td>
<td>36</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Young-farmer</td>
<td>2</td>
<td>2</td>
<td>1.0</td>
<td>22</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Adult</td>
<td>7</td>
<td>8</td>
<td>1.1</td>
<td>290</td>
<td>41</td>
<td>36</td>
</tr>
</tbody>
</table>
a whole, they enrolled almost as many farmers per teacher. Two of the five teachers with young-farmer classes were found in this top group. There was found to be a slightly smaller number of in-school boys per class among the top teachers, but this difference is probably not significant because of the small number of cases. The general pattern for this group was for the teacher to have three or four all-day classes, either a day-unit or special farm-shop class, and one or two adult classes. In other words, the general work-load pattern for this group was little different from that of the group as a whole, with the exception that they tended to have somewhat more all-day groups, but slightly fewer adult groups.

As has just been shown, there seems to be little difference between the actual teaching loads of the top teachers and the total group of 35 teachers. Yet, as was found in Chapter VII, what the top teachers did with their time and what the bottom teachers did with theirs were quite different, particularly in the realm of on-farm supervision. The top teachers' pattern of time use should be of great value in determining how much time should be allotted to various professional activities. After all, making up teaching loads involves much more than deciding the kind and the number of classes to work with, and the number of individuals to be reached in each. As has been indicated in this study, it is possible for two teachers in similar situations to have the same number and kind of classes and even the same number of individuals enrolled in each class; yet, the way they use their professional time may be very different. One may utilize his time in such a way as to result in a good strong program of education, while another may utilize his time in such a way as to result in a very weak program.
Proposed guides for the planning and the development of teaching loads. Table XXVIII proposes guides in the form of time allotments for the development of teaching loads for teachers of vocational agriculture in Georgia. As will be observed from the data, the proposals are based upon the average allotment of time which the top teachers in this study gave to their various professional activities in 1951-52. Where variations from the average amount spent by the top teachers appear in the proposals, these variations have been made to effect convenience in utilization and to avoid the appearance of infallibility.

The utilization of these proposed guides for the budgeting of teacher time in the development of programs of work and for the budgeting of time in carrying out these programs might be understood better if a definite example is given. The assumption is that a teacher of agriculture and his program planning committee reach the point in their thinking that the school's program of vocational agriculture should enroll 40 all-day boys, 10 young farmers, and 20 adult farmers for the next year. Is this too much for a teacher of vocational agriculture to do and, if so, how much too heavy is the load? This question might be answered as follows:

All-day classes -- 3
130 days X 3 (classes) 540 hours
40 boys X 10 (hours of supervision) 400

Young-farmer classes -- 1
45 hours (class time) 45
10 young farmers X 11 (hours of supervision) 110

Adult classes -- 1
30 hours (class time) 30
20 adults X 7 (hours of supervision) 140

Items 4 through 12 (Table XXVIII) 1,230

Total professional time 2,495 hours
<table>
<thead>
<tr>
<th>Items of time use</th>
<th>Amount of time spent in 1951-52 (hours)</th>
<th>Proposed guides for use in planning teaching loads (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Instruction time, per school day</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. All-day</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>b. Day-unit</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>c. Special farm-shop</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2. Instruction time, per class</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Young-farmer</td>
<td>42</td>
<td>45</td>
</tr>
<tr>
<td>b. Adult</td>
<td>31</td>
<td>30</td>
</tr>
<tr>
<td>3. On-farm supervision, per enrollee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. All-day</td>
<td>10.1</td>
<td>10</td>
</tr>
<tr>
<td>b. Day-unit</td>
<td>3.1</td>
<td>3</td>
</tr>
<tr>
<td>c. Special farm-shop</td>
<td>2.9</td>
<td>3</td>
</tr>
<tr>
<td>d. Young-farmer</td>
<td>10.6</td>
<td>11</td>
</tr>
<tr>
<td>e. Adult</td>
<td>6.6</td>
<td>7</td>
</tr>
<tr>
<td>4. Individual instruction and supervision in</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Canning plant</td>
<td>128</td>
<td>125</td>
</tr>
<tr>
<td>b. School shop</td>
<td>144</td>
<td>145</td>
</tr>
<tr>
<td>c. Other community projects</td>
<td>48</td>
<td>45</td>
</tr>
<tr>
<td>5. F.F.A. activities</td>
<td>105</td>
<td>105</td>
</tr>
<tr>
<td>6. Preparation for teaching</td>
<td>301</td>
<td>250</td>
</tr>
<tr>
<td>7. Procuring and maintaining canning, shop, and other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>facilities</td>
<td>0.0*</td>
<td>50</td>
</tr>
<tr>
<td>8. Keeping records and making reports</td>
<td>126</td>
<td>125</td>
</tr>
<tr>
<td>9. Professional improvement</td>
<td>170</td>
<td>170</td>
</tr>
<tr>
<td>10. Working with county agricultural agencies</td>
<td>44</td>
<td>35</td>
</tr>
<tr>
<td>11. Supervising Veterans Farm Training Program</td>
<td>35</td>
<td>0</td>
</tr>
<tr>
<td>12. Other school activities</td>
<td>181</td>
<td>180</td>
</tr>
</tbody>
</table>

*Included as part of preparation for teaching in data used in study
Allowed as much as five per cent freedom, this program of 2,495 hours would fall within the range of load for a 2,500-hour program. In other words, the teacher should be able to carry out the program and utilize his time as well as the average of the top teachers in the study, assuming that he could accomplish as much within a given period as the average of the top teachers.

It is believed that the guides proposed for use in the development of programs of vocational agriculture could be utilized in the planning and the development of programs of vocational agriculture to meet the needs of most community situations where this program of education is needed. Furthermore, these guides could be used to plan individual programs for whatever number of hours the school authorities might desire.
CHAPTER IX

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The purpose of this investigation was to study the use that teachers of vocational agriculture in Georgia had made of their professional time. This final chapter of the study has three purposes: (1) to summarize the major findings; (2) to draw conclusions that seem evident from the findings; and (3) to suggest ways and means whereby local programs of vocational agriculture may be improved through better use of teacher time.

SUMMARY

Sources of the data. Data for the study were obtained from selected teachers of vocational agriculture through the monthly and annual reports of their professional activities. A monthly report form can be seen in Appendix A. The monthly reports contained the following kinds of data:

1. Number of classes of various kinds.
2. Number of class members enrolled, by kinds of classes.
3. Number of organized class meetings for the month, by kinds of classes.
4. Number of F.F.A. meetings for the month.
5. Number of on-farm visits made, by kinds of classes.
6. Names of persons, schools, or places visited for each day of the month.
7. Amount of time during the month devoted to
   (a) class instruction, by kinds of classes;
(b) supervision on farms, by kinds of classes;
(c) individual instruction and supervision in canning plant, by kinds of classes;
(d) individual instruction and supervision in school shop, by kinds of classes;
(e) individual instruction and supervision in other community projects, by kinds of classes;
(f) F.F.A. meetings and other activities;
(g) preparation for teaching the different groups;
(h) keeping teacher records and making reports;
(i) professional improvement activities;
(j) working with county agricultural organizations;
(k) supervising Veterans Farm Training classes;
(l) other school activities assumed as a part of his teacher responsibility.

From the teachers' annual reports the names of individuals enrolled in all-day classes were obtained. These names permitted the investigator to determine the date and number of visits made in on-farm supervision during the twelve months covered by the study.

The teachers included in the study were visited to obtain the daily school schedule for the year 1951-52, a judgment regarding the effectiveness of farm visitation in the establishment and the promotion of good programs of supervised farming, a judgment regarding teacher-load combinations, dates for taking vacation, and kinds of activities listed in the monthly report as "other school activities."

A jury of five teachers of vocational agriculture not included in the study, three school administrators, one supervisor, and one teacher
trainer helped provide certain critical data for the study by examining, revising, and approving a list of criteria which, when applied to the data revealing the use the teachers in the study had made of their professional time, would help determine which of the teachers had made the best use of their time.

Selection of the teachers for the study. Two groups of teachers were selected for use in at least part of the study: teachers in single-teacher departments, and teachers in multiple-teacher departments. Because there were only eight schools in Georgia with more than one teacher of agriculture in 1951-52, the teachers in each of the eight schools were selected for study of the use they had made of their professional time.

Because of the fact that there were over 200 teachers of agriculture in single-teacher departments in the white schools of Georgia in 1951-52, a selection had to be made from this total population. After teachers who were operating under unusual circumstances in 1951-52 had been eliminated from the list of teachers by districts, 210 teachers remained. The names of the schools, which these teachers represented, were arranged in alphabetical order. The teacher from every sixth school in the list was then selected for participation in the study.

Findings with regard to over-all use of professional time. All teachers in the study were engaged in programs which, according to policies of the State Board of Education, called for a minimum of 2,500 hours of professional time for the year, or 50 hours per week. Yet the facts showed that, on the average, the teachers in single-teacher
departments spent 2,810 hours, or over 56 hours per week, in professional activities.

A comparison of the amount of time spent by teachers in single-teacher departments with that spent by teachers in multiple-teacher departments revealed that, on the average, the teachers in single-teacher departments devoted 2.3 hours more per week to their professional duties than did the teachers in multiple-teacher departments. The teachers in single-teacher departments put in less time in classroom teaching, more time in supervising farming programs, more time in the canning plant, almost twice as much time in the school shop (at other than class periods), more time in supervising other community projects, and somewhat less time in F.F.A. activities and in keeping records and making reports. When the different areas of activities were ranked for the two groups in the order of the amount of time devoted to them, there was, however, surprisingly little difference in the relative positions of the different areas for the two groups.

An analysis was made of the utilization of professional time by the 35 teachers in single-teacher departments during the nine months when school was in session. The data revealed that the teachers, on the average, devoted twice as much time to activities outside the classroom as they did to activities inside the classroom. This means that the work-load of a teacher of vocational agriculture cannot be adequately judged on the basis of the number of hours he is spending on in-school class activities. Approximately one-fourth of his time was devoted to on-farm supervision of farming programs. Almost 10 per cent of the teacher's time, on the average, was devoted to individual instruction and supervision in the canning plant, school shop, and other community
projects. Five per cent of the teacher's time was devoted to F.F.A. activities. About a third of the teacher's time was devoted to all other activities, including preparation for teaching, regular school duties other than teaching, professional improvement, working with county agricultural organizations, and supervising the Veterans Farm Training Program.

An analysis was also made of the amount and percentage of time devoted to professional duties during the three summer months. One of the most significant findings was that there was a wide variation among the 35 teachers in the distribution of their professional time among the different areas of activities. On the average, 29 per cent of the teacher's time, for this period, was devoted to on-farm supervision of farming programs for the largest proportion of total time. The canning plant took the second largest portion of the teacher's time, 22 per cent. Professional improvement used up 12 per cent of the time of these teachers, on the average. F.F.A. activities received 8 per cent of the teacher's time. Less time was devoted to on-farm supervision during the summer months, on the average, than was devoted to community projects, like the canning plant and the shop.

Analysis of the relative amount and percentage of time devoted to the various areas of activities provides some facts which are very important in this study. Although the nine school months cover 75 per cent of the year, this period consumed, on the average, 78 per cent of the teacher's total professional time; 99 per cent of the time he devoted to class instruction, 84 per cent of the time he devoted to preparing for teaching, and 89 per cent of the time he devoted to regular school duties other than teaching and preparing for teaching.
On the other hand, the three summer months consumed, on the average, 86 per cent of the total time the teacher devoted to the canning plant for the year, 43 per cent of the time he devoted to professional improvement, 36 per cent of the time he spent in F.F.A. activities, and 34 per cent of the time he devoted to other community projects than the canning plant and the shop. Other areas of activities like on-farm supervision, shop, keeping records and making reports, and working with other agricultural agencies demanded about as much of the time during the summer months as during the other months of the year.

The number and the percentage of work days spent inside the school community have much to do with the over-all accomplishments in a dynamic program of vocational agriculture. The study showed that a relatively large percentage of a teacher's time is spent outside the school community. For the twelve months of the study, the teachers, on the average, spent at least part of 72 work days, or 29 per cent, outside the community. There were two peak months during the year, which represented two peak periods during the year, when the teachers were out of their communities more than they were at other seasons of the year: July and October. There was wide variation among the teachers in the number of days out of the community, with a range of from 29 to 135 days.

**Findings with regard to time spent in organized class activities.**

In this study the term "organized class activities" was used to identify those activities which the teacher did with class groups as a part of a program of learning. The different kinds of classes found in the programs of the teachers studied included all-day, day-unit, and special
farm shop for the in-school boys; and young-farmer and adult classes for out-of-school groups.

Each of the 35 teachers in this study had all-day classes. They had, on the average, 47 boys in slightly over three classes, or 15 boys per class. The teachers as a group spent 40 per cent of their professional time carrying on an instructional program with the all-day groups. Each all-day class group received 369 hours of teacher time, or 13 per cent of his total professional time. Of the total time devoted to all-day activities, instruction received the greatest share, almost 50 per cent; on-farm supervision was next with over 35 per cent; F.F.A. activities received 12 per cent; and individual instruction and supervision in school shop received 3 per cent.

The adult class was the second most frequently found kind of organized class group among the schools studied. Thirty-four teachers reported 31 classes, an average of 1.5 classes per teacher. An average of 43 adults per teacher was enrolled in the adult instructional program, or 29 adults per class group. The teachers, on the average, devoted 296 hours to organized adult instruction, or 19.4 per class group. The teachers devoted 10 per cent of their time to organized adult instruction, or 7 per cent of teacher time per class group. Of the total amount of time devoted to organized adult classes, over two-thirds of it was spent in on-farm supervision; almost one-fifth was spent in individual instruction and supervision in the school shop; and one-eighth was spent in in-class instruction. All teachers in the study carried on activities for adults which did not necessarily bear a relation to an organized instructional program. When all such adult activities are considered along with those which were carried on as a part of an organized group
instructional program, one finds that the teachers, on the whole, spent more time in non-class activities with adults than they did in class activities. Less time was devoted to on-farm supervision of adult class members than was devoted to individual instruction and supervision in the canning plant.

Eighteen of the teachers reported day-unit classes. The enrollment per class for the day-unit group was greater than for any other class group except the adult class group. An average of 275 hours was spent on teaching and supervising each day-unit class, or 3 per cent of the teacher's total professional time. Seventy-two per cent of the time devoted by these teachers to day-unit work was devoted to class teaching, while only 25 per cent of the time was devoted to on-farm supervision.

Ten teachers reported special farm-shop classes. They devoted 272 hours, on the average, for each class group, or 9 per cent of teacher time. The time devoted to special farm-shop classes was divided as follows: three-fifths was devoted to class instruction and the other two-fifths was equally divided between on-farm supervision and individual instruction and supervision in the school shop.

Five of the teachers were found to be conducting young-farmer classes. The enrollment was uniformly small in each of the five classes, with an average of 11 members per class. The teachers devoted an average of 150 hours to teaching and supervising the young farmers, or 6 per cent of their total professional time. Two-thirds of the time devoted to young-farmer classes, on the average, was devoted to on-farm supervision; one-fifth was devoted to classroom instruction; and one-eighth was devoted to individual instruction and supervision in the school shop.
Findings with regard to time spent in on-farm supervision. That the teachers in this study recognized the place of on-farm supervision in a dynamic program of vocational agriculture is shown by the fact that 88 per cent of them considered it "most important" in the establishment and maintenance of effective programs of supervised farming. The remaining 12 per cent considered it "considerably important." On the average, the teachers devoted one-fourth of their professional time, or about 700 hours, over a twelve-month period to on-farm supervision of farming programs of class members.

The young-farmer and all-day class members received individually, on the average, almost twice as many hours of teacher time on their farms as were received by individuals in any other class group. Individuals in these groups received an average of 9.0 and 8.5 hours, respectively, of teacher time on their farms. The adults were third with 4.6 hours. Individuals in the special farm-shop and day-unit classes received an average of 7.7 and 2.3 hours, respectively.

An analysis of the amount of time devoted to individual supervisory visits revealed that the teacher spent an average of 1.5 hours on all-day and special farm-shop visits, 1.3 hours on adult visits, and 1.2 hours on young-farmer and day-unit visits.

A study of the average number of supervisory visits made to the farms of class members revealed that the 56 young farmers enrolled in five classes received the highest average number of visits with 7.4. Second in the average number of visits were the all-day boys who received 5.7. The adults were third with an average of 3.5. The special farm-shop and day-unit enrollees received an average of two visits each.
One indication of how well teachers of vocational agriculture spend their time is the number of days during the month and during the year on which they devote some time to supervisory visits. The 35 teachers, on the average, made supervisory visits on 172 days during the twelve-month period. For a 250-day year this meant that supervisory visits were made on somewhat over two-thirds of the work days during the year. The range, however, in the number of days the 35 teachers engaged in farm visitation was from a low of 79 to a high of 247. The period for most farm visitation was that extending from January to May. The period during the year for the least amount of visitation was the summer months. The best month for visitation was January when an average of almost 81 per cent of the work days was devoted to this activity. The poorest month was July when less than 57 per cent of the work days were devoted to on-farm supervision.

An analysis of the distribution of the on-farm supervisory visits among the all-day boys reveals that there was a rather wide range in the number of visits received by the boys — from none to 75. When classified by number of visits received, the largest number of boys was found in the group that received from four to six visits. The second largest number of boys was found in the group that were not visited at all by their teacher. One of every six boys, on the average, was in this group. The imaginary curve which might represent the frequency distribution of the individuals with regard to the number of visits received from their teacher would show a bimodal effect, with the primary mode at about six visits and the secondary mode at zero.

An analysis designed to discover the months and the seasons of the year, if any, when more or fewer visits were made, revealed that the
months and the seasons vary in the number of supervisory visits made. The number of supervisory visits made in a given period seems to be somewhat closely related to the number of days in which supervisory visits are made. The summer months showed the smallest number of visits for any given three-month period. The period in which the most visits were made ran from January through May. The peak month was found to be April, and the month for the lowest average number of visits was July.

This study showed that the first-year all-day boys, as a group, were not visited nearly so often as other all-day boys. They were visited more in the second six months than in the first six months of the fiscal year. In fact, they received 88 per cent more visits the second six months than they received the first six months. Even during the second six months, the first-year boys were not visited so well as the other days in the all-day program.

An investigation to discover how early in the school year the first-year boys were visited revealed that teachers of vocational agriculture in Georgia do not, as a group, follow the practice of visiting first-year boys before school opens as a basis for helping them get started early in their instructional program. Only four teachers had made a concerted effort to visit their first-year boys before school opened, as revealed by the fact that only four teachers had visited as many as 50 per cent of their first-year boys before September 1. October 31 had arrived before half of the teachers had visited 50 per cent of their first-year boys. The latter part of March had arrived before three-fourths of the teachers had visited 50 per cent of their first-year group. Only one boy out of nine had been visited before school opened. December had arrived before 50 per cent of the boys had
been visited. School was out before three-fourths of the first-year group had been visited once. This means that one-fourth of the first-year boys were not visited during their first school year in vocational agriculture. Yet, these boys were in classes with other boys who were visited. In fact, the average number of visits received by those who were visited before May 31 was 4.5.

**Summary of the comparisons of the top and the bottom teachers.**

One of the objectives of this study was that of identifying those teachers of the group to be studied who had made the best use of their professional time. The purpose of the selection was to utilize their use of professional time as a basis for suggesting guides for use in planning appropriate teacher loads for local programs of vocational agriculture in Georgia. The actual selection of the teachers who had made the best use of their time was to be made on the basis of criteria growing out of the point of view stated in Chapter III and approved by a jury of school leaders. The following criteria were finally adopted for use in selecting the eight teachers who had made the best use of their professional time:

1. Has the teacher devoted a comparatively large percentage of his time to work with organized groups?

2. Has the teacher devoted a comparatively large percentage of his time to supervision of farming programs of class members?

3. Has the teacher made a comparatively adequate number of visits to the farms of members of his all-day classes?

   a. Total number of visits.

   b. Average number of visits per boy.
c. Percentage of boys visited more than twice.
d. Percentage of first-year boys visited before October 1.

4. Has the teacher made a comparatively adequate number of visits to the farms of his adult class members?
   a. Total number of visits.
   b. Average number of visits per adult member.

5. Has the teacher devoted a comparatively large percentage of time to preparation for each hour of classroom instruction?

6. Has the teacher devoted a comparatively large percentage of time to F.F.A. activities?

7. Has the teacher spent a comparatively large percentage of his work days inside his school community?

After the teachers in this study had been arranged in rank order on the basis of the criteria selected for use in determining those who had made the best use of their time, the top eight teachers in this list were selected as the group of teachers who had made the best use of professional time.

Now that the top eight teachers had been selected as the teachers who had made the best use of their time, was their selection justified? Were they really different? To answer these questions, statistical tests were used in which these eight teachers who, by the same criteria, were found to be at the bottom of the list of ranked teachers. In other words, the eight teachers who were thought to have made the best use of their time would be compared with the eight teachers who were thought to have made the poorest use of their professional time.

These two groups, of eight teachers each, were compared with regard to certain items of time use which were considered to be
significant in the development of programs of vocational agriculture in Georgia. Although items representing the criteria which had been used in the selection of the top teachers were included, some items of time use were included because teachers spent time in the activities represented by those items.

Two statistical methods were used in testing the significance of the difference between the top and the bottom groups with regard to the items representing use of professional time. One of these methods was that of discovering the value of $t_0$ where the differences were measured in means, and the other was that of discovering the value of $X$ when the differences were measured in percentages. The degrees of significance were determined through reference to the table of $t$ and the normal probability table, respectively.

A summary of the findings will be organized into three parts: one, with regard for those items where little or no difference was found both in the use of teacher time and in the $t_0$ or $X$ values; two, with regard for those items where teacher time was somewhat different, but $t_0$ or $X$ values do not show a statistically significant difference; and three, with regard to those items which do show a sufficient difference to call for $t_0$ or $X$ values which indicate a significant difference.

In six items or areas of activities, the eight top teachers showed little actual difference from the eight bottom teachers in the amount of time devoted to those activities. These areas of activities are: classroom teaching, preparation for teaching, professional improvement, supervision of Veterans Farm Training classes, individual instruction and supervision in school shop, and other school activities which the teacher does as a member of the school faculty.
In three items or areas of activities, the top teachers devoted more time than did the bottom teachers, on the average; but the difference was not great enough to provide a statistically significant difference. These areas were work with organized groups, number of work days spent inside the school community, and work with county agricultural organizations. In three areas of activities, the bottom teachers devoted more time than did the top teachers, but the difference was not great enough to justify a conclusion of significant difference. These areas were keeping records and making reports, F.F.A. activities, and activities connected with the canning plant and other community projects. In some of these the difference approached rather closely the province of significant difference, particularly the time devoted to F.F.A. activities.

One of the most significant findings of this study was that, although the top teachers had been selected on the basis of criteria which represented a rather broad base, the only area of activities where there was a statistically significant difference between the top and the bottom teachers with regard to time use was that of on-farm supervision. Here, however, definite superiority was shown on the part of the top teachers, and the difference was great enough in almost all items not only to justify a conclusion of significant difference but even virtual certainty.

In a comparison not involving the test for significance of difference, the top and the bottom teachers were studied with regard to the distribution of their visits among their all-day boys. After grouping the boys on the basis of the number of times they were visited by their teacher of vocational agriculture and arranging the data into a frequency
distribution, the discovery was made that the top teachers' visits were
distributed in a manner resembling a normal curve with the median at
6.08 visits per all-day boy. On the other hand, the bottom teachers'
visits were distributed quite differently, in that the crude mode was at
zero and the size of the frequencies dropped off rapidly as the number
of visits was increased. While almost one-third of the boys taught by
the bottom teachers were not visited by their teacher, only 2.5 per
cent of the boys taught by the top teachers were not visited. While
well over half of the boys taught by the bottom teachers were not
visited more than twice, less than one-seventh of the boys taught by the
top teachers were not visited more than twice. While seven per cent of
the boys taught by the bottom teachers were visited more than eight
times during the twelve-month period, over a third of the boys taught by
the top teachers were visited more than eight times.

Proposed guides for the planning and the development of teaching
loads for teachers. In developing guides for the planning of teaching
loads for teachers of vocational agriculture in Georgia, consideration
should be given to planning programs which would permit the teacher to
excel in all aspects of his program, and yet, not have to work more than
the 2,500 hours for which he is employed. As has been shown in this
study, the teachers were going far beyond the call of duty in devoting
time to professional activities. The facts brought out in this study
indicate, therefore, that some areas of programs of vocational agricul-
ture should be curtailed, generally speaking, because even the teachers
who made the best use of their time actually devoted over 2,300 hours to
their programs of vocational agriculture. If these programs should be
brought nearer the 2,500-hour standard, curtailment in certain areas would have to be made.

Findings of this study indicate that there was little difference between the top and other teachers in the total amount of time devoted to professional activities. There was even little difference in the number and kinds of classes taught by the two groups. There was little difference in the number of individuals enrolled in the different classes. The general pattern was for the teacher to teach three or four class groups of all-day boys, either a class of day-unit boys or a class of boys in special farm shop, and one or two classes of adult farmers.

Although there was found to be little difference in the class and student load of the top and the other teachers in the study, there was a difference in the way the total professional time was utilized by the teachers in the two groups. In planning programs of work, or teaching loads, therefore, thought should be given to the amount of time to allot to the different areas of a program of teacher activities. In this study data have been presented to indicate that the top teachers did allot their time between the different activities in such a way as to effect a better use of professional time than did the bottom teachers. There seems to be good reason, therefore, to use the pattern of time use established by the eight top teachers, who represent the upper quartile of the teachers in the study, as a pattern in planning time use for teachers of vocational agriculture in Georgia. The use of this pattern does not mean that this becomes the ideal, but only a guide for the improvement in time use on the part of teachers of vocational agriculture. Farmers, in thinking through their farm problems, give consideration to what good farmers do in the solution of those same problems. In
the same way, teachers of vocational agriculture could utilize the findings of this study in the solution of their professional problem of using their professional time for the attainment of good educational objectives.

In this study the average amount of time devoted by the top teachers to the various aspects of their programs of vocational agriculture was utilized as a basis for proposing guides for allotting time in planning local programs of vocational agriculture. These allotments were suggested for each of the activities or areas of activities reported by the teachers in the study.

CONCLUSIONS

The findings of the study seem to warrant the following conclusions:

1. Teachers of vocational agriculture, as a group, devote a very large percentage of their total time to professional duties.

2. Teachers differ more in the amount of time they devote to individual areas of professional activities than in the total amount of time devoted to all professional activities.

3. Teachers who make the best use of their professional time are not necessarily the teachers who become known by state leaders in agricultural education as outstanding individuals professionally.

4. Some teachers of vocational agriculture are devoting relatively too much of their time to activities which are not associated directly with organized classes.

5. The large percentage of high school students with supervised farming programs in many schools who were not visited by their teachers
over the twelve-month period covered by this study leads one to conclude that many teachers do not practice the policy of setting up individual supervised farming programs on the home farm, with the student and his parents.

6. The large percentage of high school students in many schools who were not visited early in the school year leads one to conclude that the instructional program for many students is not geared to help them deal with those problems revealed in needs discovered first-hand by the teacher and the boy on the boy's home farm.

7. A large percentage of the teachers of vocational agriculture do not follow the policy of visiting prospective first-year students before school opens to help them and their parents decide whether or not the students should take vocational agriculture and, if so, to help them plan the kind of supervised farming program that will meet the individuals' needs.

8. There is much that needs to be done to lead teachers of vocational agriculture in Georgia to recognize the problems they have with regard to the utilization of their professional time, and to help them to be effective in planning for better time use, in executing those plans, and in evaluating, so that improved programs of vocational agriculture may result.

9. The work-load of a teacher of vocational agriculture cannot be judged on the basis of the number of hours he spends in the classroom, even during the nine school months, as evidenced by the fact that during that period teachers in this study devoted twice as many hours to professional duties outside the classroom as they did to activities inside the classroom.
10. Although there were exceptions as revealed in this study, the first-year high school students do not, as a group, receive the attention in on-farm visitation that they should receive for a functional program of instruction based upon a well-planned program of supervised farming.

11. The one area of professional activities where more improvement in the utilization of teacher time than in any other can be made seems to be in the area of on-farm visitation as a part of the development of supervised farming programs.

12. Although situations vary from school to school, the average amount of time devoted to the various activities by the eight top teachers in this study constitutes a valuable guide for use both in planning teacher loads and in budgeting for better utilization of teacher time in Georgia.

RECOMMENDATIONS

In the light of the findings of this study, the findings of similar studies made in other states, and the experience of the investigator, the following recommendations seem to be justified. Not all of the recommendations will apply equally in all situations because of varying conditions in the different schools of the State. They are believed to be worthy of consideration for the improvement of the state and the local programs of vocational agriculture.

1. In the light of the fact that many teachers of vocational agriculture are overburdened with responsibilities, those individuals responsible for planning local and state programs of vocational agriculture should give more attention to that amount of work which a teacher can do well.
2. In the light of the competition for the use of teacher time, produced, in part at least, by the responsibilities of teaching a day-unit class or two, the practice of approving this type of class as a part of teacher load should be discontinued. Data in this study show that teachers with such classes spent practically as much time in day-unit work as the total of their excess hours.

3. Many teachers of vocational agriculture should examine critically the amount and the percentage of time devoted to the various activities for which they are responsible, and replan the use that they are making of their time in the light of how well each activity contributes to desirable educational objectives.

4. Plans should be developed whereby additional teachers could be added not only when the number of prospective high school students but also when young and adult farmers seem to justify such additions.

5. The state administrative and supervisory personnel should continue to plan with the State Superintendent of Schools and the State Board of Education for the ultimate abrogation of the policy of allotting teachers of vocational agriculture on the same basis as other teachers; i.e., average daily attendance of in-school students. As was shown in the study, the teacher devotes a large percentage of his time to work with out-of-school groups, which, the investigator thinks, he should do as a teacher of vocational agriculture. In many schools, as was exemplified in this study, the teacher is teaching one or more day-unit classes, or one or more special farm-shop classes, in some of which non-farm boys are enrolled. This practice is being followed because the teacher does not have a sufficient load of all-day boys to justify his share of average daily attendance, the basis of teacher allotment. The
abrogation of the policy of allotting teachers of vocational agriculture would, in the judgment of the investigator, help (1) to alleviate the problem of teacher overload, (2) to prevent the dilution of local programs of vocational education in agriculture, and (3) to permit small schools, which cannot now afford a teacher of agriculture because of their low allotment of teachers, to add one to meet community needs.

6. Teachers of vocational agriculture should be provided a degree of freedom in the planning and the development of their programs of work. The assignment of a specific number of hours to a given activity places the teacher in a position where he is likely to feel that he must put in more hours in a given activity in a given month because something might arise to prevent his devoting the allotted number of hours next month.

7. Plans should be developed whereby the teachers could devote a larger percentage of their time in helping young and adult farmers deal more intelligently with their current problems in farming, and yet not have to do so at the expense of overburdening themselves.

8. Teachers should be led to give critical study to the use they make of their time during the summer months, so that they might devote more of their time for the development of supervised farming programs.

9. Teachers of vocational agriculture should be helped to develop plans for critically evaluating the use they are making of their professional time as a basis for improving the use they make of their time.

10. Leaders in the field of vocational education in Georgia should plan for the adoption of some plan other than that in which
teachers are paid on the basis of the number of hours they devote to their programs of professional activities.

11. The findings of this study should be utilized in both the pre-service and the in-service training in agricultural education at The University of Georgia to lead enrollees (1) to recognize the importance of the problem of budgeting professional time, (2) to understand the relationship between desirable educational objectives and the use that should be made of professional time, (3) to plan for the budgeting of professional time in keeping with the degree to which a given activity contributes to the attainment of desirable educational aims, and (4) to help them execute their plans and to evaluate the results.

12. The problems of use of teacher time should be given major consideration in joint sessions of the supervisory and teacher training staffs in agricultural education, and possibly different points of view with regard to those problems should be reconciled. Furthermore, plans should be developed for joint action in helping teachers and prospective teachers to make more intelligent use of their professional time in their local programs of vocational agriculture.

13. More general recognition should be provided for those teachers who are found to make desirable use of their professional time. The investigator feels that this kind of recognition would do much to stimulate teachers to put first things first in the development of local programs of vocational agriculture.


APPENDIX A

MONTHLY REPORT FORM
**MONTHLY REPORT OF PROGRESS MADE ON PROGRAM OF WORK BY TEACHER OF VOCATIONAL AGRICULTURE**

Make 4 copies: one for State Supervisor, one for District Supervisor, one for System Superintendent, and one for teacher's file. Due before 5th of each month.

TEACHER ___________________________ SCHOOL ___________________________ COUNTY ___________________________

Month ___________________________ Year ___________________________

**Summary of Teacher's Work Load for Month**

<table>
<thead>
<tr>
<th>Activities during month</th>
<th>All Day</th>
<th>Day Unit</th>
<th>Sp. Farm Shop</th>
<th>Young Farmer</th>
<th>Adult Farmer</th>
<th>No Org. Class</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. No. organised Classes</td>
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</tr>
<tr>
<td>2. No. Class Members enrolled to date</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>3. No. Organized Class meetings this month</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Hrs. Class Instruction (No. 3 x hrs. per class)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. No. Visits made to members on farms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Hrs. Supervision on farms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. No. F.F.A. or N.F.A. meetings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Hrs. F.F.A. or N.F.A. meetings &amp; other activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. No. persons taught in Canning Plants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Hrs. Instruction in Canning Plant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. No. persons taught in School Shop</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Hrs. Instruction in School Shop</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. No. persons taught in other Community Projects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>14. Hrs. Instruction in other Community Projects</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>15. TOTAL hrs. Instruction (add 1, 4, 6, 8, 10, 12 &amp; 14)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Hrs. Preparation for teaching</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Hrs. Procuring and Maintaining facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Hrs. Keeping teacher records and making reports</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Hrs. Professional improvement activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>20. Hrs. Working with Co. Agricultural Organizations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Hrs. Other School activities as his responsibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. TOTAL hrs. other activities (add 16, 17, 18, 19, 20 &amp; 21)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. GRAND TOTAL WORK LOAD FOR MONTH (15 plus 22)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. GRAND TOTAL WORK LOAD TO DATE (add No. 23 of each month to date)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** See Program of Work for more detailed explanation of activities. There should be no overlapping of hours in above items.
24. GRAND TOTAL WORK LOAD TO DATE (add No. 23 of each month to date)  

<table>
<thead>
<tr>
<th></th>
<th>XI</th>
<th>XX</th>
<th>XX</th>
<th>XX</th>
<th>XX</th>
</tr>
</thead>
</table>

Note: See Program of Work for more detailed explanation of activities. There should be no overlapping of hours in above items.

Special Instructional and Supervisory Items

Name of F.F.A. or N.F.A. activities other than instruction

Name of jobs taught in young-farmer and/or adult farmer organized classes

Canning in School Community Plant

<table>
<thead>
<tr>
<th>Cans Vegetables</th>
<th>Cans Fruits</th>
<th>Cans Meats</th>
<th>Total Cans</th>
<th>Number Families</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. 2</td>
<td>No. 3</td>
<td>No. 2</td>
<td>No. 3</td>
<td>No. 2</td>
</tr>
</tbody>
</table>

Items in School Farm Shop

<table>
<thead>
<tr>
<th>Items in School Farm Shop</th>
<th>This Month</th>
<th>To Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. items (Projects) made</td>
<td>No. Participants</td>
<td></td>
</tr>
<tr>
<td>No. items (Projects) repaired</td>
<td>No. Participants</td>
<td></td>
</tr>
</tbody>
</table>

Other Community Projects

<table>
<thead>
<tr>
<th>Other Community Projects</th>
<th>No. Participants this Mo</th>
<th>To Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project</td>
<td>Scope;</td>
<td></td>
</tr>
<tr>
<td>Project</td>
<td>Scope;</td>
<td></td>
</tr>
<tr>
<td>Project</td>
<td>Scope;</td>
<td></td>
</tr>
</tbody>
</table>

Signed:  
Teacher of Agriculture  

Approved:  
System Superintendent
APPENDIX B

SCHOOLS AND TEACHERS THAT PARTICIPATED IN THE STUDY
Single-teacher departments

1. Adairsville High School, Alvin Witherington, Adairsville
2. Barwick High School, Cullen Crook, Barwick
3. Baxley High School, A. R. Tuten, Baxley
4. Bogart High School, G. L. Blackwell, Bogart
5. Claxton High School, Ellis D. Sikes, Claxton
6. Clermont High School, Clyde T. Outz, Clermont
7. Danieleville High School, L. E. Baker, Danieleville
8. Dawnville High School, Floyd Q. Henry, Dawnville
9. Dexter High School, E. V. Hatcher, Dexter
10. Doerun High School, C. W. Davidson, Doerun
11. Echols County High School, A. P. Lewis, Statenville
12. Effingham Academy, I. B. Johnson, Springfield
13. Glennville High School, J. D. Kaney, Glennville
14. Hahira High School, Price Turner, Hahira
15. Hartwell High School, Pete Herndon, Hartwell
16. Hogansville High School, W. P. Neal, Hogansville
17. Jefferson High School, J. L. McMillan, Jefferson
18. Louisville Academy, O. F. Daughtry, Louisville
19. Mary Persons High School, J. M. Fowler, Forsyth
20. Marion County High School, L. E. Moss, Buena Vista
21. Millen High School, J. W. Graham, Millen
22. Monticello High School, L. E. Norris, Monticello
23. Nevils High School, Gordon Hendrix, Statesboro
24. Oakwood High School, J. M. McClure, Oakwood
26. Powder Springs High School, T. J. Hatcher, Powder Springs
27. Rhine High School, H. S. Eddleman, Rhine
28. Rochelle High School, C. H. Graham, Rochelle
29. Shellman High School, J. E. Nix, Shellman
30. Shiloh High School, W. G. Anderson, Alamo
31. South Habersham High School, H. W. Martin, Cornelia
32. Toomsboro High School, J. D. Smith, Toomsboro
33. Union High School, W. R. Jones, Leslie
34. University Demonstration School, C. M. Rose, Athens
35. Washington High School, M. A. Guill, Jr., Washington

Multiple-teacher departments
1. Campbell High School, L. J. Fowler, Roy E. Tucker, Fairburn
2. Gilmer High School, J. Everett Weeks, Calvin L. Jackson, Ellijay
4. Moultrie High School, W. L. Tomlinson, H. J. Ingram, W. L. Bruner,
   Raymond Martin, Moultrie
5. North Habersham High School, R. G. Huff, D. C. Houston, Clarkesville
6. Patterson High School, Oswell Smith, M. L. Anderson, Patterson
7. Swainsboro High School, Glenn Segars, Richard Ramsey, Swainsboro
8. Tifton High School, H. G. Peele, W. L. Eubanks, Tifton
APPENDIX C

STATISTICAL COMPUTATIONS
<table>
<thead>
<tr>
<th>Items</th>
<th>$M_1$</th>
<th>$M_2$</th>
<th>$N_1$</th>
<th>$N_2$</th>
<th>$\Sigma x_1^2$</th>
<th>$\Sigma x_2^2$</th>
<th>$t_0$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Number hours devoted to work with organized groups</td>
<td>2,042</td>
<td>1,771</td>
<td>8</td>
<td>8</td>
<td>33,675,757</td>
<td>25,638,932</td>
<td>2.17</td>
</tr>
<tr>
<td>2. Number hours devoted to on-farm supervision</td>
<td>808</td>
<td>456</td>
<td>8</td>
<td>8</td>
<td>5,668,477</td>
<td>1,914,654</td>
<td>3.17</td>
</tr>
<tr>
<td>3. Number days in which supervisory visits were made</td>
<td>203</td>
<td>119</td>
<td>8</td>
<td>8</td>
<td>335,393</td>
<td>120,828</td>
<td>5.27</td>
</tr>
<tr>
<td>4. Number supervisory visits</td>
<td>628</td>
<td>265</td>
<td>8</td>
<td>8</td>
<td>3,440,998</td>
<td>604,407</td>
<td>4.79</td>
</tr>
<tr>
<td>5. Number all-day supervisory visits</td>
<td>366</td>
<td>177</td>
<td>8</td>
<td>8</td>
<td>1,195,923</td>
<td>261,543</td>
<td>3.83</td>
</tr>
<tr>
<td>6. Number supervisory visits per boy</td>
<td>8.0</td>
<td>3.4</td>
<td>8</td>
<td>8</td>
<td>553</td>
<td>101</td>
<td>4.61</td>
</tr>
<tr>
<td>7. Average number supervisory visits per first-year boy</td>
<td>6.5</td>
<td>2.0</td>
<td>7</td>
<td>7</td>
<td>315</td>
<td>34</td>
<td>5.53</td>
</tr>
<tr>
<td>8. Average number supervisory visits per student other than first-year</td>
<td>7.7</td>
<td>3.5</td>
<td>7</td>
<td>7</td>
<td>446</td>
<td>91</td>
<td>4.68</td>
</tr>
<tr>
<td>9. Hours devoted to F.F.A.</td>
<td>105</td>
<td>179</td>
<td>8</td>
<td>8</td>
<td>98,350</td>
<td>291,697</td>
<td>2.63</td>
</tr>
<tr>
<td>10. Number adult supervisory visits</td>
<td>211</td>
<td>40</td>
<td>7</td>
<td>8</td>
<td>447,256</td>
<td>21,274</td>
<td>3.13</td>
</tr>
<tr>
<td>Items</td>
<td>$M_1$</td>
<td>$M_2$</td>
<td>$N_1$</td>
<td>$N_2$</td>
<td>$\Sigma X_1^2$</td>
<td>$\Sigma X_2^2$</td>
<td>$T_0$</td>
</tr>
<tr>
<td>-------</td>
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<td>-------</td>
<td>-------</td>
<td>----------------</td>
<td>----------------</td>
<td>------</td>
</tr>
<tr>
<td>11. Average number visits per adult class member</td>
<td>5.6</td>
<td>1.0</td>
<td>7</td>
<td>8</td>
<td>276</td>
<td>14</td>
<td>4.14</td>
</tr>
<tr>
<td>12. Hours devoted to community projects</td>
<td>320</td>
<td>473</td>
<td>8</td>
<td>8</td>
<td>882,428</td>
<td>2,290,322</td>
<td>1.52</td>
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<tr>
<td>13. Hours devoted to canning plant</td>
<td>128</td>
<td>191</td>
<td>8</td>
<td>8</td>
<td>200,554</td>
<td>310,569</td>
<td>1.56</td>
</tr>
<tr>
<td>14. Hours devoted to school shop</td>
<td>144</td>
<td>140</td>
<td>8</td>
<td>8</td>
<td>213,852</td>
<td>198,464</td>
<td>.13</td>
</tr>
<tr>
<td>15. Hours devoted to other community projects</td>
<td>48</td>
<td>143</td>
<td>8</td>
<td>8</td>
<td>46,092</td>
<td>354,105</td>
<td>1.52</td>
</tr>
<tr>
<td>16. Number work days spent inside community</td>
<td>202</td>
<td>170</td>
<td>8</td>
<td>8</td>
<td>329,616</td>
<td>224,064</td>
<td>1.16</td>
</tr>
<tr>
<td>17. Hours devoted to preparation for teaching</td>
<td>301</td>
<td>296</td>
<td>8</td>
<td>8</td>
<td>795,508</td>
<td>741,686</td>
<td>.11</td>
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<tr>
<td>18. Hours devoted to records and reports</td>
<td>126</td>
<td>152</td>
<td>8</td>
<td>8</td>
<td>133,514</td>
<td>191,606</td>
<td>1.58</td>
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<tr>
<td>19. Hours devoted to professional improvement</td>
<td>170</td>
<td>157</td>
<td>8</td>
<td>8</td>
<td>242,850</td>
<td>215,716</td>
<td>.59</td>
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<tr>
<td>20. Hours devoted to work with county agricultural organizations</td>
<td>44</td>
<td>29</td>
<td>8</td>
<td>8</td>
<td>19,274</td>
<td>11,728</td>
<td>1.16</td>
</tr>
<tr>
<td>Items</td>
<td>M1</td>
<td>M2</td>
<td>N1</td>
<td>N2</td>
<td>$\sum x_1^2$</td>
<td>$\sum x_2^2$</td>
<td>$t_0$</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>-------------</td>
<td>-------------</td>
<td>------</td>
</tr>
<tr>
<td>21. Hours devoted to supervising Veterans Farm Training classes</td>
<td>35</td>
<td>33</td>
<td>8</td>
<td>8</td>
<td>12,760</td>
<td>12,784</td>
<td>.19</td>
</tr>
<tr>
<td>22. Hours devoted to other school activities</td>
<td>181</td>
<td>193</td>
<td>8</td>
<td>8</td>
<td>333,830</td>
<td>322,299</td>
<td>.30</td>
</tr>
</tbody>
</table>
### TABLE XXX

**Statistical Computations for Tests of Significance of Difference Between Certain Percentage Scores of the Eight Teachers Who Had Made the Best Use of Their Professional Time and the Eight Teachers Who Had Made the Poorest Use of Their Time with Regard to Certain Items Involving Time Use**

<table>
<thead>
<tr>
<th>Item</th>
<th>$N_1$</th>
<th>$N_2$</th>
<th>$t_1$</th>
<th>$t_2$</th>
<th>$\frac{t_1}{N_1}$</th>
<th>$\frac{t_2}{N_2}$</th>
<th>$x$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of time devoted to work with organized groups</td>
<td>22,583</td>
<td>21,445</td>
<td>16,235</td>
<td>14,167</td>
<td>43a</td>
<td>66</td>
<td>.43a</td>
</tr>
<tr>
<td>Percentage of visits to farms of class members</td>
<td>4,808</td>
<td>1,953</td>
<td>4,588</td>
<td>1,785</td>
<td>.96</td>
<td>.92</td>
<td>6.45b</td>
</tr>
<tr>
<td>Percentage of boys visited</td>
<td>320</td>
<td>349</td>
<td>313</td>
<td>237</td>
<td>.98</td>
<td>.68</td>
<td>10.10b</td>
</tr>
<tr>
<td>Percentage of boys visited three or more times</td>
<td>320</td>
<td>349</td>
<td>276</td>
<td>144</td>
<td>.86</td>
<td>.41</td>
<td>12.09b</td>
</tr>
<tr>
<td>Percentage of boys visited seven or more times</td>
<td>320</td>
<td>349</td>
<td>163</td>
<td>56</td>
<td>.57</td>
<td>.16</td>
<td>9.61b</td>
</tr>
<tr>
<td>Percentage of first-year boys visited</td>
<td>134</td>
<td>121</td>
<td>131</td>
<td>69</td>
<td>.98</td>
<td>.57</td>
<td>7.91b</td>
</tr>
<tr>
<td>Percentage of first-year boys visited three or more times</td>
<td>134</td>
<td>121</td>
<td>105</td>
<td>33</td>
<td>.78</td>
<td>.27</td>
<td>8.19b</td>
</tr>
<tr>
<td>Percentage of first-year boys visited seven or more times</td>
<td>134</td>
<td>121</td>
<td>56</td>
<td>6</td>
<td>.42</td>
<td>.05</td>
<td>6.83b</td>
</tr>
<tr>
<td>Percentage of first-year boys visited by October 1</td>
<td>134</td>
<td>121</td>
<td>63</td>
<td>19</td>
<td>.47</td>
<td>.16</td>
<td>5.35b</td>
</tr>
</tbody>
</table>

aBecause of the fact that this value is much less than 3.00, the difference is not significant.

bSince these values exceed 3.00, the differences are considered significant, or virtually certain.
I, Ralph Harmon Tolbert, was born in Hull, Georgia, April 16, 1905. I received my elementary school and a part of my secondary school education in the public schools of Hull. I completed my secondary school training in the Winterville High School, Winterville, Georgia. My undergraduate training was obtained at The University of Georgia from which I received the degree Bachelor of Arts in 1927, and the degree Bachelor of Science in Agriculture in 1931. From the same institution I received the degree Master of Science in Education in 1944.

I was employed as a teacher of Latin, science, history, and mathematics in the Guyton, Georgia, public schools from September, 1927, to June, 1929. From September, 1930, to June, 1933, I was teacher of vocational agriculture in the Girard High School of Girard, Georgia. In July, 1933, I accepted the position of teacher of vocational agriculture in the Wilkes County High School at Tignall, Georgia, where in 1938, I became a supervising teacher of apprentices in Agricultural Education from The University of Georgia. In July, 1939, I became teacher of vocational agriculture in the Lavonia High School, Lavonia, Georgia, where I continued to serve as supervising teacher.

In November, 1940, I accepted a position as Associate Professor in the Department of Agricultural Education, University of Georgia. For two years, my main responsibilities were to work with apprentice teachers in the training centers and to follow up first-year teachers. When World War II had taken its toll of students, I was granted a
partial leave of absence by the University to devote most of my time to
the Education Panel of the Agricultural and Industrial Development
Board of Georgia. In this position I worked with professional and lay
people in planning local programs of education for the post-war period.
Cessation of hostilities and the provisions of the G.I. Bill caused an
influx of students to the University and the Department of Agricultural
Education. In April, 1946, I left the Education Panel to take up full­
time duties again with the Department of Agricultural Education. This
time I assumed much of the responsibility for teaching the under­
graduate courses and for directing the apprentice training program of
the Department.

In September, 1947, I was given a leave of absence to study at
The Ohio State University, where I was granted a graduate assistantship
in the Department of Agricultural Education. At the end of the Summer
Quarter, 1948, I completed the course work required for the degree
Doctor of Philosophy, and returned to the Department of Agricultural
Education, The University of Georgia. In July, 1950, I was promoted to
Acting Chairman of the Division of Vocational Education in that
institution.