

AN ANALYSIS OF THE IN-SERVICE TRAINING NEEDS  
AND PARTICIPATION IN IN-SERVICE TRAINING  
PROGRAMS BY TEACHERS OF AGRICULTURAL SCHOOLS  
OF THE PHILIPPINES

Thesis for the Degree of Ed. D.  
MICHIGAN STATE UNIVERSITY

Bruno M. Santos  
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This is to certify that the

thesis entitled

AN ANALYSIS OF THE IN-SERVICE TRAINING NEEDS  
AND PARTICIPATION IN IN-SERVICE TRAINING  
PROGRAMS BY TEACHERS OF AGRICULTURAL  
SCHOOLS OF THE PHILIPPINES

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Bruno M. Santos

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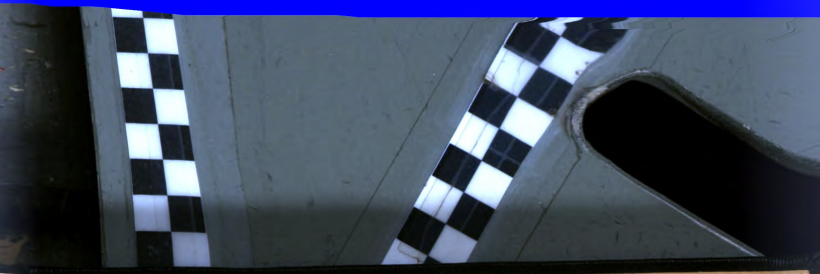
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## ABSTRACT

### AN ANALYSIS OF THE IN-SERVICE TRAINING NEEDS AND PARTICIPATION IN IN-SERVICE TRAINING PROGRAMS BY TEACHERS OF AGRICULTURAL SCHOOLS OF THE PHILIPPINES

by Bruno M. Santos

Purpose. To determine the in-service training needs, and the scope and participation by teachers of agricultural schools of the Philippines in in-service training programs.

Method. Data were obtained by means of questionnaires sent to teachers of 25 and administrators of 32 agricultural schools, and 7 teacher-training institutions.

Findings and interpretations. Out of 27 items of need listed in the questionnaires the teachers rated 20 as critical with scale points of 3.0 or higher on a five-point scale. The range of needs was 15 to 24. Language teachers expressed the most and social science teachers the least number of needs. Grouped into areas and priority the needs were (1) research and experiments, (2) subject matter content, (3) methods, (4) co-curricular activities, (5) general education, and (6) administration and supervision. All areas were given scale points higher than 3.0, the midpoint on the scale.

Administrators and teachers were agreed as to the latter's need for in-service training. However, they





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disagreed on the priority of these needs.

The administrators expressed the need for in-service training in all the items listed in the questionnaires. The areas of needs were: administration, supervision, curriculum, guidance, and public relations.

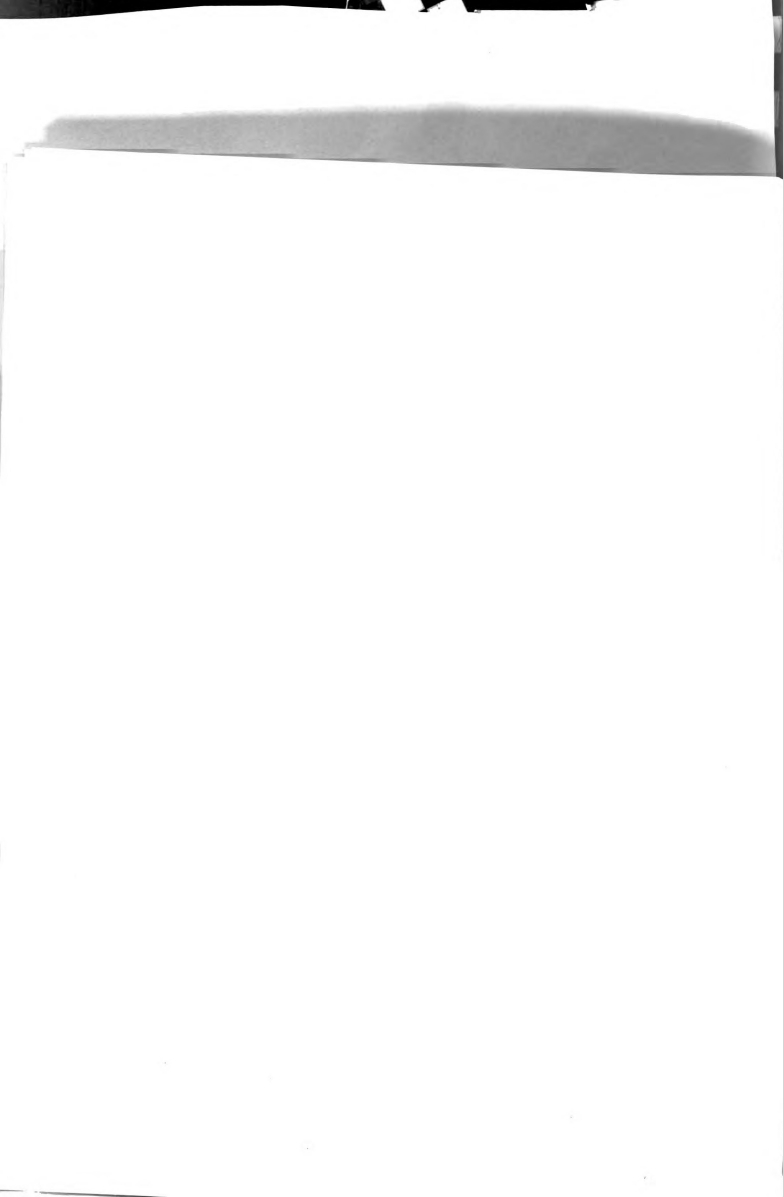
Workshops, conferences, and demonstrations were the techniques commonly used in in-service programs.

Less than 3 teachers per school participated in one or more in-service training programs each year. Among the respondent teachers only two attended per year per school.

The participation by teachers and administrators in in-service programs was directly related to years of tenure up to 15 and 20 years, respectively, and inversely related thereafter. The number of in-service programs conducted by administrators was directly related to their participation in regional and national in-service training activities.

Limited opportunity, lack of funds, subject not in interest field, and family responsibilities were the important reasons why teachers had limited participation in in-service training activities. "Too busy with administrative duties" was the most important reason which limited the number of local in-service programs conducted by administrators.

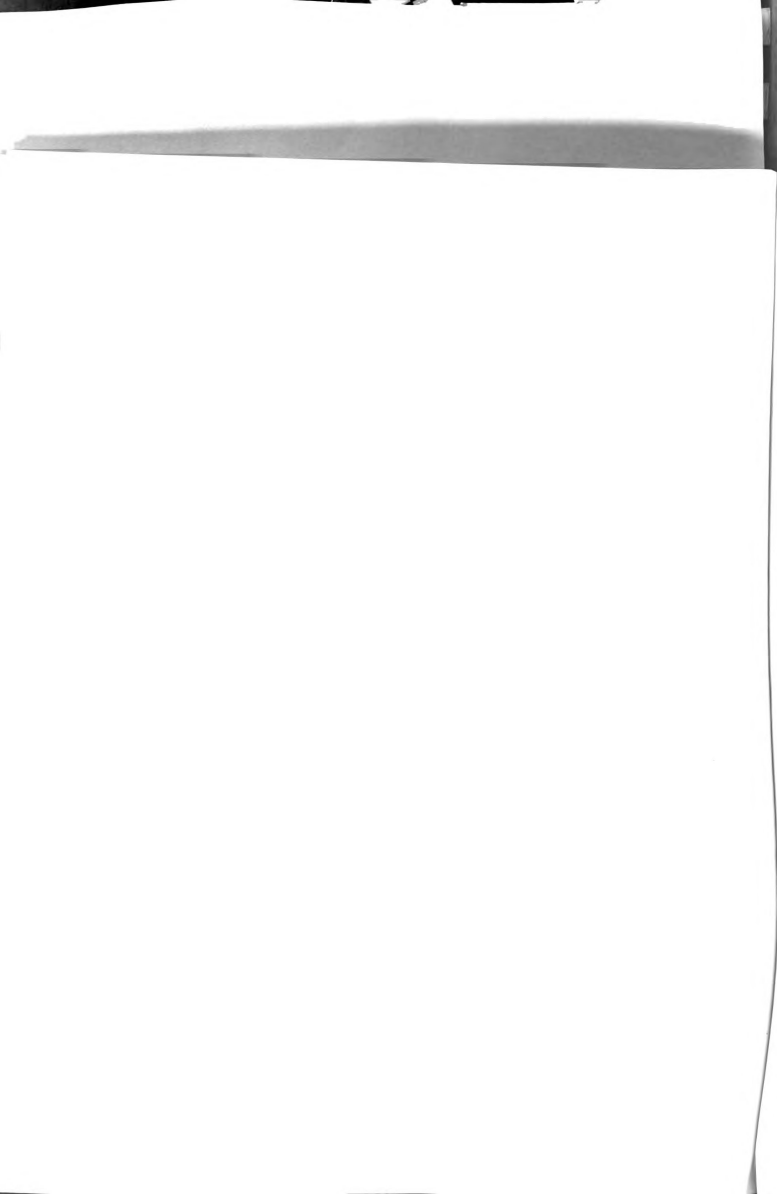
In-service programs held in the past were judged as



generally effective but inadequate and limited in scope.

Teacher-training institutions expressed willingness to cooperate with and assist the Bureau of Public Schools in providing in-service training activities for teachers.

Time, finance, and certain regulations appear to be the major sources of impediments limiting the number and frequency of in-service training activities provided and the participation by teachers in these programs.





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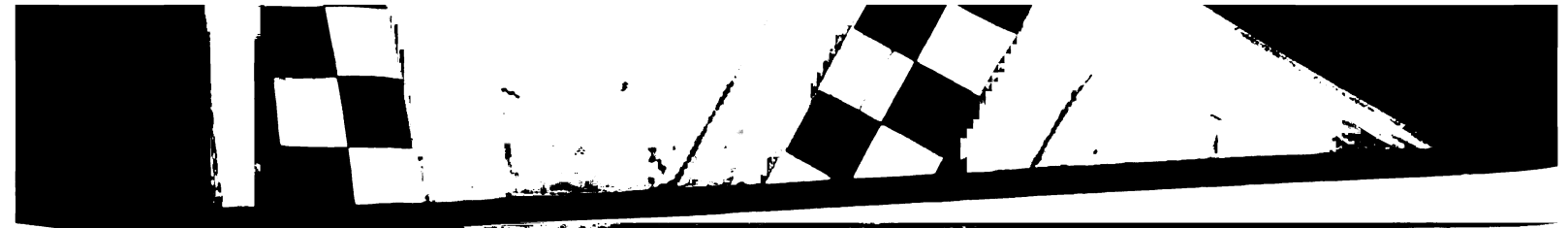
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This work is dedicated to my loving wife and  
children who courageously and patiently  
endured two years of separation and  
gave me inspiration while I  
pursued my graduate  
studies.





## ACKNOWLEDGEMENTS

The writer wishes to express his sincere gratitude and appreciation to all the persons who have given him assistance in the conduct of this study.

Sincere thanks are due particularly to his adviser, Dr. Guy E. Timmons, of the Agricultural Education Service, and to the other members of his guidance committee: Dr. Harold M. Byram, of the Agricultural Education Service, Dr. James W. Costar, of the Administrative and Educational Services, and Dr. John Useem, head of the Department of Sociology and Anthropology, all of Michigan State University, for the suggestions and encouragement each gave to the writer in the conduct of the study and preparation of the manuscript.

Special thanks are due to Dr. James E. Woodhull, Agricultural Education Advisor of the International Cooperation Administration, United States Operations Mission in the Philippines, Mr. Jose F. Crisanto, Chief of the Agricultural Education Division, Mr. Sabas P. Tangco, Assistant Chief, Agricultural Education Division, and Mr. Virginio C. Juan, Supervisor of Teacher Education, Agricultural Education Division, all of the Bureau of Public Schools, who gave the writer official and moral support in the conduct of the study and took charge of the distribution of the questionnaires to the different schools.





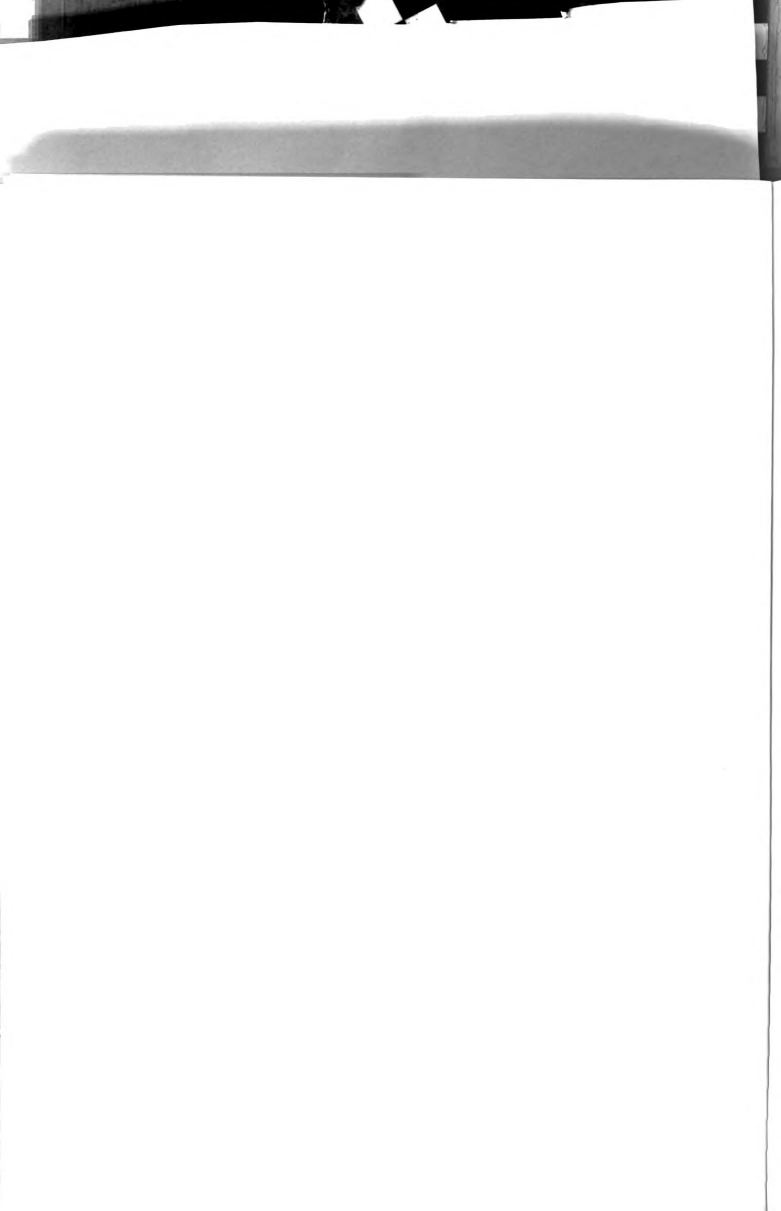
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The writer also wishes to thank Mr. Charles W. McIntosh, his program officer in the Office of Education, U. S. Department of Health, Education and Welfare, Washington, D. C., who arranged the trips of the writer to seven land grant colleges and universities in connection with this study.



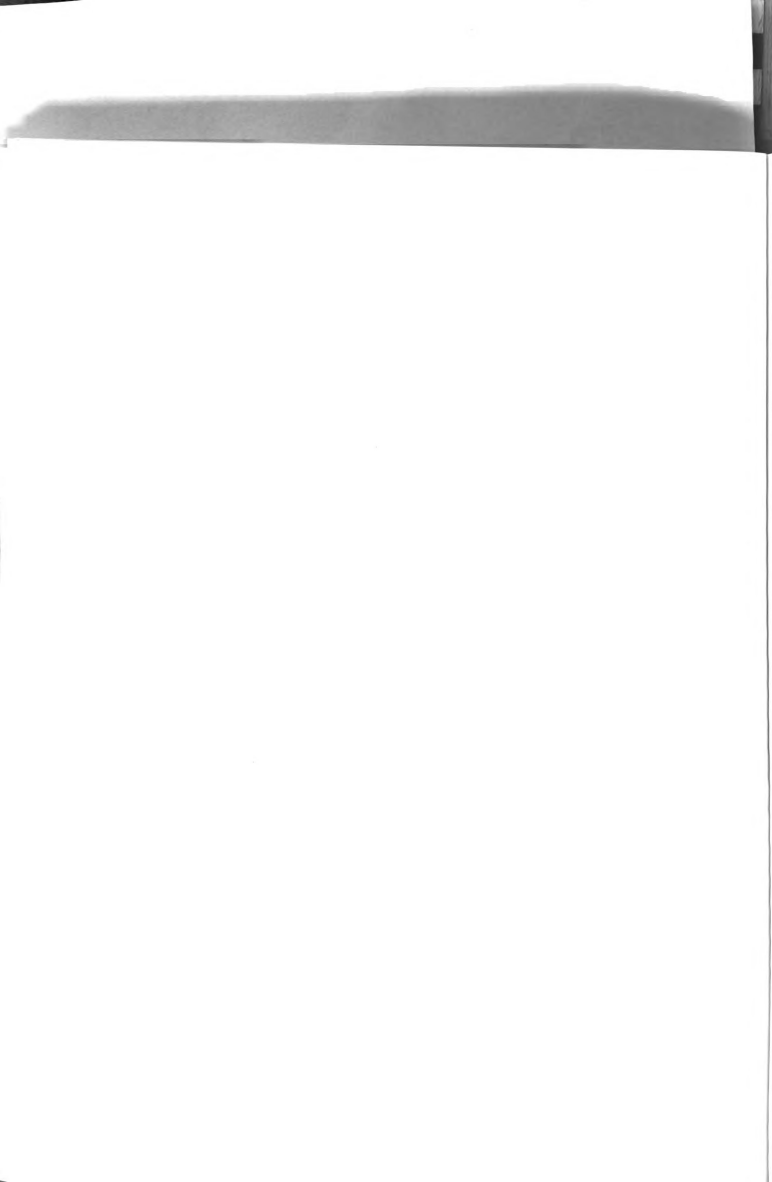
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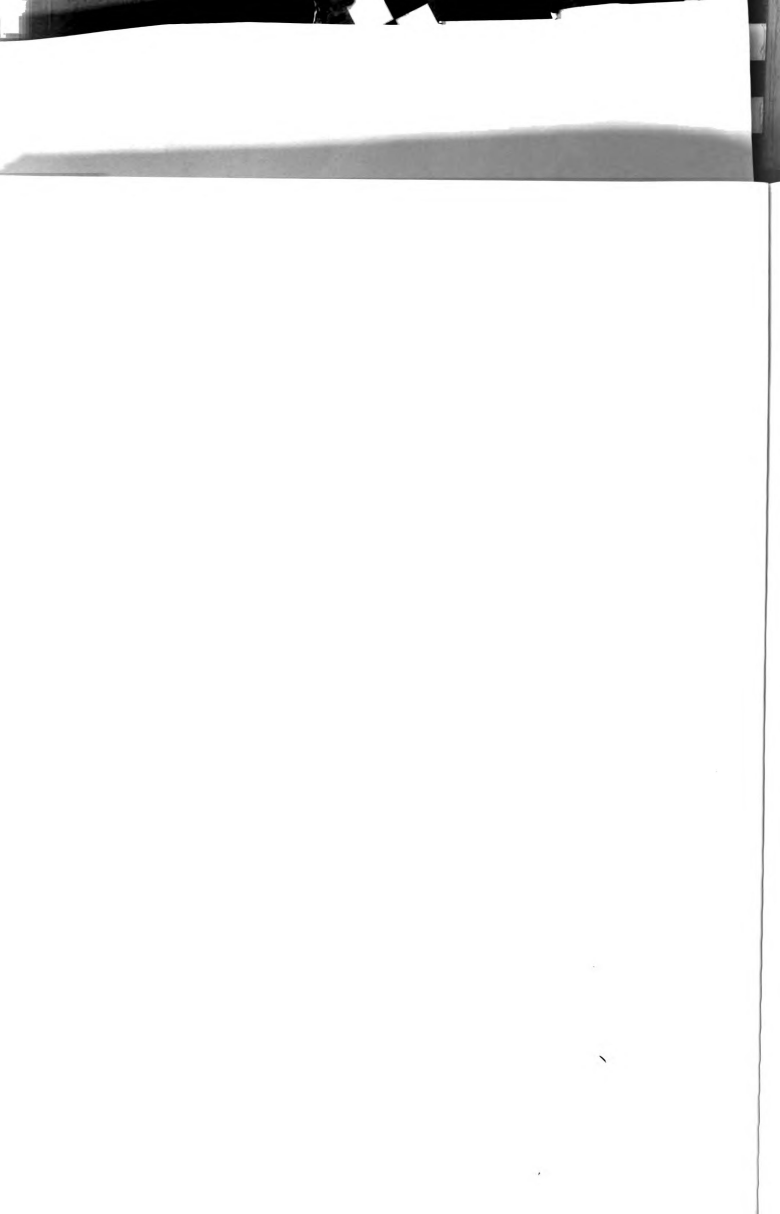
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## CHAPTER I

## THE PROBLEM AND ITS SETTING

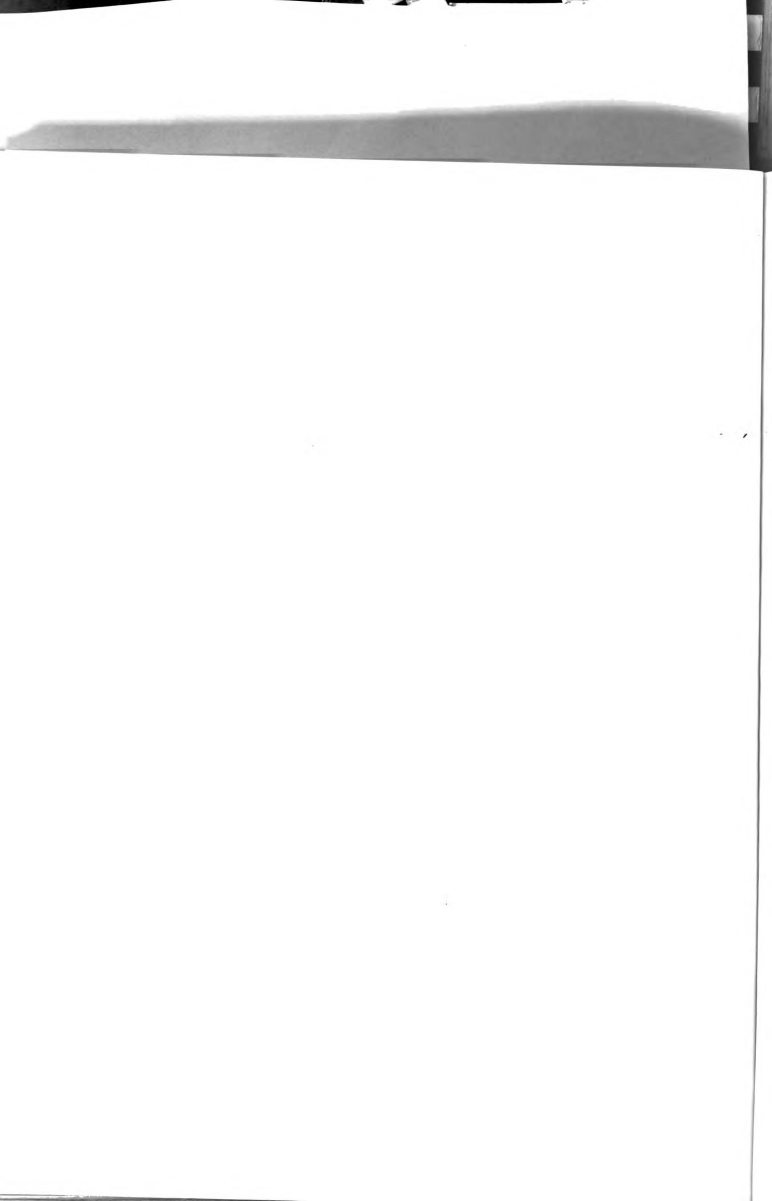
Statement of the Problem

The problem of this study was to determine the urgent in-service training needs of teachers of agricultural schools, what types of in-service training programs should be provided to meet these needs, and how the participation by teachers in these programs could be maximized.

Purposes of the Study

This study was undertaken to determine:

- (1) The in-service training needs of teachers of agricultural schools of the Philippines.
- (2) The type and scope of in-service training programs provided by the Central Office of the Bureau of Public Schools to meet these needs.
- (3) The extent of participation by teachers in in-service training programs conducted at the local, regional, or national level.
- (4) The in-service training needs of agricultural school administrators.
- (5) The extent of participation by agricultural school administrators in regional and national in-service training programs.



(6) The factors which prevent or tend to limit the opportunities of and participation by teachers and administrators in in-service training activities.

(7) Ways of improving the quality and quantity of the in-service training programs provided at the various levels.

(8) Ways of maximizing the opportunities of teachers to participate in in-service training activities.

(9) Possible areas in which some teacher-training institutions could and are willing to render assistance to the Bureau of Public Schools in providing more comprehensive programs of in-service education for teachers of agricultural schools, and

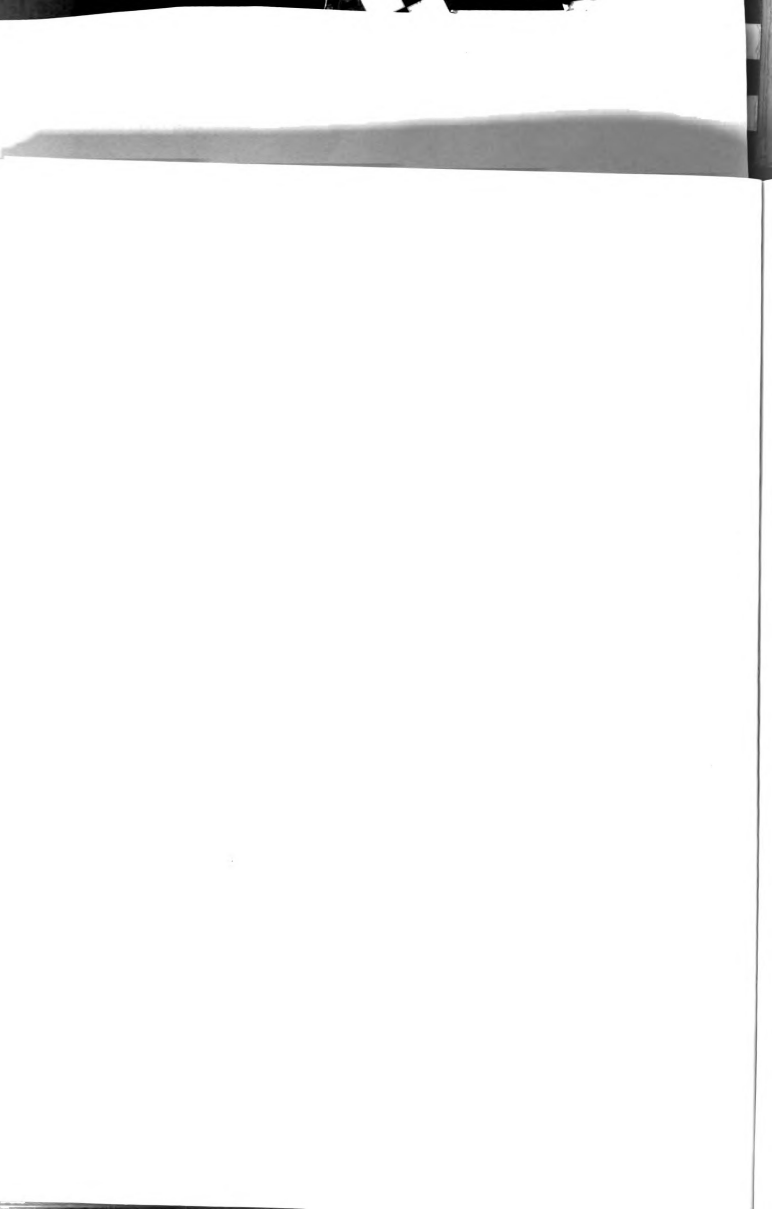
(10) Which level of in-service training program should be given increased emphasis.

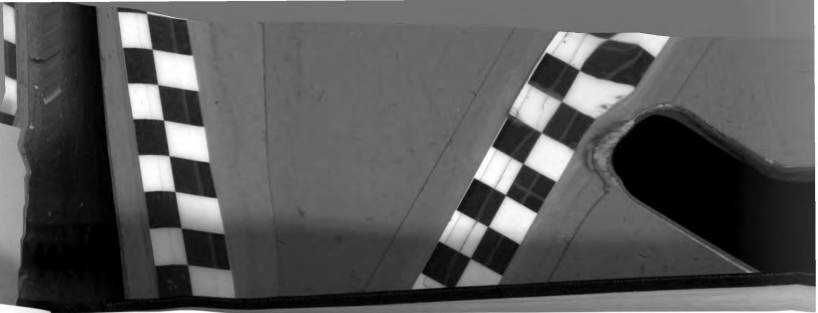
#### Assumptions

This study was based on the following assumptions:

(1) That an adequate and effective in-service training program for teachers is an essential part of the supervisory program of agricultural schools.

(2) That teachers as well as administrators will benefit by taking part more frequently in well-planned in-service training programs.





(3) That teachers, by and large, are eager to grow educationally and professionally while in the service if opportunities through in-service training programs are provided them.

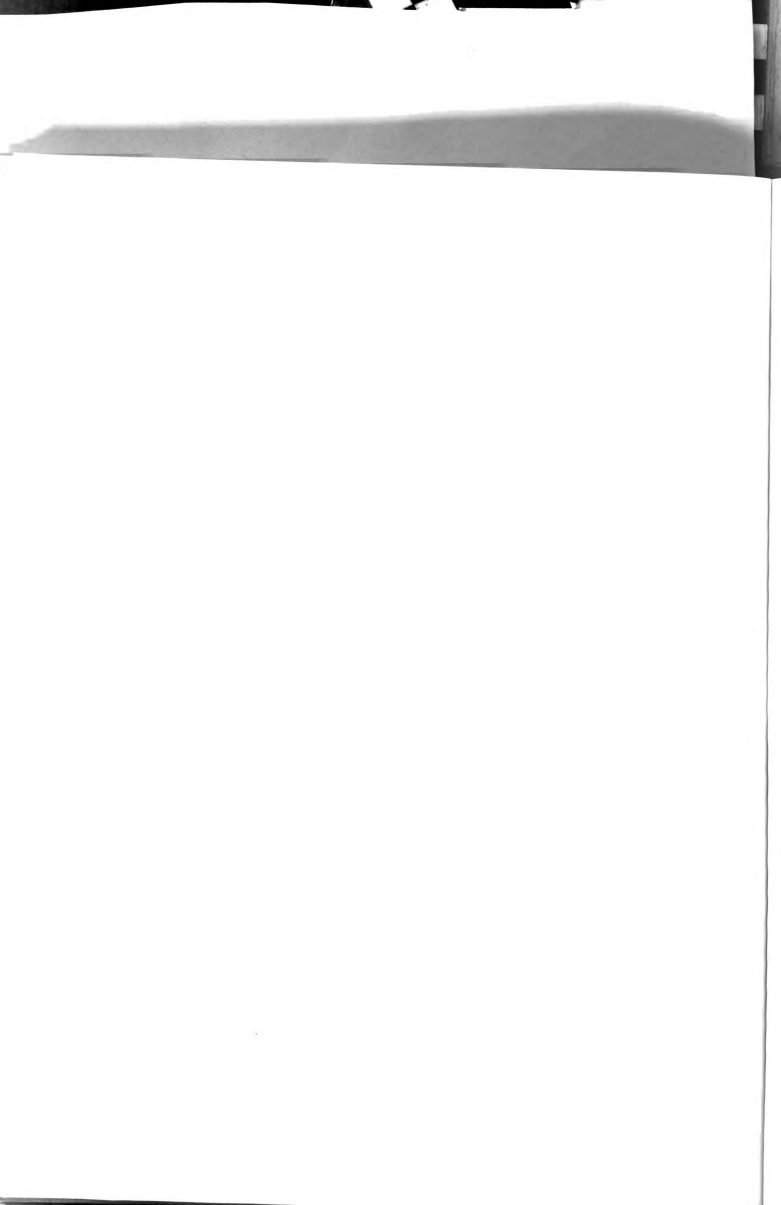
(4) That the results of this study will provide a basis for improving the vocational agriculture program of the Philippines.

#### The Need and Importance of the Study

Paraphrasing Rizal, the Filipino national hero, in a speech he delivered just before his untimely death, the late Dr. Gregorio Hernandez, then Secretary of Education of the Philippines, said: ". . . the teacher is the architect of the nation's destiny. It is the teacher to whom is entrusted the tender and pliable minds of the young and the privilege and the responsibility of moulding and firing them with the loves and the loyalties for which they shall live and die." Later in the same speech he said, ". . . if the teacher is important because he works for tomorrow, then, with more reason can we say that those who train the teachers are important because they work for today . . . If the teacher . . . is the architect of a nation's destiny, he who trains the teacher controls that destiny."<sup>1</sup>

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<sup>1</sup>Gregorio Hernandez, Quoted in: The 6th Milestone: ICA and Education in the Philippines. Annual Report of the United States Operations Mission, International Cooperation Administration in the Philippines, 1958, p. 166.



Probably this is not the first time that these sentiments have been expressed, but their constant repetitions do not in any way lessen their meaning and significance to education. In stressing the role of teachers in nation-building one is not likely to overlook the pivotal function which teacher-training institutions perform. It is from these institutions that teachers acquire the fundamental "tools" which their profession requires. Hence, their strategic role in nation-building is crucial.

But the pre-service training of teachers is only one part of the teachers' education. As Crisanto<sup>2</sup> said, "pre-service training only brings a teacher into being; it does not make him the full-fledged teacher." Professional educationists are agreed that the quality of educational services which may be expected of teachers depends to a large extent upon the kind and quality of the pre-service preparation which they received. Unfortunately, as Hass<sup>3</sup> has pointed out, many teachers and other members of the professional staff do not have adequate pre-service training. Even assuming that

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<sup>2</sup>Jose Crisanto, Vocational Education in the Philippines, Ch. V (Manila: Bureau of Public Schools, 1955), p. 117.

<sup>3</sup>C. Glen Hass, "In-service Education Today," The Fifty-Sixth Yearbook of the National Society for the Study of Education, Ch. II (Chicago, Ill.: University of Chicago Press, 1957), p. 14.





teachers have received the highest quality of pre-service preparation possible there still would remain a multitude of things which they need and ought to have learned but have not for lack of time or other reasons. To be up-to-date teachers need a program of continuing education while in the service. Knowledge and practices, just like tools and machines, become outmoded, some of them so fast that before we have time to apply them and see how they work they are already obsolete.

The quality of the pre-service preparation of teachers has been vastly improved as a result of better techniques and superior facilities now available to teacher-training institutions. This fact, however, does not lessen the teachers' need for in-service education. On the contrary, the need is even now greater because the gap between the pre-service training in skills and abilities of the teacher and the new facts and knowledges which science and technology are daily bringing to light is tremendously wider and widening at a rapid rate. Hence, the necessity " . . . for all members of the professional school staff to keep abreast of the rapid accumulation of new knowledge and new professional subject matter."<sup>4</sup>

"Teachers can only teach what they know," is true, but this is not all. They must know how to teach what they know.

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<sup>4</sup> Glen C. Hass, op. cit., p. 14.





They must strive constantly to increase and update their knowledge of subject matter and search continuously for better and more effective methods and procedures of teaching. These, along with the movement to let teachers participate in school administration, underscore the importance and indispensability of good in-service education programs for teachers.

Because of the vital function of teachers in the moulding of the youth society has the right to demand from them excellence and the highest quality of service. By the same token teachers have the right to expect, if not demand, from society the necessary conditions and opportunities by which they may equip and constantly prepare and improve themselves professionally to render the type and quality of service expected of them.

Professional educators and school administrators cannot afford to be indifferent and leave the matter of in-service education to chance. They must see to it that teachers are given maximum opportunity to improve themselves in every possible way.

The work of making good teachers must be carried forward steadily because of the immaturity of teachers on entering the profession, the unevenness of their preparation, the singular lack of external stimulus connected with the practice of the profession, the complex nature of the work that must be entrusted to even the poorest teacher, the profound injury that results when the work is badly done, the constant change in methods and curriculum.<sup>5</sup>

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<sup>5</sup> See next page.

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This means that the education of teachers must go on. It is the responsibility of professional educators and school administrators to provide the essential conditions for this continuing education to take place effectively. In turn teachers should take full advantage of the opportunities afforded them.

Educators should seek constantly to improve the working conditions and the opportunities of teachers for in-service growth. In-service training should be recognized and accepted as an integral part of the total school program.

Several types of in-service activities have been in use in the Philippines but the effectiveness of these devices could not be specified for lack of information. At least four studies are known to have been conducted to determine the in-service training needs of vocational agriculture teachers, but the writer is not aware of any study made to identify the needs of academic teachers. Nor is he aware of any study conducted to determine the types and effectiveness of the in-service training devices used. In the absence of these vital information it is doubtful that a comprehensive program of in-service education can be designed to meet

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<sup>5</sup>Charles D. Lowry, Quoted by Nelson B. Henry in "Preface," Fifty-Sixth Yearbook of The National Society for the Study of Education (Chicago: University of Chicago Press, 1957), p. ix.

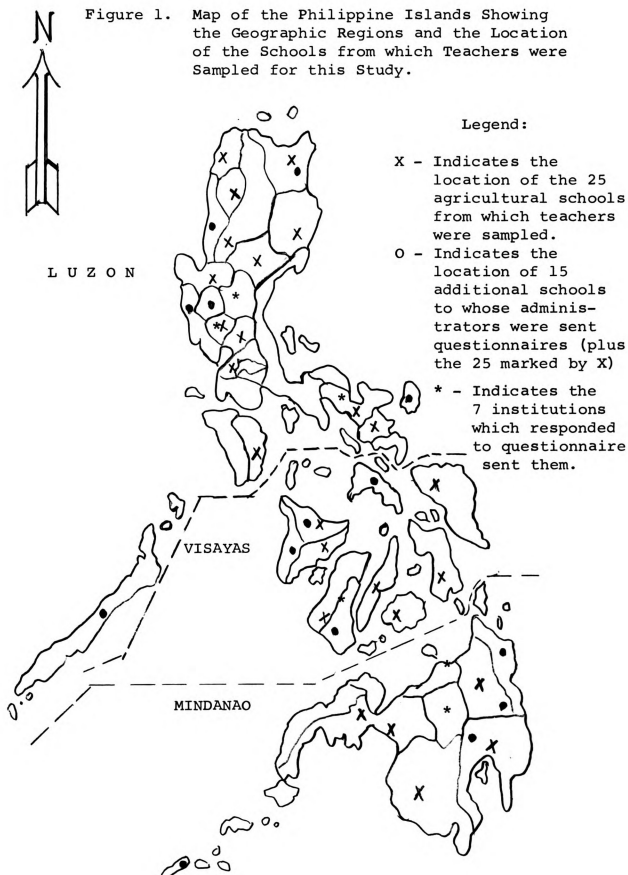
satisfactorily and effectively the needs of all teachers.

It was in the hope of filling this gap that the present study was set up. The study was directed primarily to the identification of (1) the in-service training needs of teachers, (2) the types of in-service training programs provided for them, (3) the extent of their participation in these programs, (4) the reasons for their limited or non-participation, and (5) their recommendations for the improvement of the in-service training programs currently in use. It was hoped, however, that ways of evading, minimizing, or correcting the difficulties mentioned previously would be yielded partly by the results.

#### Scope of the Problem and Delimitations of the Study

Respondent schools, teachers and administrators:

1. Teachers were sampled from 25 schools five years old or older. The schools were selected on a regional basis and according to type.
2. The administrators of the above schools plus the administrators of 15 others were also included in the study.
3. The distribution of the schools selected follows:  
Luzon - 13, Visayas - 7, and Mindanao - 5. Figure 1 shows the location of these schools.



The questions forming the basis of this study were:

1. What are the in-service training needs of teachers of agricultural schools of the Philippines?
2. What types and how extensive were the in-service training programs provided to meet the in-service training needs of teachers?
3. To what extent was the participation by teachers in these in-service training programs?
4. What are the in-service training needs of agricultural school administrators?
5. To what extent are administrators participating in in-service training programs?
6. What types of in-service training activities were locally organized and conducted by school administrators?
7. What are the factors or reasons tending to limit or prevent the participation of teachers at in-service training programs, including attendance in summer schools?
8. What factors tend to limit or prevent administrators from organizing and conducting local in-service training programs often?
9. How may and in what ways could the in-service training programs be improved?





10. How may the opportunities of teachers to participate in in-service training programs be maximized?
11. What incentives are necessary?
12. Which level of in-service training program should be given increased emphasis?

This study was limited to the data obtained from the questionnaires returned by the teachers and administrators of the schools selected for the study. However, additional data were also secured from the reports of the Director of Public Schools and the ICA Mission in Manila.

The population of the study consisted of the teachers and administrators of agricultural schools only, of which there are now 75.

In order to double check the data on the type and number of in-service training programs, and gather additional information that might be pertinent to the study, a summary of the reports of the Agricultural Education Division of the Bureau of Public Schools regarding the types and participation by teachers of agricultural schools in in-service training programs held during the five years covered by the study was secured.

For the purpose mainly of incorporating ideas and practices in the recommendations to be made as a result of this study, information on the in-service training practices

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used in the United States was obtained through actual observation and interviews with the head teacher-trainers of seven land grant institutions, and through printed information furnished the author. The list and date of visit to these institutions is appended to this report as Appendix F.

#### Definition of Terms

For the purpose of this study the following terms were defined and used as follows:

Agricultural school(s) or agricultural high school(s) - refer to secondary vocational agricultural schools whether classified as rural, agricultural or national. These are used interchangeably.

Teacher or teachers of agricultural schools - is applied to any member of the teaching staff of agricultural schools regardless of the degree possessed or subject taught.

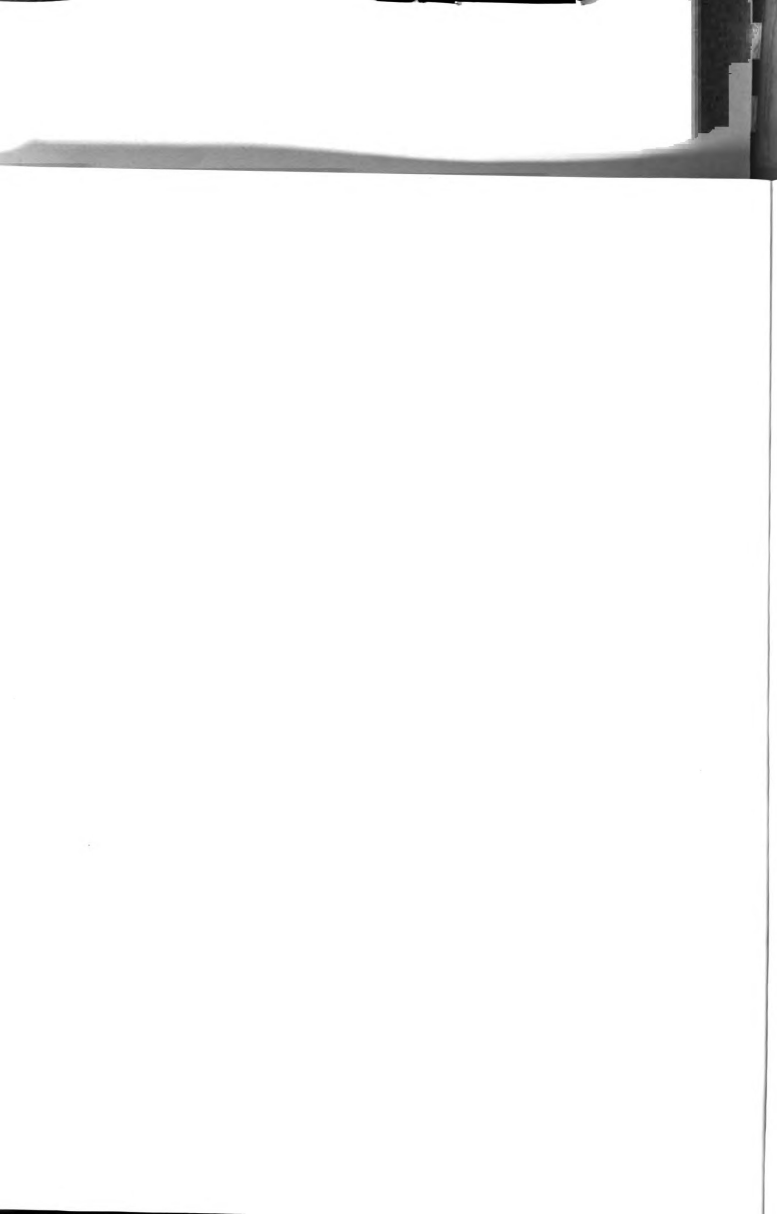
Agriculture teacher(s) - applies to any or all members of the teaching staff whose major assignment or teaching load consists of agriculture subjects or field partium. Farm managers who have charge of the school farm are included in this category.

Farm mechanics teacher(s) - applies to either or both the farm machinery and/or farm shop teacher(s).

Farm machinery teacher - applies to the teacher whose sole or major teaching assignment is farm machinery and is also in charge of the farm machineries of the school.

Farm shop teacher - applies to the teacher teaching farm shop courses as a major teaching load, and/or is in charge of construction projects of the school.

Language teacher(s) - applies to any or all teachers whose major teaching load is either English, Pilipino Language, or both.



Social Science teacher(s) - applies to any or all teachers whose major teaching load consists of three or more courses in social studies, history or economics.

Homemaking or home economics teacher(s) - applies to any or all teachers whose major teaching assignment consists of home economics courses.

Science teacher(s) or applied science teacher(s) - applies to any or all teachers whose major teaching assignment consists of general science and/or applied science courses such as physics, agricultural chemistry, biology, or any combination of these.

Mathematics teacher(s) - applies to any or all teachers whose major teaching assignments consists of any or combinations of arithmetic, algebra, geometry, and general mathematics.

Major assignment or major teaching load - means that more than 50 percent of the daily teaching periods of a teacher is devoted to one particular subject area of instruction.

Minor teaching assignment - means that less than 50 percent of the teaching time of the teacher is devoted daily to teaching the particular course or subject area in addition to a major teaching load.

Administrator(s) - means either or both the principal(s) and superintendent(s) of agricultural schools.

In-service education and in-service training - used interchangeably to refer to the program of in-service training activities provided for teachers of agricultural schools at any or all levels (local, regional, or national), including summer school attendance and supervisory visits.

In-service training activity(ies) - means and includes any formally organized activity for the purpose of improving teachers' professional skills and abilities in performing their duties. It may refer to any or all devices or techniques used such as conferences, conventions, meetings, workshops, seminars, demonstrations, educational trips, etc.

Conference - refers only to professional meetings or conferences regularly held at the local school level, or occasionally at the regional or national levels for the purpose of discussing professional subjects and/or administrative and



supervisory problems, including community and public relations. It does not include faculty meetings or conferences devoted to routine business or operational matters.

Convention - refers to conferences held on a regional or national basis and lasting for two or more days for the purpose of discussing educational issues, and administrative, supervisory, and instructional problems, including the formulation of policies, recommendations and legislative proposals.

Workshop - refers to any in-service activity dealing on special areas and problems of instruction which involve both group discussions and project activities either on an individual or group basis. This includes the construction of course outlines, syllabuses, and other aspects of curriculum improvement and program planning, under the guidance of leaders, resource persons and consultants.

Seminar - refers to any in-service activity held at any level for relatively short duration for the purpose of discussing on a professional level trends and issues in education, including the reading and reporting by individual teachers or groups of recently published researches or books, and critically appraising or evaluating these materials for possible application. This also includes the reporting by teachers of significant information concerning their teaching experiences or results of action research which they may be conducting.

Symposium - a discussion meeting led by a panel or group of educators (or teachers and administrators), lasting from one to a few hours, on problems, trends and crucial issues affecting education. The primary purpose is for the enlightenment and greater understanding of teachers of these issues.

Demonstration teaching - an in-service training activity in which one or more teacher demonstrate in actual classroom, shop or laboratory situations a new technique, method or procedure of instruction. It is followed by a discussion of the various aspects of the technique demonstrated and an evaluation of its weaknesses (or that of the teacher using it) as well as its strong points for the purpose of improving the technique further.

Educational trips - organized trips by teachers to places of educational interest for purposes of obtaining additional information or new insights in solving school or instructional problems. This may include visits to farms, business enterprises,





factories, historical places, higher institutions of learning, and government offices.

Inter-school visits - visits made by individual or groups of teachers from one school to another for purposes of observing practices, facilities, and other professional and social aspects of the school program of the host school.

Professional class(es) - used in this paper to mean classes organized in the different state-teacher-training institutions by request of the Bureau of Public Schools in which courses suggested or decided upon by the bureau are offered for credits, and in which designated teachers attend on official time, sometimes with expenses paid partially or entirely by the bureau or local school. This includes refresher courses.

Local - used to identify the scope or level of in-service training activity or program and means that the program or activity is participated in only by members of the staff of the local school. Resource persons and consultants from outside may, however, be used.

Regional - used to identify in-service programs planned and organized to serve the teachers of a geographic or supervisory region. Teachers participating may come from 3-8 schools.

National - used to identify in-service programs held and participated in by teachers coming from the three geographic areas of the country (Luzon, Visayas, and Mindanao).

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## CHAPTER II

## REVIEW OF LITERATURE

Status of In-Service Training for Teachers in the Philippines

In 1955 the Chief of the Agricultural Education Division of the Bureau of Public Schools wrote:<sup>6</sup>

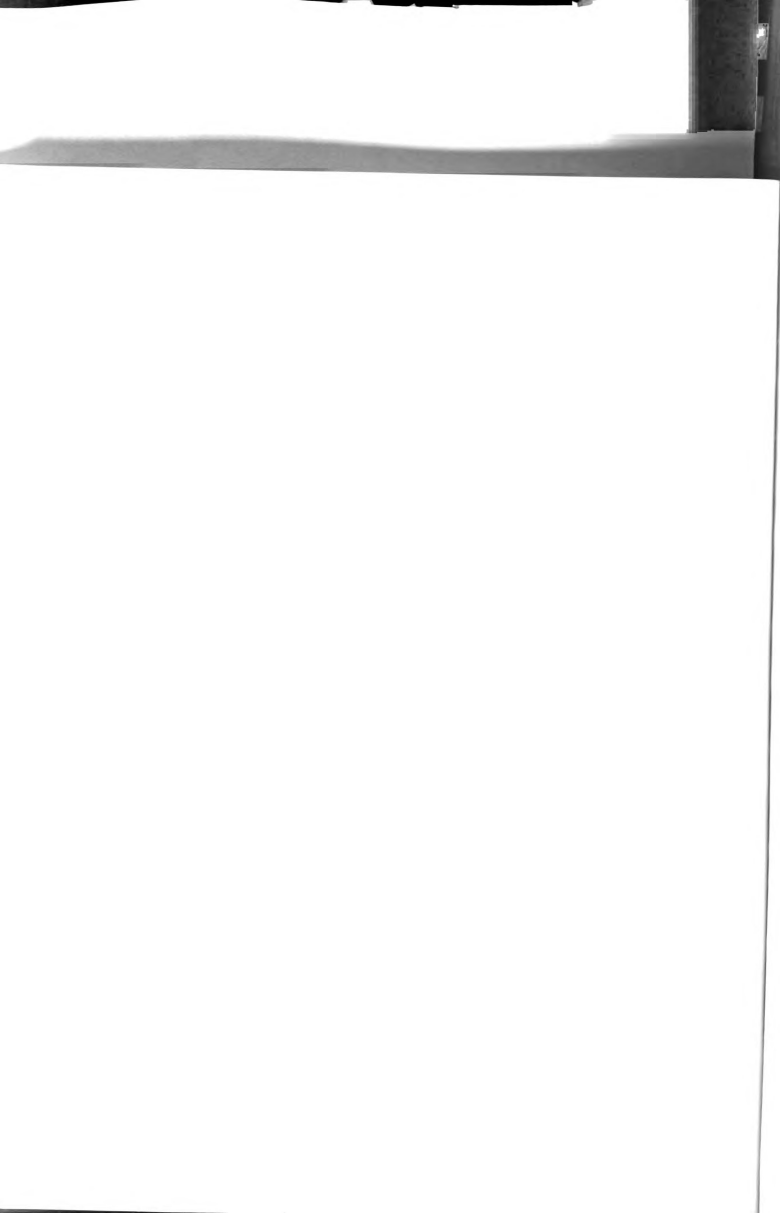
Education is constant growth, therefore, pre-service training only brings a teacher into being; it does not make the full-fledged teacher. The teacher receiving his diploma is not yet fully developed; his vitality and his growth depend on the proper attention given to his in-service training. Hence, the positive need for in-service training.

The above statement summarizes the philosophy and the need for in-service training for teachers. It, too, expresses the recognition by the Central Office of its leadership role in providing the in-service training programs needed. No clue is given, however, as to the success or effectiveness of the in-service programs which have been provided.

The prime objectives of in-service training programs then as now are: to promote efficient teaching and professional growth; to complete the education of teachers whose training was insufficient; and to train personnel for the higher positions in education.

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<sup>6</sup> Jose Crisanto, "Agricultural Education," Ch. V of Vocational Education in the Philippines (Manila: Published by the Bureau of Public Schools, 1955), pp. 117-119 (Mimeographed).



Over the years since the present educational system of the country was established these objectives have provided the basic guidelines for the in-service education of teachers. Two general types of in-service training activities have prevailed: (1) informal training without credit, and (2) formal training for which credit is given.<sup>7</sup>

Included in the first are supervisory visits and conferences with teachers, regular faculty professional meetings, demonstration teaching and group discussions, interschool visitation, conventions, membership in educational or professional organizations, subscription to professional and technical magazines, issuance by the Central Office or division offices of bulletins, circulars and memorandums, and parent-teacher association meetings. Under the second are included Saturday classes, summer school classes, and, occasionally, refresher courses at the different state colleges and universities.

The workshop, seminar, and symposium have been introduced only recently as in-service training devices. The workshop is now widely used throughout the country by both general and vocational schools, but the number held and the subject areas taken up have been largely restricted to critical areas of needs as perceived by administrators and Central

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<sup>7</sup>Ibid., p. 119.



office supervisors. It is, however, "a promising form of in-service training."<sup>8</sup>

It is not possible, however, to indicate accurately the degree of success of the total in-service education program, nor the effectiveness of any one of the devices used because of the absence of research evidence or evaluation data upon which to base judgment. One can only hazard a guess, and in this the writer hesitates to make one. Thus, the present study has sought as a secondary aim to identify some of the weaknesses, if any exist, of the current in-service training programs and find ways of correcting them.

#### Studies on the Educational Qualifications and Subject Matter Needs of Teachers

Research studies on the pre-service and in-service training needs of teachers in the Philippines are scanty. The few that had been made deal mostly on the pre-service and in-service professional needs of teachers. Only one attempted to make a partial evaluation of the in-service training programs and devices used.

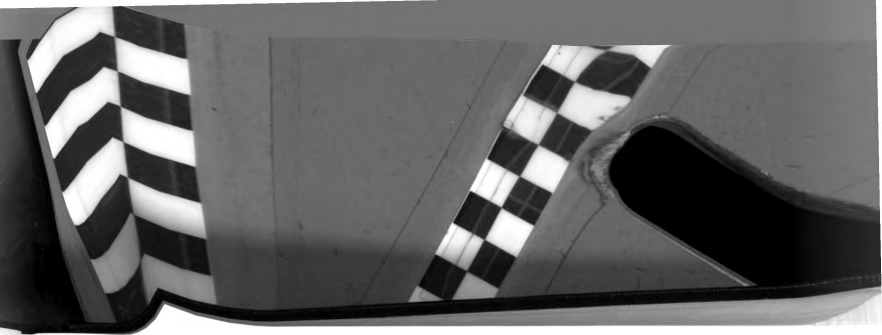
In a study conducted in 1955 to determine the (1) educational and professional qualifications of agriculture

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<sup>8</sup>Ibid., p. 119.







teachers in general and agricultural high schools, (2) factors affecting their efficiency, (3) their deficiencies in teacher preparation, (4) their in-service training since entrance into the teaching service, and (5) the means of improving the qualifications of prospective teachers and those already in the service, Cedillo<sup>9</sup> found that one percent of the 260 teachers responding to the questionnaire held post-graduate degrees, 57 percent were college graduates, 8 percent were college under-graduates and 21 percent were graduates of agricultural or rural high schools. Only five percent possessed adequate professional training for teaching vocational agriculture. Forty-six percent had none. The study also revealed that 44 percent of the teachers wished to take professional courses in Agricultural Education, and 34 percent wished to take other courses. Only 25 percent had earned credits at college by attending summer school or Saturday classes since employment.

The above findings seem to lend credence to the stress placed by the Bureau of Public Schools on professional classes with credits and attendance on official time for a certain

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<sup>9</sup>Valentin G. Cedillo, "Qualifications of Agricultural Teachers in General, Agricultural and Rural High Schools," The Philippine Agriculturist, V. 39 (4) (Laguna: The University of the Philippines, College of Agriculture, 1955), pp. 226-232.



number of teachers every year as a means of encouraging teachers to upgrade themselves.

In another study made in 1959 by Cushman, Cagni, and Jarmin<sup>10</sup> to discover the phases of each farm enterprise in which teachers of agriculture need agriculture subject matter which will assist them in keeping up-to-date with research findings and technological developments, they found that farm jobs involved in the production of rice, corn, poultry, citrus, mango, dairy cattle, carabao, sweet potato, sugar cane, cassava, coffee and cocoa, vegetables, coconut, ducks and geese, and swine raising were ranked by the 252 teachers and principals of 30 schools as their areas of greatest need. One hundred thirty-seven other farm enterprise jobs were also ranked according to priority of need. A plan was developed for the Bureau of Public Schools and the College of Agriculture to provide agricultural subject-matter service for teachers of agriculture. No information is, however, available at this time as to whether the plan has already been put in operation.

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<sup>10</sup>Harold R. Cushman, Arsenio O. Cagni, and Martin V. Jarmin, The Agricultural Subject-Matter Needs of Teachers of Agriculture in the Philippines. Research Report, Summaries of Studies in Agricultural Education in the Philippines (University of the Philippines, College of Agriculture, 1959), U.P., p. 14.



Juan<sup>11</sup> studied the educational attainment, service status, and in-service training needs of agriculture teachers in 1955, and found that only 60 percent of the 250 teachers studied were qualified to teach vocational agriculture. The majority was not professionally trained to teach. Barely half had earned at least six credits in education courses. Forty-six percent had attended in-service classes within the past six years and 30 percent had attended two-week workshops. The needs indicated by teachers correlated high (+ .87 - + .97) with the ranked importance of the subjects taught in high school classes and the major and minor crop and animal enterprises important in each locality. These seem to indicate that the respondent teachers recognized their insufficient preparation to teach basic information and production skills required for the crops and animals considered important in the community. The teachers listed poultry, swine, rice and corn as the areas in which they had the greatest need.

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<sup>11</sup>Virginio C. Juan, The Educational Attainment, Service Status, and In-Service Training Needs of Agriculture Teachers in the Philippines (Master's thesis, Pennsylvania State University, 1955), p. 68. Summaries of Studies in Agricultural Education in the Philippines, An annotated bibliography of studies. (Laguna: University of the Philippines, College of Agriculture, 1959), pp. 26-27.



The study by Juliano,<sup>12</sup> which preceded that by Juan, on "The Technical Training of Teachers of Vocational Agriculture in the Philippines," revealed essentially the same deficiency in the technical agriculture preparation of teachers as their professional education deficiency found by the latter. Juliano's findings were: 65 percent of the 94 teachers studied had Bachelor degrees in agriculture, 34 percent had less than a Bachelor degree or had degrees in fields other than agriculture; only 67 percent had adequate technical training based on college units completed. More than 40 percent felt a need for more training, more experience and more knowledge in farm mechanics, livestock diseases and parasites, fertility management, conservation and farm shop.

The findings indicate the deficiencies in the college preparation of the teachers and the urgent need for good programs of in-service education. Juliano recommended higher compensation for teachers in order to give them incentives to upgrade themselves and do better work through well-planned in-service training programs.

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<sup>12</sup> Jorge P. Juliano, The Technical Training of Teachers of Vocational Agriculture in the Philippines (Master's thesis, Pennsylvania State University, 1954), p. 69. Summaries of Studies in Agricultural Education in the Philippines. An annotated bibliography of studies, College of Agriculture, University of the Philippines, College, Laguna, 1959, pp. 27-28.





In 1958, Habito<sup>13</sup> made the following recommendations which are relevant to the present study in connection with the development of an adult farmer program for the Philippines:

- (1) Reorientation of the philosophy, objectives and guiding principles of the agricultural education program to give emphasis to the vocational agriculture education of adult farmers;
- (2) Continuous in-service training of agriculture teachers;
- and (3) Use of advisory councils in organizing, conducting and evaluation of agriculture instruction in the community.

Elsewhere studies similar to those cited above were also being conducted. In 1958 Sudershanam<sup>14</sup> found that teachers and administrators in Andra Pradesh State, India, recognized the need for in-service education for continuous growth. Among the in-service education activities which teachers wanted to be held more often were: individual and group conferences with administrators, reading of professional literature, participation in group activities, study groups, refresher courses, evaluation programs, educational research,

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<sup>13</sup> Celestino P. Habito, Development of An Adult Farmer Education Program for the Philippines. (Ph.D Thesis, University of Minnesota, 1958), p. 380. Summaries of Studies in Agricultural Education in the Philippines. College of Agriculture, University of the Philippines, College, Laguna, pp. 22-23.

<sup>14</sup> Ratna Sudershanam, A Study of In-Service Teacher Education of Secondary School Teachers in Andra Pradesh State, India (Ed.D. Thesis, Indiana University, 1958). Dissertation Abstracts, V. 19, No. 12 (Ann Arbor: University of Michigan, June, 1959), pp. 3240-3241.

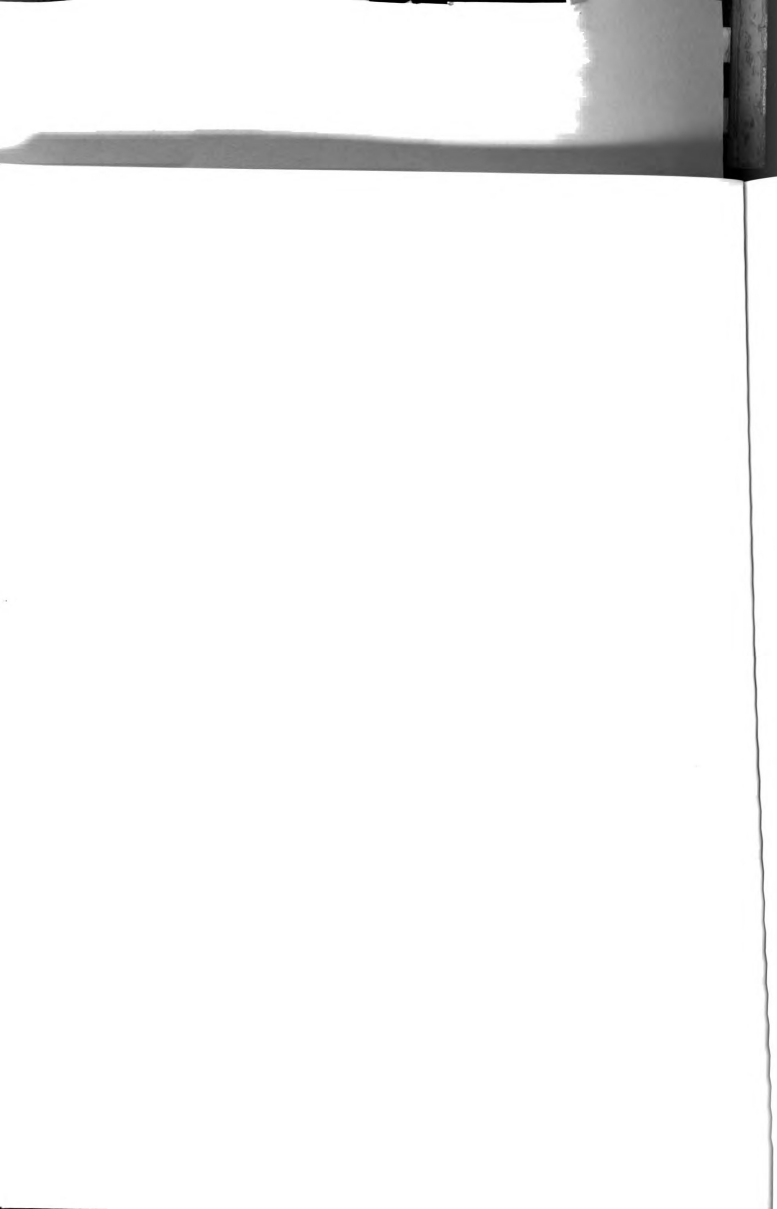


educational trips, study leave, panel discussions, seminars, visiting classes and schools, and meeting educators from foreign countries. He found that participation by teachers depended more on internal rather than external stimulation, i.e., by encouragements and incentives provided by the local school administration. Some of the important problems were inadequate or no professional libraries in the individual schools, inadequate buildings and instructional materials, and lack of coordination among the various leaders of local programs and the Director of Public Instruction on one hand, and teacher-training colleges on the other. He recommended that the needs of teachers be identified, analyzed and evaluated, and appropriate programs formulated and conducted to meet them.

In a study she conducted in 1957, to find what secondary public school teachers in Manila were doing for professional improvement, Santiago<sup>15</sup> found that teachers in Manila felt that they were not offered enough external incentives to encourage them to grow professionally; that the relatively extensive participation of teachers in faculty meetings and group conferences with supervisors was to a great degree

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<sup>15</sup> Alicia A. Santiago, A Study of the In-Service Education of Public Secondary School Teachers in Manila, Philippines (Ed.D. Thesis, Indiana University, 1957), p. 379. Dissertation Abstracts, V. 18, No. 2 (Ann Arbor: University of Michigan, Feb., 1958), p. 515.



required rather than voluntary; that several in-service training techniques were utilized, but techniques involving cooperative action were rarely used; that the extent of teacher-participation in in-service training activities depended largely on the extent of offering of in-service activities by the school. Various in-service techniques generally recognized by authorities as effective were used but only on a limited basis. The importance of providing professional library facilities to the teachers was evidenced by the results of the study. Workshops and conventions or conferences, when offered, were fairly well participated in by the teachers. Great importance was attached to the leadership provided by the Central Office of the Bureau of Public Schools in providing in-service training activities to the teachers outside of their schools. The teachers rated the in-service training programs which they attended fairly high. The most highly rated technique was the use of teaching aids (audio-visual) such as educational films. However, this technique was the least used. The problems rated most important were: lack of instructional materials and second-language difficulty of students.

The status of in-service teacher education in public



high schools in Indiana was studied by Taylor<sup>16</sup> in 1957. He found that (1) teachers took an active part in faculty meetings but they did not plan them, (2) teachers were active in curriculum improvements but worked individually rather than cooperatively, (3) the most widely used techniques of in-service education were related to teacher welfare, (4) schools in wealthier areas used the greatest number of different selected techniques, (5) both principals and teachers showed great interest in in-service education, (6) teachers and principals agreed closely as to the status of in-service teacher-education programs in Indiana, and (7) the emphasis was on the well-being rather than on the professional competency of teachers.

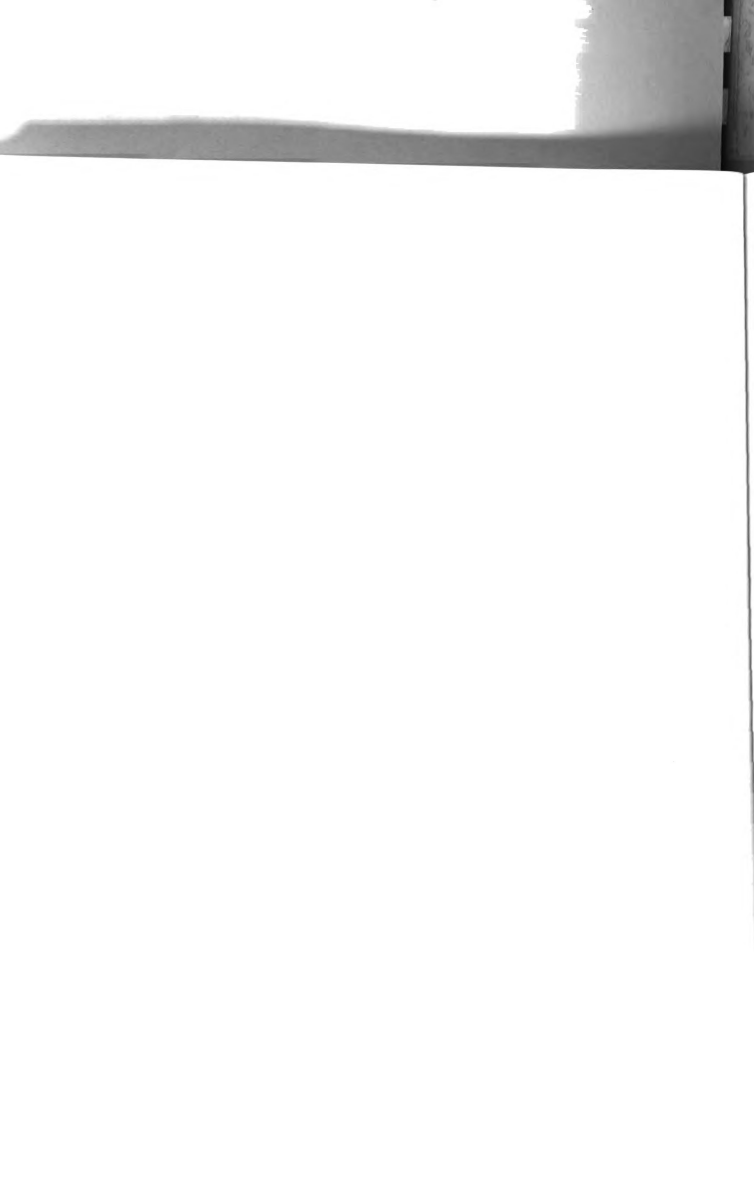
In a study to determine what in-service education was being provided to Negro teachers of vocational agriculture in the state of Virginia, Diggs<sup>17</sup> found the following extensively used: (1) full-time residence in college, (2) full-time

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<sup>16</sup> Bob Leslie Taylor, The Status of In-Service Teacher-Education in the Public Senior High Schools of the State of Indiana (Ed.D. Thesis, University of Indiana, 1957). Dissertation Abstracts, V. 18, No. 2, Feb., 1958 (Ann Arbor: University of Michigan, 1958), pp. 515-516.

<sup>17</sup> Kermit Hunter Diggs, In-Service Education of Teachers of Vocational Agriculture in Virginia (Ed.D. Thesis, Cornell University, 1957). Summaries of Studies in Agricultural Education, Supplement No. 12, Voc. Div. Bull. No. 275, Agriculture Series No. 72 (Washington, D. C.: U. S. Department of Health, Education and Welfare, 1959), pp. 17-18.



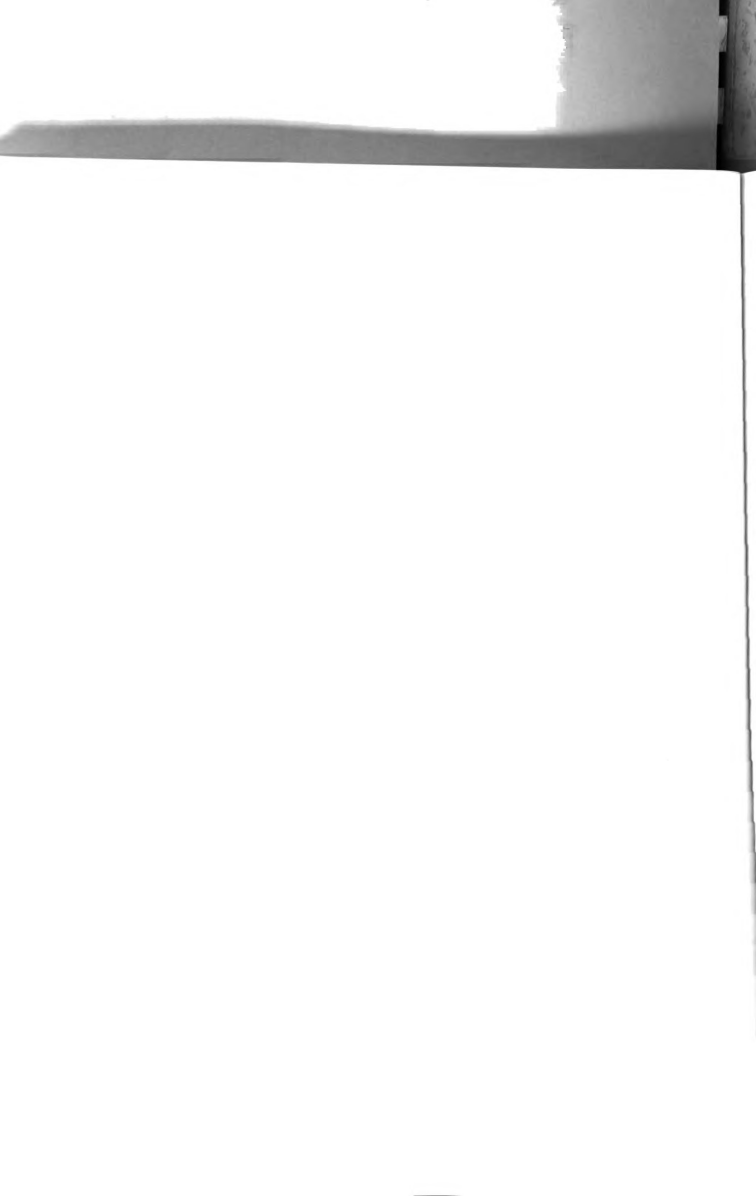


summer session, (3) three-week short courses, and (4) extension and week-end courses with credits. Nineteen workshops were conducted and participated in by 97 percent of the teachers for an average of 6.5 times. Ninety-eight percent consulted with 1-11 other agricultural agencies for an average of 6.2 per teacher. Fifty-six percent pursued credit courses in agricultural education, general education and technical agriculture. Ninety-four percent were visited by the teacher-trainer and/or supervisor for an average of 4.1 visits. Teaching experience had no apparent effect on the attendance by teachers at workshops, but a relationship existed between experience and assistance received from supervisors or teacher-trainers. The number of problems discussed varied inversely to the increase in experience. Lack of time limited the frequency of participation by teachers in in-service training programs. Finance and distance were also important factors limiting the pursuit of credit courses.

Essman<sup>18</sup> studied the summer activities of Nebraska teachers of agriculture in 1956, and found that the greatest

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<sup>18</sup> Rolland L. Essman, A Study of the Summer Activities of Nebraska Teachers of Vocational Agriculture (M.S. Thesis, University of Nebraska, 1956), p. 94. Summaries of Studies in Agricultural Education, Suppl. No. 11, Voc. Div. Bull. No. 272, Agric. Series No. 71, p. 24. U. S. Department of Health, Education and Welfare, 1958.



proportion of the teachers' time was devoted to self-improvement. Summer school attendance and the development of the next year's teaching program occupied the major share of the teachers' time. Other activities were supervising farming programs, FFA activities, professional reading and many routine matters in the operation of the vocational agriculture department. He recommended that the summer program be considered an integral part of the total program, and that teachers evaluate the summer activities and eliminate the less important ones. Administrators and supervisors should aid teachers in identifying the important activities.

Horner,<sup>19</sup> 1959, conducted an evaluation of the in-service education program provided for teachers of vocational agriculture by North Carolina State College and found that the most important item of need checked by teachers was, "Having in-service education opportunities conveniently available." Three-fourths of the teachers needed assistance in keeping up-to-date on information and techniques for effective teaching. Teachers expressed highest subject matter needs

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<sup>19</sup>James T. Horner, An Evaluation of the In-Service Education Program Provided for Teachers of Vocational Agriculture by North Carolina State College (Ed.D. Dissertation, Columbia, Missouri: University of Missouri, 1959), 209 p. Summaries of Studies in Agricultural Education, Suppl. No. 13, Voc. Div. Bull. No. 282, Agric. Series No. 75, U. S. Department of Health, Education and Welfare, 1960, pp. 48-49.

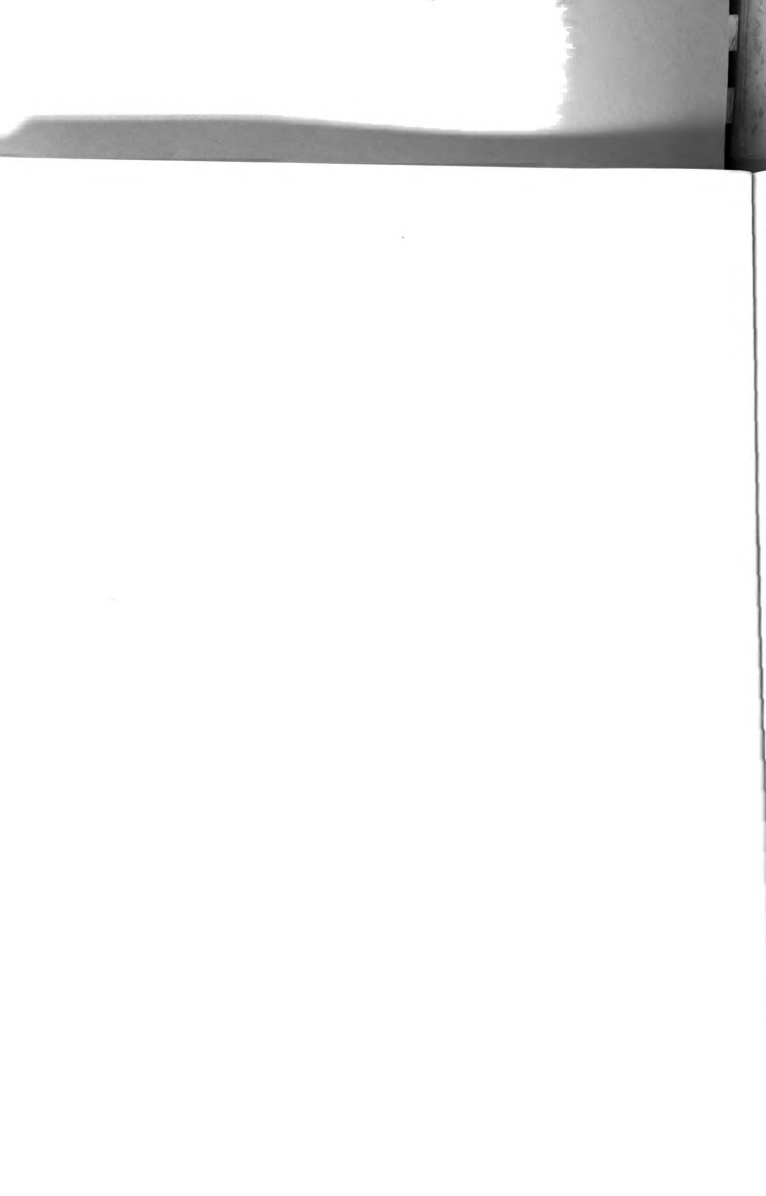


for (a) plant diseases, (b) livestock and poultry diseases, (c) farm management, (d) agricultural economics and marketing, and (e) motor and machinery operation. The in-service program was found to be weak in: policy and planning, budget provisions, supply of new information, and technical off-campus courses. It was found to be strong in facilities, visits to first year teachers, and workshops. Teachers differed in their evaluation of in-service education programs from the evaluation by teacher-educators. The most effective in-service media were: workshops, small group meetings, subject-matter specialist, short courses, and extension courses.

Deems,<sup>20</sup> 1956, evaluated the in-service education program provided for Nebraska teachers of vocational agriculture by the University of Nebraska and found that teachers ranked workshops, informational services, consultative services, and graduate courses, in that order, as the important devices used. The needs of teachers were ranked in the following order: (1) new developments in agriculture, (2) development of skills in farm mechanics, (3) training in organizing and using advisory councils, (4) training in organizing and

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<sup>20</sup> Howard W. Deems, An Evaluation of the In-Service Program Provided by the University of Nebraska for Teachers of Vocational Agriculture (Ed.D. Thesis, University of Missouri, 1956), 260 p. Summaries of Studies in Agricultural Education, Suppl. No. 10, Voc. Div. Bull. No. 265, Agric. Series No. 69, United States Department of Health, Education and Welfare, 1957, p. 28.



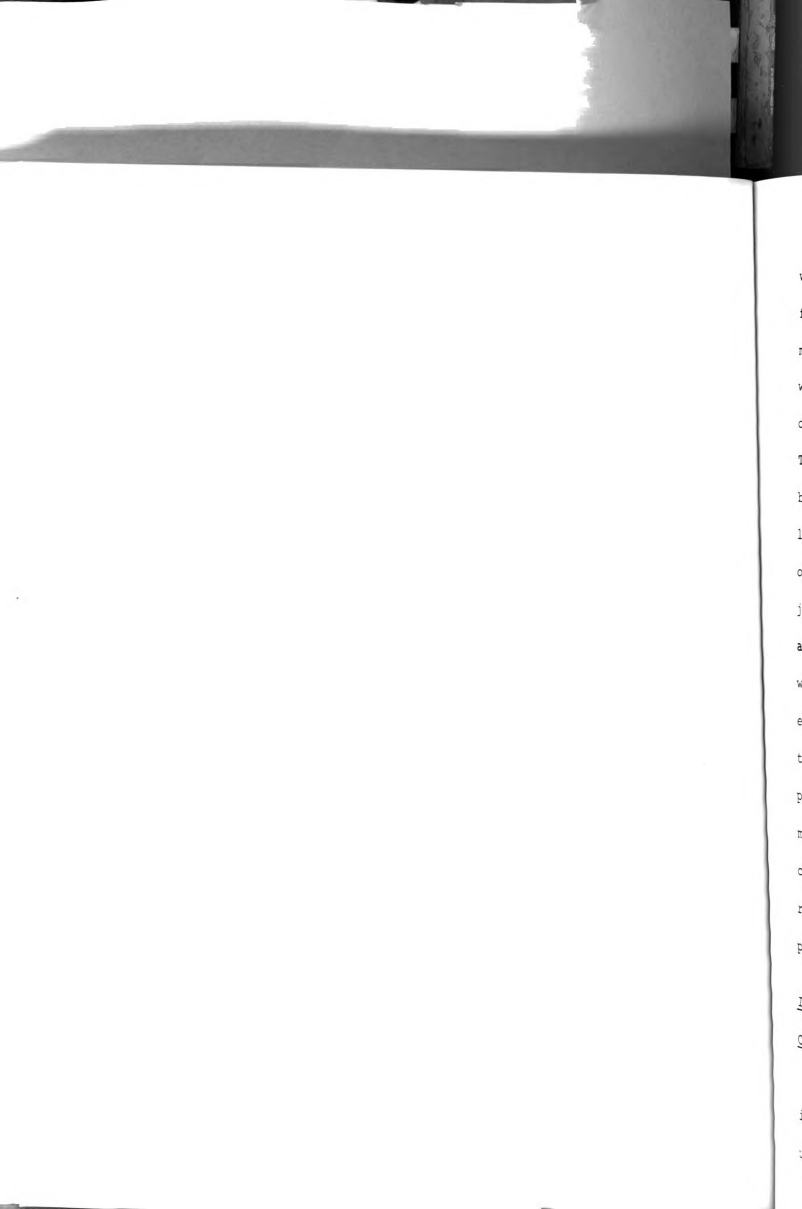
conducting young and adult farmer classes, (5) instruction in guidance and educational psychology, and (6) training in the use of proper techniques of publicity. Deems noted that teacher-training institutions do not necessarily provide in-service training in the areas of greatest need for teachers. Among his recommendations were: (1) Teacher-training institutions should make in-service education a definite part of the total education program; (2) Definite plans and policies should be formulated; (3) Adequate finances and facilities should be provided; (4) A complete in-service program should include professional and technical graduate courses both on and off-campus at times convenient to teachers, workshops both on and off-campus, informational services of proper scope and variety, and consultative services for all teachers. A research program should be instituted and teaching aids provided to teachers.

In 1955, Deyoe<sup>21</sup> studied the in-service education program provided for teachers of vocational agriculture by the 13 departments of agricultural education in the north central region of the United States. Among the findings he reported

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<sup>21</sup>George P. Deyoe, A Study of In-Service Education Provided for Teachers of Vocational Agriculture by Departments of Agricultural Education in the Central Region (Nonthesis, University of Illinois, Div. of Agric. Educ., 1955), 30 p. Summaries of Studies in Agricultural Education, Suppl. No. 10, Voc. Div. Bull. No. 265, Agric. Series No. 69, U.S. Dept. Health, Education and Welfare, 1957, p. 29.





were: (1) All 13 departments provided in-service education for beginning teachers; (2) Visits to beginning teachers were made by persons from 12 departments; (3) Statewide meetings were sponsored for new teachers by five States; and (4) Special courses for credit were provided in each of five States. Twelve departments offered summer courses for graduate credits both on campus and off-campus. Eleven institutions reported 152 non-credit workshops held during a 12-month period, most of which were held off-campus. Over half of all courses were jointly taught by persons in the field of technical agriculture and teacher-educators. Teaching aids of one form or another were provided teachers by all departments. Forty-two teacher-educators in 10 states spent part of their time preparing these aids, but only 5 persons in 3 states spent more than 50 percent or more of their time doing this work. Seven departments reported some form of cooperative action research conducted with teachers in the field. Nine departments reported having made changes in their programs while the rest planned changes for later.

#### In-Service Training Practices in Seven Land Grant Colleges and Universities Visited

In order to obtain first hand information on current in-service training practices seven land grant colleges and universities were visited in the summer of 1960 (August 3 to



September 3). The institutions visited were: (1) University of Connecticut, (2) Pennsylvania State University, (3) Virginia Polytechnic Institute, (4) University of Georgia, (5) Auburn University, (6) Mississippi State University, and (7) University of Kentucky. Head teacher-trainers and other members of the agricultural education department staffs of these institutions were interviewed. Two vocational agriculture departments were also visited, and the vocational agriculture teachers of these were interviewed. In addition, printed information on the in-service programs then in use at these institutions was secured. A review of the notes taken of the interviews and the printed information secured revealed the following:

(1) The seven institutions used substantially the same in-service training devices or techniques but differed somewhat in the frequency or number of times the different types of programs were used and the areas of emphases. (2) Six institutions offered both on and off-campus courses with credits during the regular school year and summer for teachers of vocational agriculture. The seventh institution had only an on-campus program. Most of the courses offered were credited toward a Master's degree program both in the fields of agricultural education and technical agriculture. (3) Of the seven institutions visited the Pennsylvania State University had the most comprehensive and extensive off-campus program.

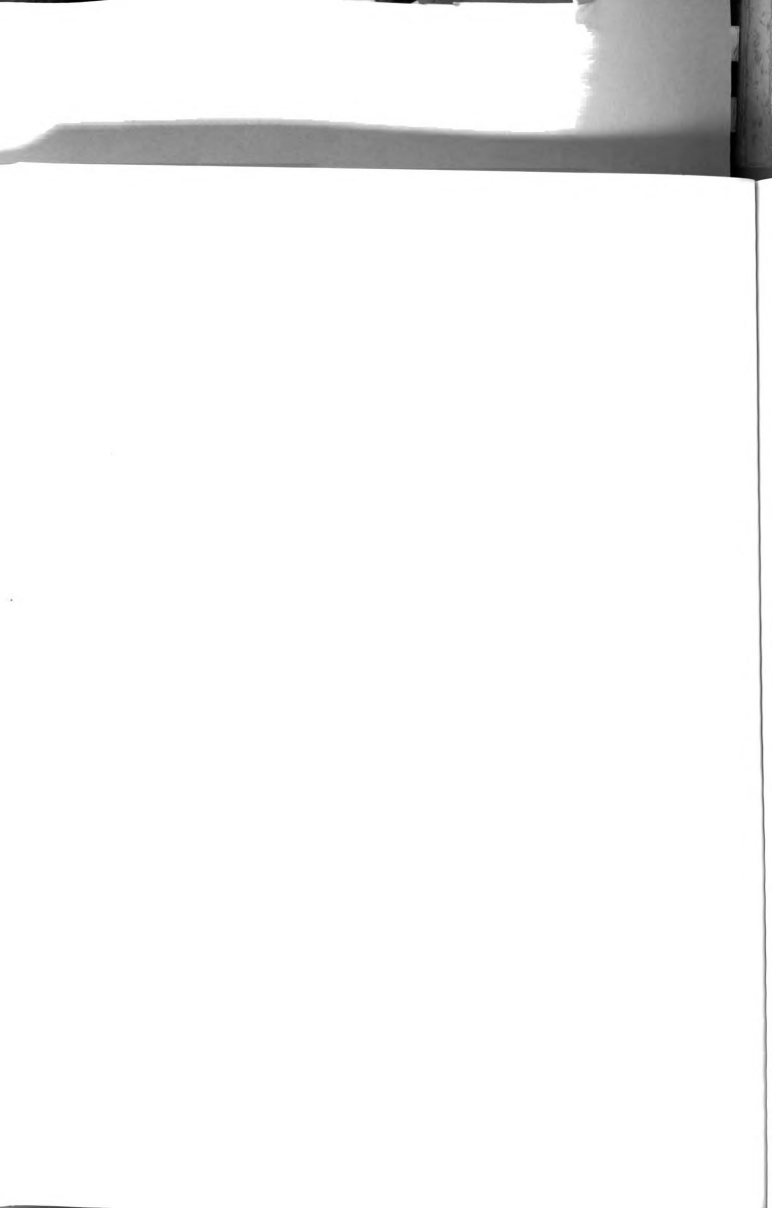


(4) The types of non-credit in-service activities most widely used were workshops, visits and conferences with vocational agriculture teachers by the teacher-trainers or area supervisors from the State Department of Education, conventions or State teachers' conferences, seminars, group meetings, and demonstrations. (5) All institutions prepared and made available to vocational agriculture teachers various types of essential information. Teachers were also encouraged by all seven institutions to invite or visit and have conferences with the personnel of other agricultural and educational agencies, private companies, and industrial enterprises concerning problems of vocational agriculture instruction in which the respective business enterprises or agencies could be of help. This phase of the in-service program was considered important in order to make use of all the available resources in enhancing the in-service training of teachers. As Diggs<sup>22</sup> found in his study, Virginia teachers of vocational agriculture used these external agencies and enterprises at an average of 6.2 agencies per teacher. Some teachers consulted with as many as 11 agencies in one year.

Five institutions had off-campus extension education centers located at strategic places throughout the state.

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<sup>22</sup>Kermit Hunter Diggs, op. cit., p. 18.



Both credit and non-credit courses were offered at these centers during the regular school year and in summer. Teachers enrolled in off-campus credit courses paid the same amount of tuition fees per credit hour of load as those enrolled on-campus, except: (1) Vocational agriculture teachers in Pennsylvania paid one-half less than those enrolled on campus, although non-vocational agriculture teachers paid the same amount. (2) In Mississippi, off-campus students, whether vocational agriculture teachers or not paid \$2.00 more than those enrolled on campus.

The number of agricultural education staff members assigned to off-campus teaching varied from 1 to 5, some on full time, others on part time basis. These were reinforced or assisted in some instances by experienced vocational agriculture teachers, and worked cooperatively with area supervisors from the state departments of education.

The seven institutions followed essentially the same practices in carrying out their respective in-service education programs, although practices varied in intensity and areas of emphases. These corresponded to and paralleled the findings of Deyoe as regards in-service training practices used by agricultural education departments in the north central region consisting of the States of Michigan, Wisconsin, Minnesota, Illinois, Indiana, Ohio, Missouri, Kansas, Nebraska, Iowa,





North Dakota, South Dakota, and Kentucky.

It is noted from the foregoing citations that the types of in-service training activities which teachers reported they participated in agreed with the types which teacher-training institutions said they employed. It is also significant for Philippine educators to note that according to the opinion of teacher-trainers of the institutions visited there exist cordial and very satisfactory cooperative working relationships among the personnel of teacher-training institutions, county agents and supervisors, and supervisors from the different state departments of education. Likewise, the cooperation of private enterprises and other government agencies was rated very satisfactory.

#### Principles and Practices for Planning

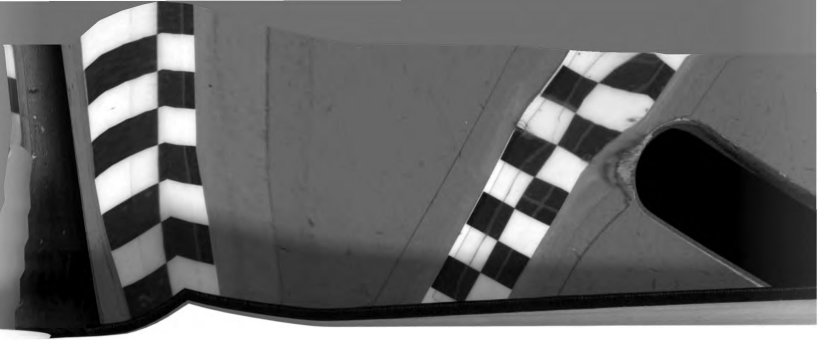
##### In-Service Educational Programs

It seems fitting to conclude this chapter by quoting the principles of in-service education evolved by educators from the 13 states comprising the central region of the United States, which now constitute the basic guidelines for action by each state in the region in carrying out their respective in-service education programs:<sup>23</sup>

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<sup>23</sup> George W. Sledge, George P. Deyoe, and Harold M. Byram, Principles and Practices for Planning In-Service Educational Programs for Teachers of Vocational Agriculture in the Central Region (Madison: University of Wisconsin, Dept. of Agric. & Ext. Education, College of Agriculture, 1959), 16 pp. (Mimeographed).





Principle 1: Personnel of teacher-education institutions, state departments of education and/or state boards of vocational education, local administrators, and teachers, should share the responsibility for developing programs of in-service education.

This is the principle of involvement. It stresses the sharing of responsibility among the various educational agencies or personnel of these agencies, and prescribes the working relationships which should prevail. It forms the basic frame of reference for all actions to be taken in planning and carrying out the in-service training program. It is fundamental, for under the democratic system, no project can be completely successful unless all the persons affected are involved in the formulation of policies and plans, and the implementation of the program. The degree to which this principle is adhered to will determine the degree of success of the in-service training program.

Principle 2: In-service educational programs should be designed to enable teachers to identify and solve their own problems.

This principle embodies the basic aim of in-service education--the development of competencies among teachers in order to enable them to solve effectively their own professional and educational problems with minimum external assistance. A sample evidence as to how this principle operates is illustrated by the findings of Diggs. The number of problems discussed by vocational agriculture teachers with



visiting teacher-trainers, state department supervisors, or personnel from other government agencies and private enterprises varied inversely with experience, that is, the longer the teacher has been in the service the fewer are the problems which he could not himself alone solve. Practices to be followed in planning and implementing the in-service education program should, therefore, be designed such that teachers acquire and achieve the desired competencies which will make them more effective in their jobs and in solving their own problems. Teachers should become less and less dependent upon in-service education personnel for help in solving their problems.

Principle 3: Local, State and Federal policies and regulations should be developed which encourage in-service educational programs.

Developing and implementing a comprehensive and adequate in-service training program involves personnel and money. For the Philippines the implications are more than crucial. Filipino educators are well aware of the financial straits the government is in. Funds allocated to finance in-service training programs have always been less than adequate. This accounts for the limited number of workshops, professional classes and other in-service devices, including supervisory visits, held in the past. This fund lack should not, however, lead educators into helpless abnegation of their responsibility for providing adequate in-service education programs for



teachers. A more effective allocation and expenditures of funds should be sought.

Principle 4: In-service educational programs should be continually evaluated and improved.

The importance of this principle is obvious since the effectiveness of any program cannot be determined and, therefore, no plan can be wisely formulated for its improvement, unless its effects and outcomes, and its strengths and weaknesses, are evaluated continuously. Lack of a systematic program of evaluation is one of the weaknesses of the in-service training program in the Philippines.

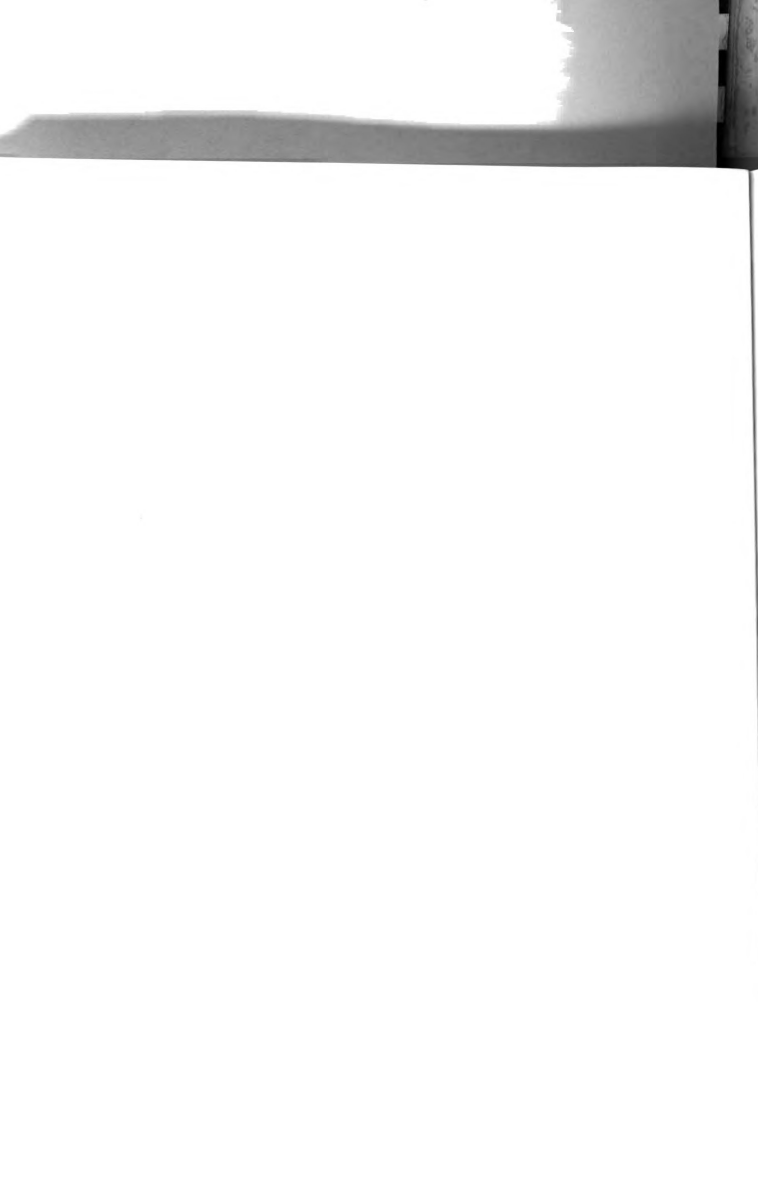
Principle 5: In-service educational programs should stimulate needed changes in the program of agricultural education in public schools.

The ultimate objective of in-service education is the improvement of the total vocational agriculture program. This pre-supposes the introduction of innovations and the adoption by teachers of new and modern practices. These in-service education should help bring about.

Principle 6: A program of in-service education should aid in the development of local, long-range programs.

The participation of teachers in planning long-range programs is essential to ensure that all will cooperate in carrying out these programs. Any kind of participation will not suffice. Teachers must have an intelligent grasp of the problems so that they can make intelligent contributions in





the deliberations. These competencies could be acquired by teachers through in-service training.

Principle 7: The program of in-service education should be concerned with the planning, organization, and maintenance of physical facilities for programs of vocational agriculture.

The implication of this principle is crucial particularly for schools with inadequate facilities. In such schools the use of the limited facilities available should be well-planned. The equipment should be maintained with great care to lengthen their usefulness, and enable the school to derive maximum benefits from their use. A program for replacing worn and unusable equipment, and for acquiring additional ones, should be evolved. The in-service education program should help the school administration and the teachers do all these.

Principle 8: The program of in-service education should prepare teachers to develop adequate systems of departmental records and use them for the improvement of instruction.

Next to research or experimental data records are important sources of information from which to base plans or programs for improving instruction and other operational activities of the school. Good records tell accurate stories and if properly analyzed and interpreted should serve an important purpose in the improvement of the total school program.



principle 9: The program of in-service education should promote understanding of and appreciation for the local program of vocational agriculture.

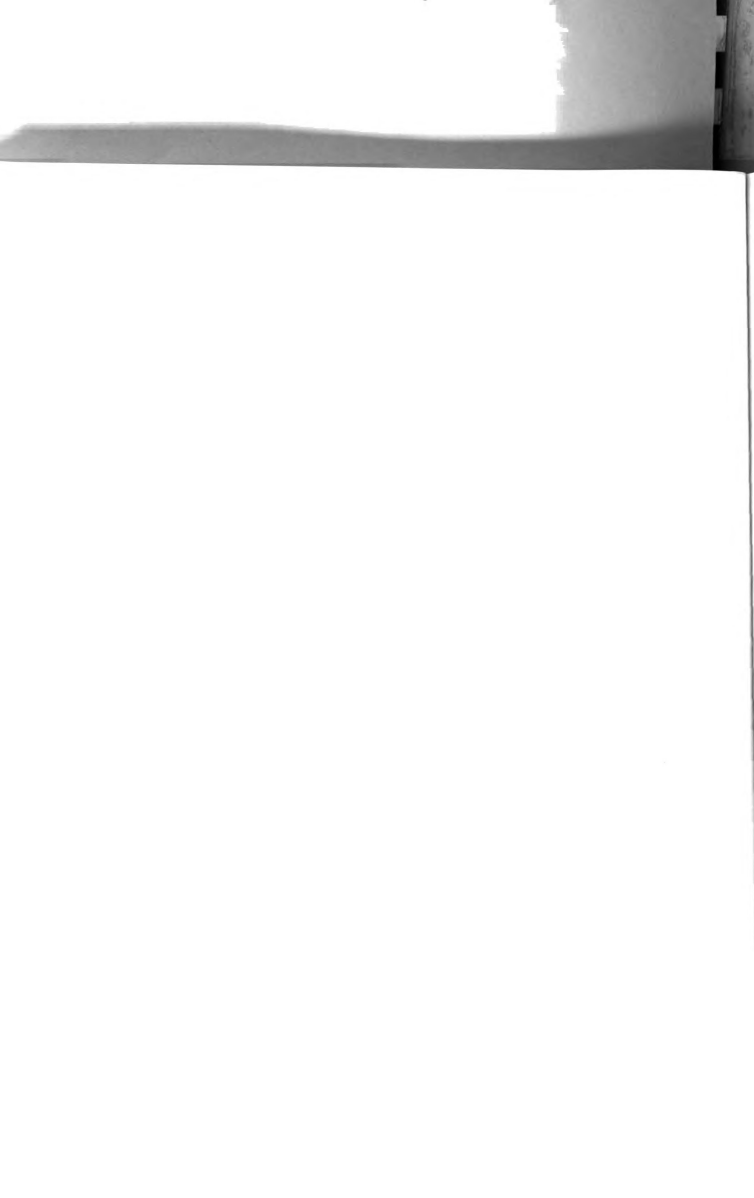
This applies not only with vocational agriculture teachers but all other teachers and members of the staff also. Instruction in all the non-agricultural areas should promote or enhance learning by students in the vocational areas. This is not possible to do if the so-called academic or related subject teachers do not appreciate and understand the program and its objectives.

Principle 10: An in-service program should enable teachers to work with others in developing suitable policies for a department and in carrying out these policies.

The fostering of cooperativeness and good working relationship should be one of the intrinsic values to be strived for and derived from in-service education.

Principle 11: An in-service educational program should be planned to provide for the instruction and improvement of a maximum number of teachers.

The rate of growth of a school, the rate at which the total program is improved, and the rate at which new innovations are adopted, all depend on the number of the teachers who are progress-oriented and are not foiled in their desires for in-service growth. As the saying goes - the chain is only as strong as its weakest link; so is the total school program only as strong as the teachers are educationally and professionally strong. The in-service program should, therefore,



strive to provide all teachers maximum opportunity for in-service growth.

Principle 12: Summer school sessions designed to meet the needs of teachers . . . should be provided.

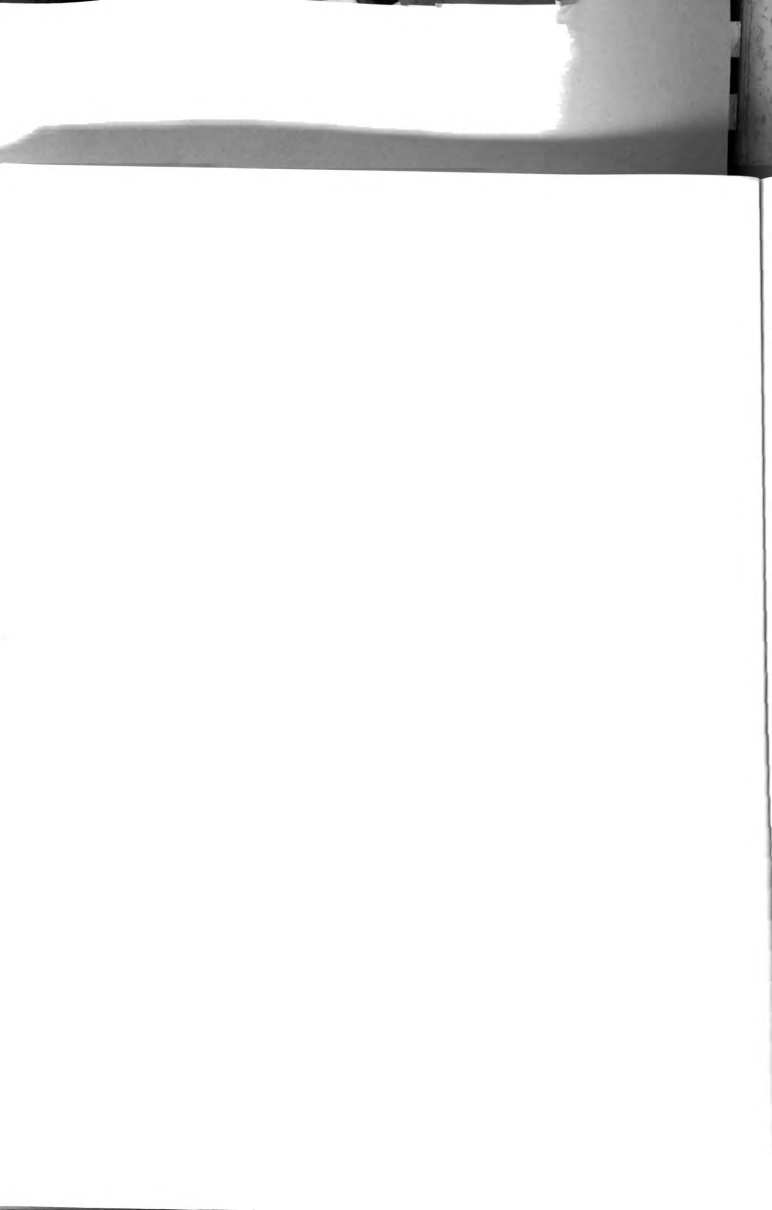
The need for summer school programs is particularly urgent for agricultural schools in view of their distance from training institutions, the poor transportation facilities available, and the fact that teachers are required to render 12 months' service and seldom granted vacation or study leaves.

Principle 13: In-service education programs should assist teachers . . . in discharging responsibilities toward the educational programs of the entire school.

In-service training programs should not train only for narrow segments of the school services but for all other essential areas where teachers could contribute significantly to the improvement of services without lessening their effectiveness in their specialized fields of assignments.

Principle 14: In-service educational programs should provide opportunities for teachers to improve themselves through graduate instruction.

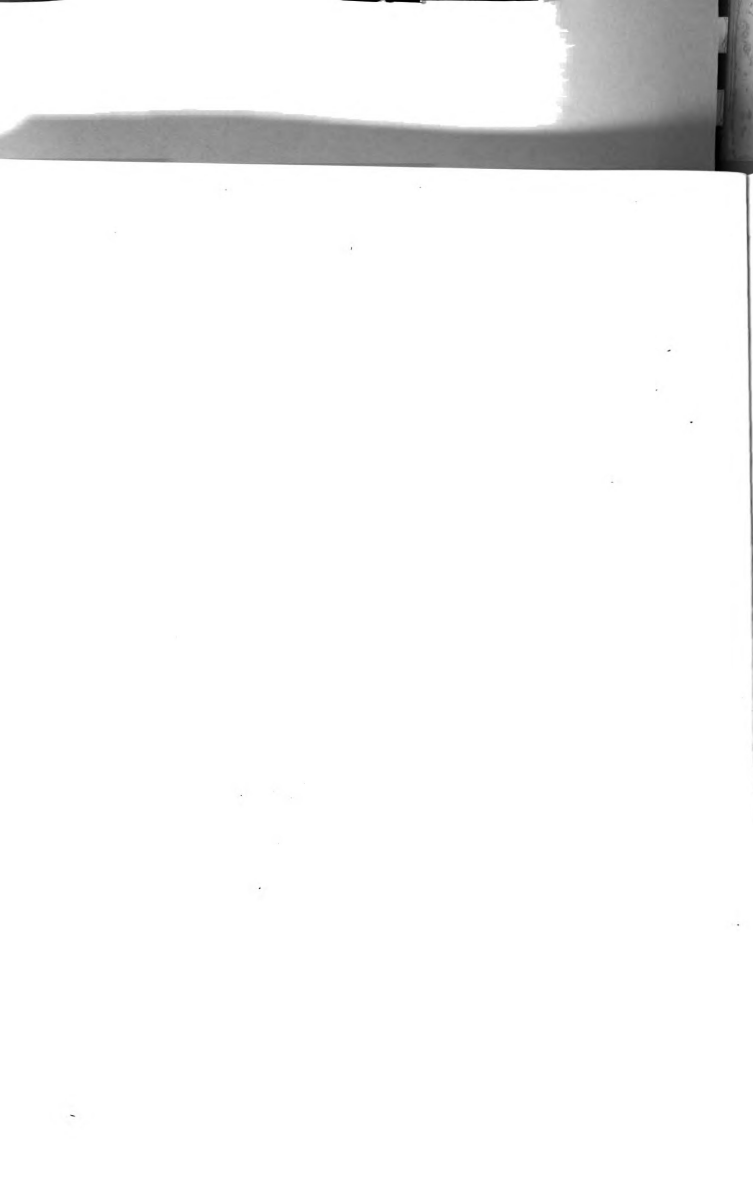
In the Philippines as in the United States vocational agriculture teachers render 12 months' of service throughout the year. But the expediency for planned summer graduate programs is more urgent in the former because the opportunities for teachers to attend credit courses during the regular school year are limited.



principle 15: Teacher education departments of teacher-training institutions should provide consultative services for teachers, school administrators, and others on an individual and group basis.

This is a neglected part of the teacher-training program in the Philippines. Undoubtedly, financial and transportation problems are limiting factors in the initiation of this type of in-service activity, but these should not be a cause for abandoning it altogether. Wherever feasible and practical consultative services should be organized and set in motion. There are several schools located near teacher-training institutions and a program such as described here could very well start with these schools.





## CHAPTER III

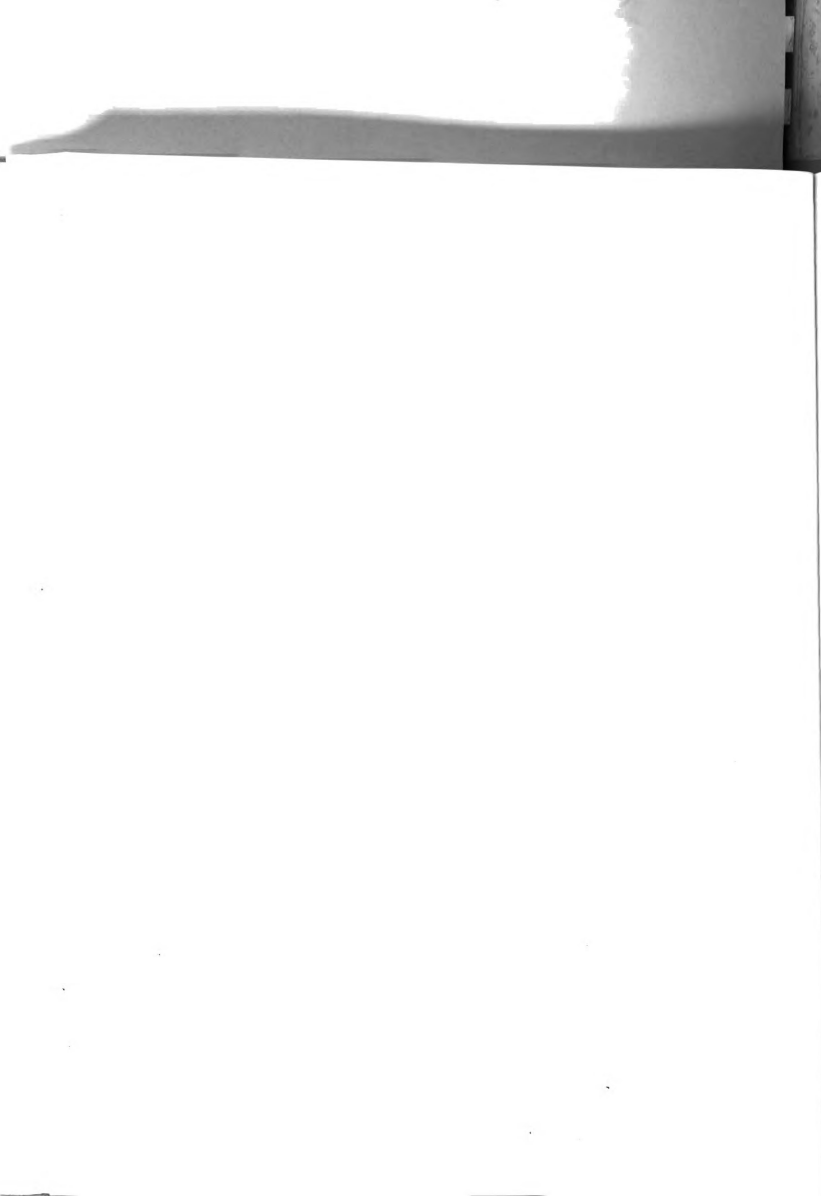
## METHOD OF THE STUDY

Sources of Data

The basic data used in this study were derived from the responses of 248 teachers and 32 principals and superintendents of agricultural schools in the Philippines who responded and returned the two separate sets of survey questionnaires and checklists sent to them. Additional information was obtained from the Director of Public Schools, the International Cooperation Administration (USOM) in Manila, and from seven teacher training institutions of the Philippines who responded to a checklist-type questionnaire sent to them. Data regarding current in-service training practices in the United States were also obtained from seven land grant colleges and universities (in addition to Michigan State University) through the personal interview technique. The seven land grant institutions have previously been identified in the preceding chapter.

Universe and Population of the Study

The universe of the study consisted of the 75 agricultural schools located throughout the Philippine Archipelago. The population consisted of all the teachers, principals and superintendents of these schools.



Sampling of the Universe and Population

The schools chosen as sources of the population samples were selected on a regional basis and according to types of schools. A list of the agricultural schools indicating the year of establishment was secured from the Bureau of Public Schools. All the schools established after 1956 were deleted. The remaining 49 schools were then grouped according to geographical location and classified according to type, such as national regional, national provincial and national rural. The 25 schools used were then picked out from the respective geographical regions such that at least 50 percent of the schools belonging to each type were selected. On this basis the final sample schools were distributed as follows: Luzon - 13, Visayas - 7, and Mindanao - 5. Broken down according to type of schools the sample consisted of 9 national regional schools, 10 national provincial schools, and 6 national rural schools. Figure 1 shows the location of these schools.

Fifteen other schools were added to the first 25 to enlarge the sample number of schools for purposes of reaching a greater number of the school administrators. These were selected on the basis of the length of service of the incumbent administrators (5 years or more). These additional 15 schools are indicated in Figure 1 with a large solid dot.



The population was sampled as follows: An estimate of the number of teachers was made for each school. Using the average of these estimates as a basis the number of classes was also hypothetically determined. From this was derived the sampling ratio used in the study: 3 agriculture teachers, 2 farm mechanics teachers, 2 homemaking teachers, 2 English teachers, 1 Pilipino language teacher, 1 mathematics teacher, 2 science teachers, and 2 history or social science teachers, or an average of 15 teachers per school.

Three sets of questionnaires were prepared: (1) Set I was for teachers, (2) Set II for administrators, and (3) Set III for teacher-training institutions. From 10 to 15, or a total of 300 copies of Set I were sent to each of the 25 schools sampled for teachers. One copy each of Set II were sent to 40 schools (including the 25 schools sampled for teachers). Twelve copies of Set III were sent to 12 teacher-training institutions selected on a geographical basis: Manila and suburbs - 4, Central Luzon - 1, Southern Luzon - 1, Visayas - 3, and Mindanao - 3. The locations of the institutions which returned the questionnaires are indicated by asterisks in Figure 1.

Teachers were sampled as follows: Administrators were instructed to list the teachers' names alphabetically. Those having less than five years of service in the bureau or school



were eliminated. The remaining names were regrouped in alphabetical order according to major subjects taught. The first names appearing in each group list were picked out following the ratio previously described. No difficulty was involved in sampling the principals or superintendents since only one set of the questionnaire was sent to each school for either the principal or superintendent to accomplish.

Set III questionnaire was sent to and accomplished by the heads of the institutions selected, or by the deans of the colleges of education of the same.

#### Percent Return

Based on the 25 schools selected and from which was sampled the teacher-population there was a 100 percent return on the questionnaire for teachers. Based on the number of questionnaires sent out the return was 82.7 percent. The latter percentage is misleading, however, since the sampling design discriminated against teachers with less than five years of service. The balance of questionnaires not returned possibly had not been distributed at all for lack of qualified teachers. (Administrators were instructed to discard the extra or unused questionnaires.)

Thirty-two of the 40 school administrators returned the questionnaires sent to them. This represents a return of 80 percent.





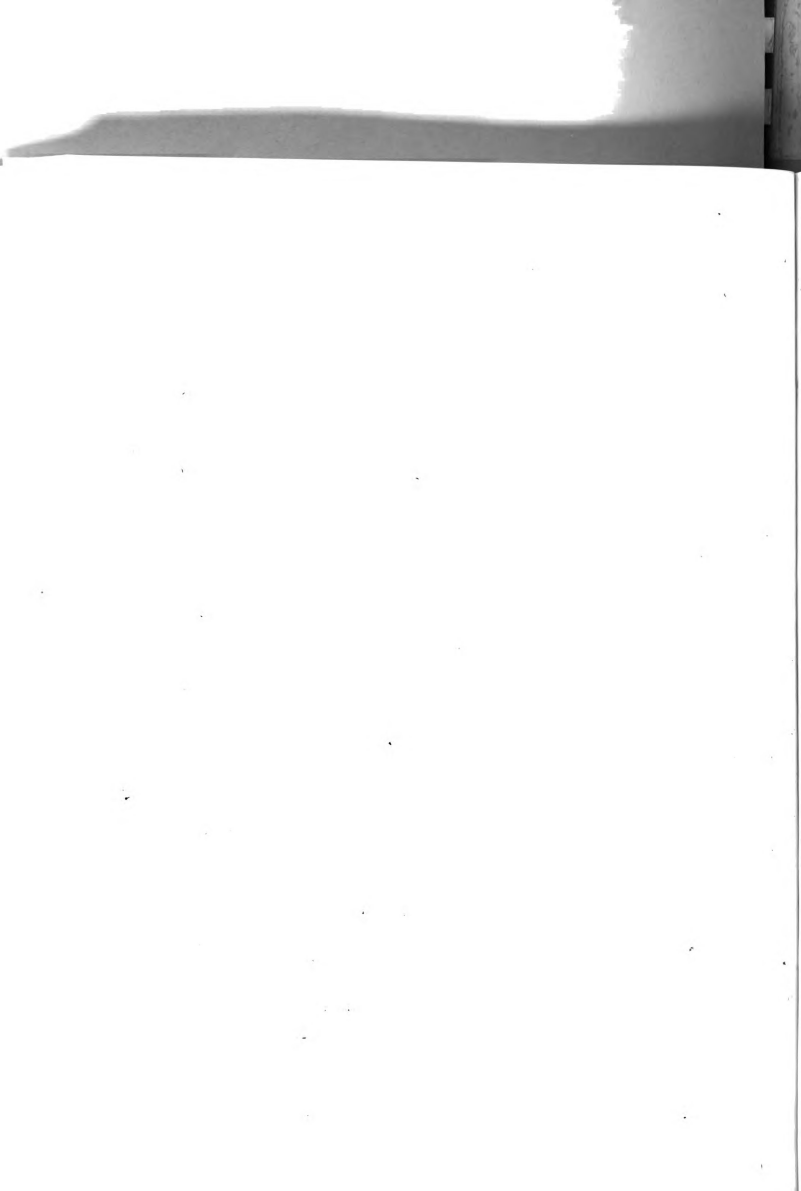
Seven of the 12 teacher-training institutions returned the questionnaires sent to them. This represents a percentage return of approximately 70 percent.

#### Method of Analysis

The results of the data collected were grouped into six categories, namely (1) Educational and Job Information, (2) In-service Training Needs, (3) In-service Training Programs held and Participated in by Teachers, (4) Reasons for the Limited Participation of Teachers in In-service Programs, (5) Evaluation by Teachers and Administrators of In-service Programs, and (6) Recommendations of Teachers and Administrators.

The data are presented in tabular form in the group order given above. Data for category 1 are mostly totals, averages and percentages. Data for category 2 are presented as weighted values, rank orders, and percentages. Where comparisons of data for different groups of respondents were considered useful in interpreting the information rank correlations were calculated. In some, the standard deviations were computed. In calculating the correlation coefficients the Pearson product-moment method was used.

Data for categories 3 and 4 are presented as totals, averages, and percentages. Categories 5 and 6 are given as totals, percentages and priority ranks based on percentages or weighted values.



### Data-Gathering Instruments

Three sets of questionnaires and checklists were used in gathering the data for this study. Set I, Survey Questionnaire and Checklist for Teachers, contained seven major groups of items to be checked by the responding teachers:

(1) Educational and Personal Information, (2) Job Information, (3) Participation in In-service Training Programs, (4) Reasons for Limited or Non-participation in In-service Training Programs, (5) In-service Training Needs, (6) Evaluation of In-service Training Programs, and (7) Recommendations of Teachers on how to Improve In-service Training Programs. This set of questionnaire and checklist was pretested using three Filipino students in Michigan State University who were formerly teachers in the public schools of the Philippines, and two American vocational agriculture teachers from two of the land grant universities visited in August, 1960. Appropriate changes were made after the pretest was taken.

The questionnaire and checklist for principals and superintendents (Set II) contained five main groups of items of information: (1) Job Information, (2) Participation in In-service Training Programs, (3) In-service Education Needs, (4) Evaluation of Regional and National In-service Training Programs, and (5) Recommendations on How to Improve In-service Training Programs. Like Set I questionnaire this was also



pretested by administering it to one public school administrator currently studying in Michigan State University, and one agricultural school teacher-in-charge who was an ICA participant returning home, and whom the author met in Washington, D. C. in August, 1960. Minor revisions were made on this questionnaire after the pretest.

Both sets of questionnaires were presented to the Guidance Committee advising the writer for review and further suggestions before being printed in final form for mailing.

The questionnaires were sent to the schools chosen for the study through Dr. James Woodhull of the Agricultural Education Division of the ICA Mission in Manila, who, with the cooperation of Mr. Jose Crisanto, Chief of the Agricultural Education Division of the Bureau of Public Schools and the assistance of other personnel of his Office, mailed them to the respective schools. Returns were also routed through Dr. Woodhull to the author.

The set of questions or checklist sent to 12 teacher-training institutions of the Philippines was not presented to the Guidance Committee for review, since it was not a part of the original research design. Its use was decided upon by the author on his own initiative purely on the assumption that the information thus obtained would aid him in formulating his recommendations regarding the involvement and active



participation of teacher-training institutions in providing in-service training programs for teachers. The questionnaire was a one-page checklist designed to find out what the respondent institutions could and are willing to do to help the Bureau of Public Schools improve and intensify the in-service training programs now provided by the bureau for teachers of agricultural schools.

The data or information obtained from the interviews with the head teacher-trainers of the seven land grant institutions visited were recorded in an Interview Form prepared for this purpose. The items included in the form were primarily designed to elicit information on the types and scope of in-service training practices followed and, to some degree, the extent of participation or attendance by teachers at these in-service training activities.





## CHAPTER IV

## FINDINGS AND ANALYSIS OF RESULTS

In this chapter are presented the summarized data and pertinent findings relative to the objectives of the study. These are organized according to the major areas emphasized and outlined in Chapter III.

Teacher-Population of Reporting Agricultural Schools

Table I shows the total number of teachers on the staffs of the 32 agricultural schools whose principals and superintendents responded to the questionnaires. The number of teachers ranged from 12 to 49, or an average of 27 teachers per school. The total was 858 teachers broken down as follows: agriculture - 225, farm mechanics - 94, homemaking - 95, language - 137, social science and history - 65, applied science - 92, mathematics - 62, health and physical education - 52, and 36 unclassified. The typical agricultural school had 7 vocational agriculture teachers, 3 farm mechanics teachers, 3 homemaking teachers, 4 language teachers, 2 social science teachers, 3 applied science teachers, 2 mathematics teachers, 2 health and physical education teachers and 1 unclassified teacher.

The distribution of teachers into the major assignment areas was not proportionally uniform in all schools. This indicates that there is considerable overlapping in the subject



TABLE I. CLASSIFICATION AND PROPORTION OF TEACHERS OF  
32 AGRICULTURAL SCHOOLS OF THE PHILIPPINES AS  
REPORTED BY 32 PRINCIPALS AND SUPERINTENDENTS.

| Classification of<br>Teachers | Number on<br>Staffs | Percent | Average per<br>School | Sampling<br>Ratios |
|-------------------------------|---------------------|---------|-----------------------|--------------------|
| Agriculture                   | 225                 | 26      | 7                     | 3                  |
| Farm Mechanics                | 94                  | 11      | 3                     | 2                  |
| Homemaking                    | 95                  | 11      | 3                     | 2                  |
| Language                      | 137                 | 16      | 4                     | 3                  |
| Social Science                | 65                  | 8       | 2                     | 2                  |
| Applied Science               | 92                  | 11      | 3                     | 2                  |
| Mathematics                   | 62                  | 7       | 2                     | 1                  |
| Health and P. E.              | 52                  | 6       | 2                     | -                  |
| Others (unclassified)         | 36                  | 4       | 1                     | -                  |
| T o t a l                     | 858                 | 100     | 27                    | 15                 |



assignment of teachers which may be due to the absence of educationally qualified teachers with the appropriate major or minor field of specialization. This supposition seems to be supported by the data in Table XIII which show that only 47.2 percent of the teachers responding were teaching subjects exclusively in their major areas of specialization; 31.9 percent were teaching subjects in both their major and minor areas of specialization; 6.9 percent were teaching subjects only in their minor fields of specialization; and 14 percent were teaching subjects which were neither in their major nor minor fields of specialization. The studies of Cedillo<sup>24</sup> and Juan<sup>25</sup> further support these findings.

#### Classification and Years of Tenure of Respondent Teachers

The classification by major teaching assignment and years of service in the Bureau of Public Schools of the 248 teachers studied are given in Table II. Seventy-six, or 30.7 percent of the respondents were agriculture teachers; 37, or 14.9 percent were farm mechanics teachers; 26, or 10.5 percent were homemaking teachers; 57, or 23 percent were language teachers; 26, or 10.5 percent were social science teachers; 14, or 5.7 percent were applied science teachers and 12, or

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<sup>24</sup>Valentin G. Cedillo, op. cit., p. 200.

<sup>25</sup>Virginio C. Juan, op. cit., p. 27.



TABLE II. CLASSIFICATION BY SUBJECTS TAUGHT AND YEARS OF TEACHING EXPERIENCES OF 248 TEACHERS OF AGRICULTURAL SCHOOLS OF THE PHILIPPINES.

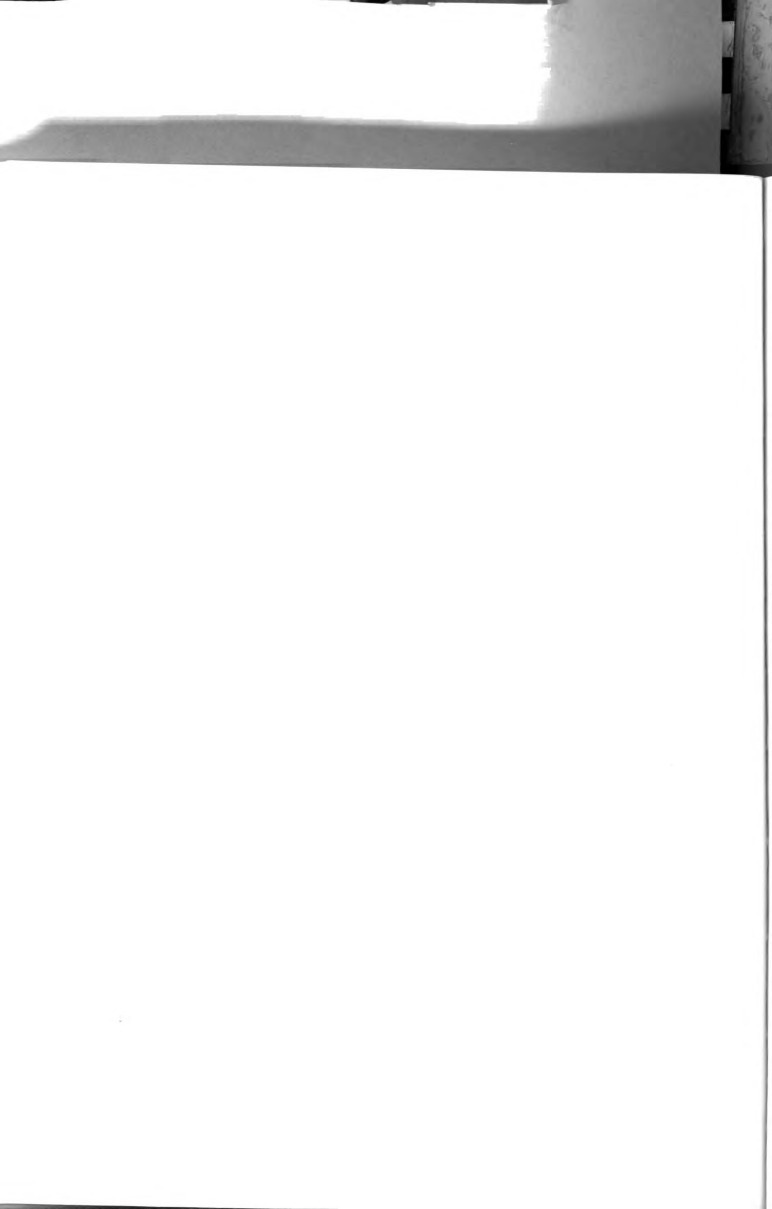
| Classification<br>of Teachers |   | Frequency Distribution by<br>Years of Tenure |      |       |       |       |       |       | Total | Median* |       |
|-------------------------------|---|----------------------------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
|                               |   |                                              |      |       |       |       |       |       |       | Mean    | S. D. |
|                               |   | 5                                            | -10  | 10-15 | 15-20 | 20-25 | 25-30 | 30-up |       |         |       |
| Agricul-<br>ture              | N | 63                                           | 6    | 4     | 1     | 1     | 1     | 76    | M     | 8.0     |       |
|                               | % | 82.9                                         | 7.9  | 5.3   | 1.3   | 1.3   | 1.3   | 100   | A     | 9.2     |       |
|                               |   |                                              |      |       |       |       |       |       | SD    | 4.7     |       |
| Farm<br>Mechanics             | N | 25                                           | 6    | 2     | 2     | 2     | -     | 37    | M     | 8.7     |       |
|                               | % | 67.6                                         | 16.2 | 5.4   | 5.4   | 5.4   | -     | 100   | A     | 10.7    |       |
|                               |   |                                              |      |       |       |       |       |       | SD    | 6.4     |       |
| Homemaking                    | N | 15                                           | 2    | 2     | 5     | 1     | 1     | 26    | M     | 9.0     |       |
|                               | % | 57.7                                         | 7.7  | 7.7   | 19.2  | 3.9   | 3.9   | 100   | A     | 13.3    |       |
|                               |   |                                              |      |       |       |       |       |       | SD    | 9.2     |       |
| Language                      | N | 33                                           | 7    | 4     | 5     | 1     | 7     | 57    | M     | 9.3     |       |
|                               | % | 57.9                                         | 12.3 | 7.0   | 8.8   | 1.8   | 12.3  | 100   | A     | 13.6    |       |
|                               |   |                                              |      |       |       |       |       |       | SD    | 10.6    |       |
| Social<br>Science             | N | 10                                           | 8    | 2     | 3     | 2     | 1     | 26    | M     | 11.9    |       |
|                               | % | 38.5                                         | 30.8 | 7.7   | 11.5  | 7.7   | 3.9   | 100   | A     | 14.0    |       |
|                               |   |                                              |      |       |       |       |       |       | SD    | 9.4     |       |
| Applied<br>Science            | N | 11                                           | 1    | 1     | -     | -     | 1     | 14    | M     | 8.2     |       |
|                               | % | 78.6                                         | 7.1  | 7.1   | -     | -     | 7.1   | 100   | A     | 10.4    |       |
|                               |   |                                              |      |       |       |       |       |       | SD    | 6.7     |       |
| Mathema-<br>tics              | N | 10                                           | -    | 1     | -     | 1     | -     | 12    | M     | 8.0     |       |
|                               | % | 83.3                                         | -    | 8.3   | -     | 8.3   | -     | 100   | A     | 10.2    |       |
|                               |   |                                              |      |       |       |       |       |       | SD    | 6.0     |       |
| T o t a l                     | N | 167                                          | 30   | 16    | 16    | 8     | 11    | 248   | M     | 8.7     |       |
|                               | % | 67.3                                         | 12.1 | 6.5   | 6.5   | 3.2   | 4.4   | 100   | A     | 11.5    |       |
|                               |   |                                              |      |       |       |       |       |       | SD    | 7.8     |       |

\*M - Median years of service.

A - Mean years of service.

SD - Standard deviation.





or 4.9 percent were mathematics teachers.

Of the 248 teachers, 167, or 67.3 percent had 5-10 years of service; 30, or 1.1 percent had 10-15 years; 16, or 6.5 percent had 15-20 years; 16, or 6.5 percent had 20-25 years; 8, or 3.2 percent had 25-30 years; and 11, or 4.4 percent had 30 or more years. A majority of the teachers had 5-10 years of service. The proportion by group ranged from 38.5 percent to 83.3 percent. It was lowest among the social science teachers and highest among the mathematics teachers.

The median years of service for all teachers was 8.7 years, and the mean was 11.5 years. Social science teachers had the longest service with an average of 14 years. The youngest group, in point of service, was the agriculture teachers. This group had an average service of 9.2 years.

The standard deviation in the years of service of the different groups of teachers was greatest among language teachers which was plus or minus 10.6. It was least among agriculture teachers which was plus or minus 4.7. The standard deviation in the years of service for all the teachers was plus or minus 7.8 years.

#### Educational Attainment of Respondent Teachers

The educational attainment of the 248 teachers who responded to the questionnaires may be seen from Table III. One hundred and fifty-five teachers, or 62.5 percent, had

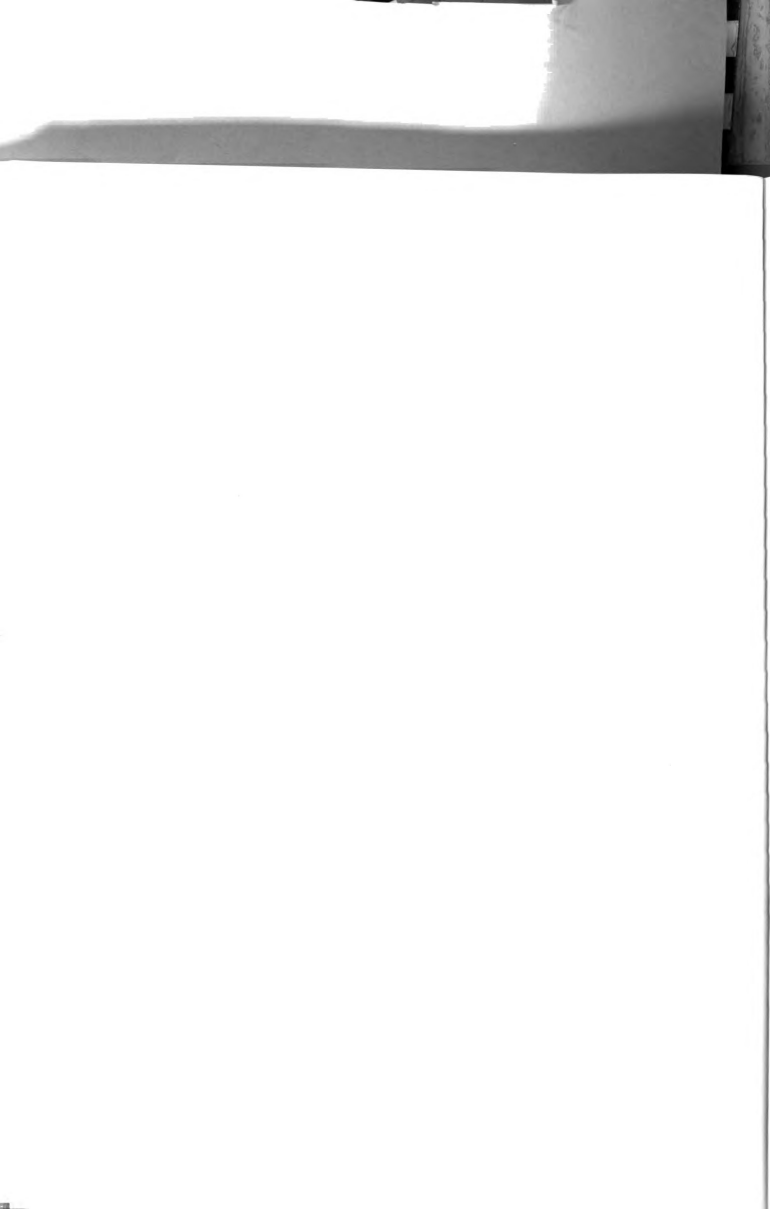


TABLE III. EDUCATIONAL ATTAINMENT OF 248 RESPONDENT AGRICULTURAL HIGH SCHOOL TEACHERS OF THE PHILIPPINES.

| Classification<br>of Teachers by<br>Major Subject<br>Taught | Teachers with                   |      |                    |      |                                 |      |                    |     | Total |       |
|-------------------------------------------------------------|---------------------------------|------|--------------------|------|---------------------------------|------|--------------------|-----|-------|-------|
|                                                             | Less than<br>Bachelor<br>Degree |      | Bachelor<br>Degree |      | More than<br>Bachelor<br>Degree |      | Master's<br>Degree |     |       |       |
| Agriculture                                                 | 2                               | 2.6  | 49                 | 64.5 | 25                              | 32.9 | -                  | -   | 76    | 30.7  |
| Farm Mechanics                                              | 25                              | 67.6 | 9                  | 24.3 | 3                               | 8.1  | -                  | -   | 37    | 14.9  |
| Homemaking                                                  | -                               | -    | 17                 | 65.4 | 9                               | 34.6 | -                  | -   | 26    | 10.5  |
| Language                                                    | -                               | -    | 43                 | 75.4 | 12                              | 21.1 | 2                  | 3.5 | 57    | 23.0  |
| Social Science                                              | -                               | -    | 17                 | 65.4 | 8                               | 30.8 | 1                  | 3.9 | 26    | 10.5  |
| Applied Science                                             | -                               | -    | 11                 | 78.6 | 2                               | 14.3 | 1                  | 7.1 | 14    | 5.7   |
| Mathematics                                                 | -                               | -    | 9                  | 75.0 | 3                               | 25.0 | -                  | -   | 12    | 4.8   |
| T o t a l                                                   | 27                              | 10.9 | 155                | 62.5 | 62                              | 25.0 | 4                  | 1.6 | 248   | 100.0 |



Bachelor degrees; 62, or 25 percent, had earned credits beyond the Bachelor degree; and 4, or 1.6 percent, had Master's degrees. Farm mechanics teachers had the lowest educational attainment. Twenty-five, or 67.6 percent, had no Bachelor degrees. This is because for this group of teachers, the Bureau of Public Schools prescribes as a minimum educational requirement the completion of a non-degree two or three-year teachers' curriculum in the trade, shop, or automechanics fields. Percentage-wise more homemaking teachers (34.6 percent) had earned credits beyond the Bachelor's degree than any group. Only 4 of the 248 teachers possessed Master's degrees, all of whom were academic teachers. None of the vocational teachers had a Master's degree. This may be attributed to the fact that until recently seldom have vocational teachers been allowed to go to school during summer because their presence in the school to supervise students working in their agricultural projects was thought essential and indispensable.

Table IV, however, suggests a trend. It shows that 19 agriculture teachers had earned an average of 12.8 credits toward the master's degree during the five years covered by the study. Eight homemaking teachers earned an average of 9.1 credits; while one farm mechanics teacher earned 12 credits, and 9 others earned an average of 21 credits toward a Bachelor's degree. These figures compare favorably with the 18 language

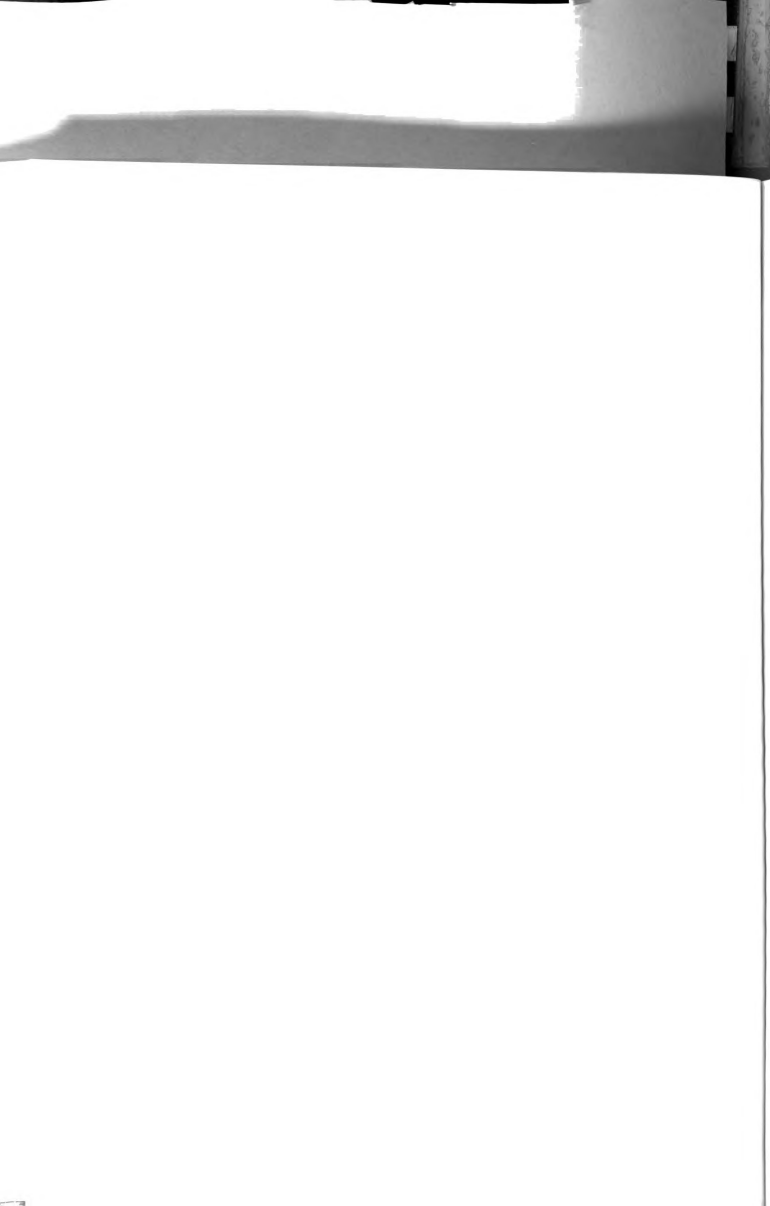


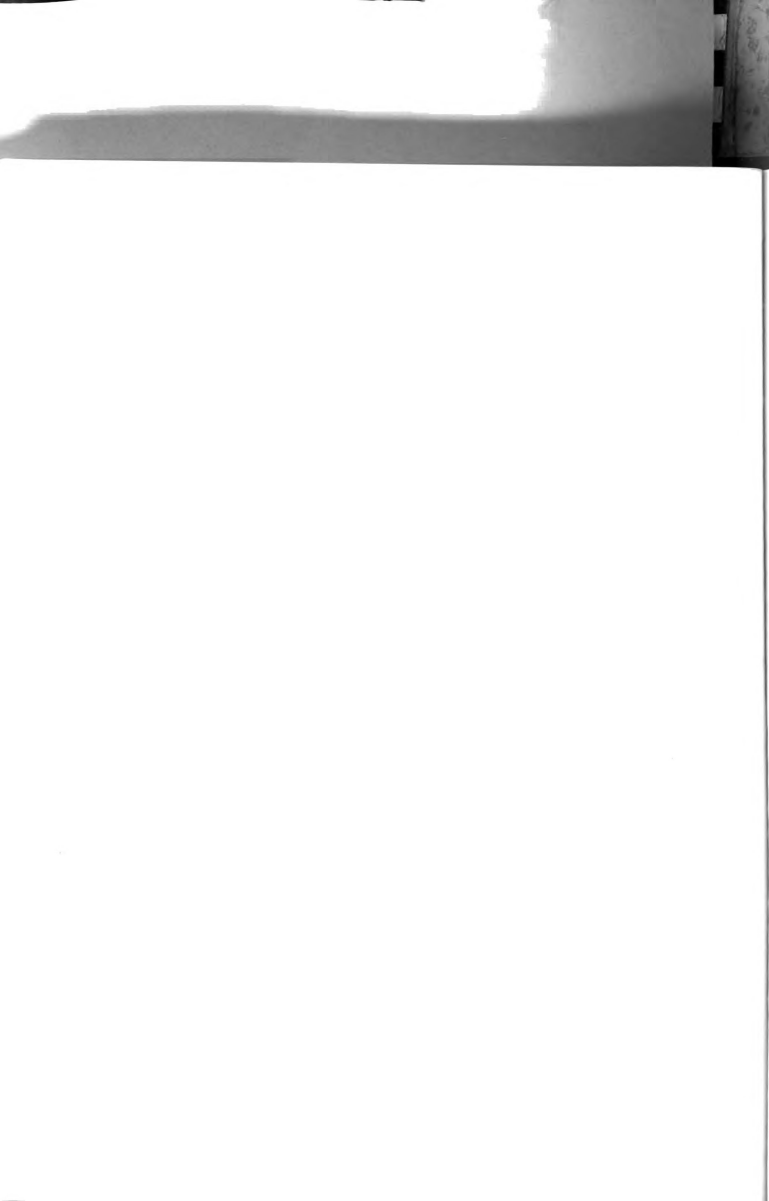
TABLE IV. NUMBER OF TEACHERS WHO EARNED ADVANCED CREDITS  
WITHIN THE LAST FIVE YEARS (1956-1960) AMONG  
248 RESPONDENT TEACHERS OF AGRICULTURAL SCHOOLS  
OF THE PHILIPPINES.

| Classification<br>of Teachers | No.<br>of<br>cases | Degree Program |             |                | Total Earn-<br>ing Credits |      | Average No.<br>of Credits<br>Earned |      |       |
|-------------------------------|--------------------|----------------|-------------|----------------|----------------------------|------|-------------------------------------|------|-------|
|                               |                    | Bache-<br>lor  | Mas-<br>ter | Doc-<br>torate |                            |      | B.S.                                | M.S. | Ph.D. |
|                               |                    | N              | N           | N              | N                          | %    |                                     |      |       |
| Agriculture                   | 76                 | 4              | 19          | -              | 23                         | 30.3 | 23.0                                | 12.8 | -     |
| Farm Mechanics                | 37                 | 9              | 1           | -              | 10                         | 27.0 | 21.0                                | 12.0 | -     |
| Homemaking                    | 26                 | -              | 8           | -              | 8                          | 30.8 | -                                   | 9.1  | -     |
| Language                      | 57                 | 1              | 18          | -              | 19                         | 33.3 | 18.0                                | 15.7 | -     |
| Social Science                | 26                 | 1              | 6           | 1              | 8                          | 30.8 | 18.0                                | 10.0 | 12.0  |
| Applied<br>Science            | 14                 | -              | 1           | -              | 1                          | 7.1  | -                                   | 3.0  | -     |
| Mathematics                   | 12                 | 1              | 1           | -              | 2                          | 16.7 | -                                   | 4.5  | -     |
| T o t a l                     | 248                | 15             | 54          | 1              | 71                         | 28.6 | 21.1                                | 10.8 | 12.0  |
| Average/yr                    |                    | 3              | 10.8        | 0.2            | 14.2                       |      | 4.2                                 | 2.2  | 2.4   |

Summary

Average credits earned in 5 years (all degree level) - 15.3  
 Average credits earned yearly (all degree level) - - - 3.1  
 Median credits earned in 5 years (all degree level) - 14.3  
 Percent earning credits in five years - - - - - 28.6  
 S. D. of the means - - - - - 8.0





teachers earning an average of 15.7 credits toward the Master's degree, and the 6 social science teachers who earned an average of 10 credits toward the Master's degree.

A total of 15 teachers earned credits toward a Bachelor's degree, and 54 teachers toward a Master's degree. One teacher earned credits toward a doctorate degree. The median credits earned in five years for all degree programs was 14.3. The mean was 15.3. The average yearly credits earned for all degree programs was 3.1. Only 71, or 28.6 percent of the 248 teachers earned three or more credits. The range was 3-36 credits during the five-year period.

#### In-Service Training Needs of Teachers and Administrators

The in-service training needs of the 248 teachers who responded to the questionnaires are presented in Table V, and Table VA in the Appendix. Two hundred and one, or 81 percent of the teachers indicated that their greatest need was in their respective fields of specialization. The mean scale rank being 4.3, with the highest rank on the scale being 5 on a five-point scale. Mathematics teachers gave it 4.8 scale points. With the exception of social science teachers, who ranked it with a scale point of 2.2, all the teachers gave this area a scale rank from 4.1 to 4.8. The area of need given the lowest mean scale rank of 2.3 scale points by 31 percent of the teachers was "Subject fields other



TABLE V. IN-SERVICE TRAINING NEEDS INDICATED BY RESPONDENT  
TEACHERS OF AGRICULTURAL SCHOOLS OF THE PHILIPPINES  
ARRANGED ACCORDING TO SCALE RANK OF IMPORTANCE.

| Area of Need                                 | Scale<br>Rank<br>of<br>Need | Number<br>Rank-<br>ing<br>Need | Percent |
|----------------------------------------------|-----------------------------|--------------------------------|---------|
| Field of specialization                      | 4.32                        | 201                            | 81.1    |
| Agricultural research                        | 4.25                        | 146                            | 58.9    |
| Methods of educational research              | 4.03                        | 155                            | 63.5    |
| Audio-Visual methods of instruction          | 3.95                        | 203                            | 81.9    |
| Program planning                             | 3.90                        | 156                            | 62.9    |
| Philosophy of education                      | 3.87                        | 151                            | 60.9    |
| Youth organizations                          | 3.84                        | 160                            | 64.5    |
| Supervision of instruction                   | 3.72                        | 139                            | 56.1    |
| Educational psychology                       | 3.66                        | 137                            | 55.2    |
| Curriculum improvement                       | 3.61                        | 132                            | 53.2    |
| Extension education                          | 3.53                        | 153                            | 61.7    |
| Remedial teaching                            | 3.44                        | 164                            | 66.1    |
| Sociology                                    | 3.39                        | 120                            | 48.4    |
| Evaluation of instruction                    | 3.27                        | 156                            | 62.9    |
| Resource and occupational survey             | 3.27                        | 124                            | 50.0    |
| School philosophy and objectives             | 3.26                        | 105                            | 42.3    |
| Cognate field of study                       | 3.19                        | 112                            | 45.2    |
| School and student publications              | 3.17                        | 128                            | 51.6    |
| Community and public relations               | 3.08                        | 137                            | 55.2    |
| Test construction and testing                | 3.00                        | 138                            | 55.7    |
| Policy and decision-making                   | 2.98                        | 89                             | 35.7    |
| Leadership training                          | 2.87                        | 111                            | 44.8    |
| Report writing                               | 2.82                        | 80                             | 32.3    |
| Professional ethics                          | 2.80                        | 117                            | 47.2    |
| School laws                                  | 2.68                        | 102                            | 41.1    |
| Political science                            | 2.48                        | 113                            | 45.6    |
| Subject fields other than major<br>and minor | 2.25                        | 77                             | 31.1    |





major or minor." Considering 3.0, the mid-point on the scale as the critical point of need, more than two-thirds of the 27 areas of needs listed in the questionnaire would be critical areas. Twenty of these areas of needs were given scale rank of 3.0 or higher.

Table VA in the Appendix reveals that language teachers expressed the greatest number of items of critical need. This group rated 24 of the 27 items in the checklist as important to most important (scale rank of 3.1 to 4.3). Only 3 items were given scale points below 3.0, the midpoint on the scale, by this group.

Homemaking teachers followed the language teachers in the number of items of needs given scale point ranks above 3.0. This group considered 23 items important to most important with scale-point ranks ranging from 3.1 to 4.3

The other groups of teachers have indicated critical areas of needs as follows: applied science teachers, 21 items; agriculture teachers, 20 items; farm mechanics and mathematics teachers, 18 items each; and social science teachers, 15 items.

Taken as a whole the teachers ranked the areas of need as follows: research and experiment areas, 3.9; subject-matter areas, 3.5; methods areas, 3.5; co-curricular areas, 3.5; general education areas, 3.4; and administration and supervision areas, 3.3.



By inspection it may be concluded from Table VA that the differences in the specified needs of the different groups of teachers were not significant, except for the single item "field of specialization" where the social science teachers were widely atypical of the rest. Why this was so need further investigation. It is probable that these teachers, and the administrators who agreed with them that social science and history teachers had little need for in-service training in this special field, do not realize the necessity for updating subject matter with the dynamic nature of society and the advances made in the social sciences.

In-Service Training Needs of Teachers as  
Perceived by Administrators

Administrators were asked to indicate what they considered were the in-service training needs of their teachers. Table VI shows the scale point ranking of these needs by the 32 administrators who responded.

None of the items of needs was given a scale point rank of below 3.0, the midpoint on the scale, except for social science and history under the area of subject matter content. This was given only 2.8 scale points. This seems to indicate that the administrators agreed with the social science and history teachers, who gave this item 2.2 scale points, that this group of teachers has little need for in-service training





TABLE VI. IN-SERVICE TRAINING NEEDS OF TEACHERS OF AGRICULTURAL SCHOOLS OF THE PHILIPPINES AS PERCEIVED BY ADMINISTRATORS.

| Area of Need                           | Average Rank of Need* | Average Rank of Need by Area | Priority Rank of Need by Area |
|----------------------------------------|-----------------------|------------------------------|-------------------------------|
| <u>Subject Matter Content:</u>         |                       | 3.54                         | 4th                           |
| English and Philipino Language         | 3.64                  |                              |                               |
| Social sciences and history            | 2.84                  |                              |                               |
| Mathematics                            | 3.38                  |                              |                               |
| General and applied sciences           | 4.31                  |                              |                               |
| Agriculture                            | 3.72                  |                              |                               |
| Farm mechanics                         | 3.72                  |                              |                               |
| Homemaking                             | 3.09                  |                              |                               |
| <u>Methods of Teaching:</u>            |                       | 4.35                         | 1st                           |
| Audio-visual methods of instruction    | 4.38                  |                              |                               |
| Test construction and testing          | 4.34                  |                              |                               |
| Evaluation of instruction              | 4.47                  |                              |                               |
| Remedial teaching                      | 4.19                  |                              |                               |
| <u>Administration and Supervision:</u> |                       | 3.95 )                       |                               |
| Curriculum development & improvement   | 4.16                  |                              |                               |
| School laws and regulations            | 3.84                  |                              |                               |
| Community and public relations         | 4.09                  |                              |                               |
| Policy and decision-making             | 3.56                  |                              |                               |
| Professional ethics                    | 3.91                  |                              |                               |
| Supervision and student activities     | 4.16                  |                              |                               |
| <u>Research and Experiments:</u>       |                       | 3.97 )                       | 2nd                           |
| Educational research                   | 4.06                  |                              |                               |
| Agricultural research                  | 4.03                  |                              |                               |
| Resource and occupational survey       | 3.84                  |                              |                               |
| <u>Student Services:</u>               |                       | 3.98 )                       |                               |
| Educational & vocational information   | 3.86                  |                              |                               |
| Guidance and counseling                | 4.06                  |                              |                               |
| Placement and follow-up                | 4.03                  |                              |                               |
| <u>Co-curricular Activities:</u>       |                       | 3.69                         |                               |
| Youth organizations                    | 3.84                  |                              |                               |
| School and student publications        | 3.69                  |                              |                               |
| Extension education                    | 4.09                  |                              |                               |
| Athletic coaching, etc.                | 3.13                  |                              |                               |

\*Ranking was based on a 5-point scale:

- |                    |                     |
|--------------------|---------------------|
| 5 - Most important | 2 - Less important  |
| 4 - More important | 1 - Least important |
| 3 - Important      |                     |



in the field of their specialization.

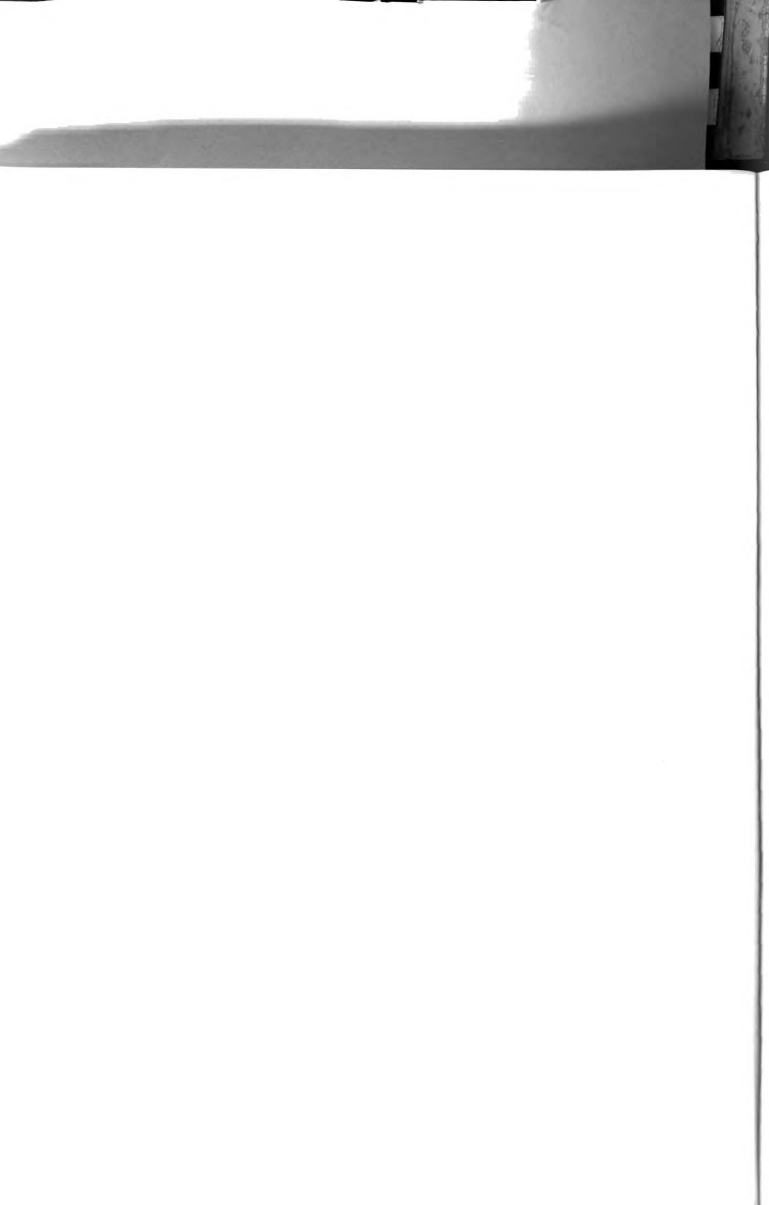
It may be noted that while teachers as a whole gave the highest mean scale point rank of 4.3 to subject matter content, (see Table VII), administrators gave it the lowest mean area rating of 3.54 among the six major areas of needs. These were ranked as follows: methods of teaching, 4.35; student services, 3.98; research and experiments, 3.97; administration and supervision, 3.95; co-curricular activities, 3.69; and subject matter content, 3.54.

A comparison of the teachers' own perception of their needs with that perceived by the administrators (Table VII), reveals that there was nearly complete agreement as to the scale point rating of the major areas of need, both groups giving all areas scale point ratings above 3.0. There was, however, a disparity in the priority ranking of the major areas of needs by the two groups. It was only in the area of research and experiments that teachers agreed with administrators. This disagreement in the priority ranking of the teachers' needs is probably due to differences in opinion as to which aspect of the vocational agriculture program should be given greater attention and emphasis. It is assumed that the administrators based their judgment on the weaknesses of the school program seen as a whole, while the teachers based their decision on their individual needs.



TABLE VII. COMPARISON OF TEACHERS' IN-SERVICE TRAINING NEEDS AS INDICATED BY ADMINISTRATORS AND TEACHERS.

| Area of Need                               | Teachers' own<br>Ranking of<br>their Needs | Administrators'<br>Ranking of<br>Teachers' Needs |
|--------------------------------------------|--------------------------------------------|--------------------------------------------------|
|                                            | X<br>(Mean)                                | Y<br>(Mean)                                      |
| <u>Subject Matter Content:</u>             | 4.32                                       | 3.54                                             |
| Agriculture                                | 4.44                                       | 3.72                                             |
| Farm mechanics                             | 4.09                                       | 3.72                                             |
| Homemaking                                 | 4.28                                       | 3.09                                             |
| Language                                   | 4.28                                       | 3.64                                             |
| Social science and history                 | 2.80                                       | 2.84                                             |
| Applied science                            | 4.18                                       | 4.31                                             |
| Mathematics                                | 4.75                                       | 3.38                                             |
| <u>Methods:</u>                            | 3.46                                       | 4.35                                             |
| Audio-visual instruction                   | 3.95                                       | 4.38                                             |
| Test construction and testing              | 3.00                                       | 4.34                                             |
| Evaluation of instruction                  | 3.27                                       | 4.47                                             |
| Remedial teaching                          | 3.44                                       | 4.19                                             |
| <u>Administration &amp; Supervision:</u>   | 3.25                                       | 3.95                                             |
| Curriculum development                     | 3.61                                       | 4.16                                             |
| Supervision of instruction                 | 3.72                                       | 4.16                                             |
| Professional ethics                        | 2.80                                       | 3.91                                             |
| School laws and regulations                | 2.68                                       | 3.56                                             |
| Policy and decision-making                 | 2.98                                       | 3.56                                             |
| Community & public relations               | 3.08                                       | 4.09                                             |
| <u>Research and experiments:</u>           | 3.88                                       | 3.97                                             |
| Methods of educational research            | 4.03                                       | 4.06                                             |
| Agricultural research                      | 4.25                                       | 4.03                                             |
| Resource and occupational survey           | 3.28                                       | 4.09                                             |
| <u>Co-curricular activities:</u>           | 3.54                                       | 3.69                                             |
| Youth organizations                        | 3.84                                       | 3.84                                             |
| School and student publications            | 3.17                                       | 3.69                                             |
| Extension education                        | 3.53                                       | 4.09                                             |
| Average of the means                       | 3.68                                       | 3.89                                             |
| S. D. of X and Y (plus or minus)           | 0.58                                       | 0.40                                             |
| Coefficient of correlation between X and Y |                                            | + 0.27                                           |



The ranking of the teachers' needs by the teachers and by the administrators correlated only + 0.27. Administrators were more agreed in their ranking of the needs item for item than were the teachers. The standard deviation in the means of item by item ranking of needs indicated by teachers was plus or minus 0.6, while that of the administrators was plus or minus 0.4.

#### In-Service Training Needs of School Administrators

To determine whether agricultural school administrators have any felt in-service training needs, they were asked to check and rank 13 items or areas of need listed in the questionnaire form as first, second, and third. The responses of the 32 administrators returning the questionnaires are presented in Table VIII.

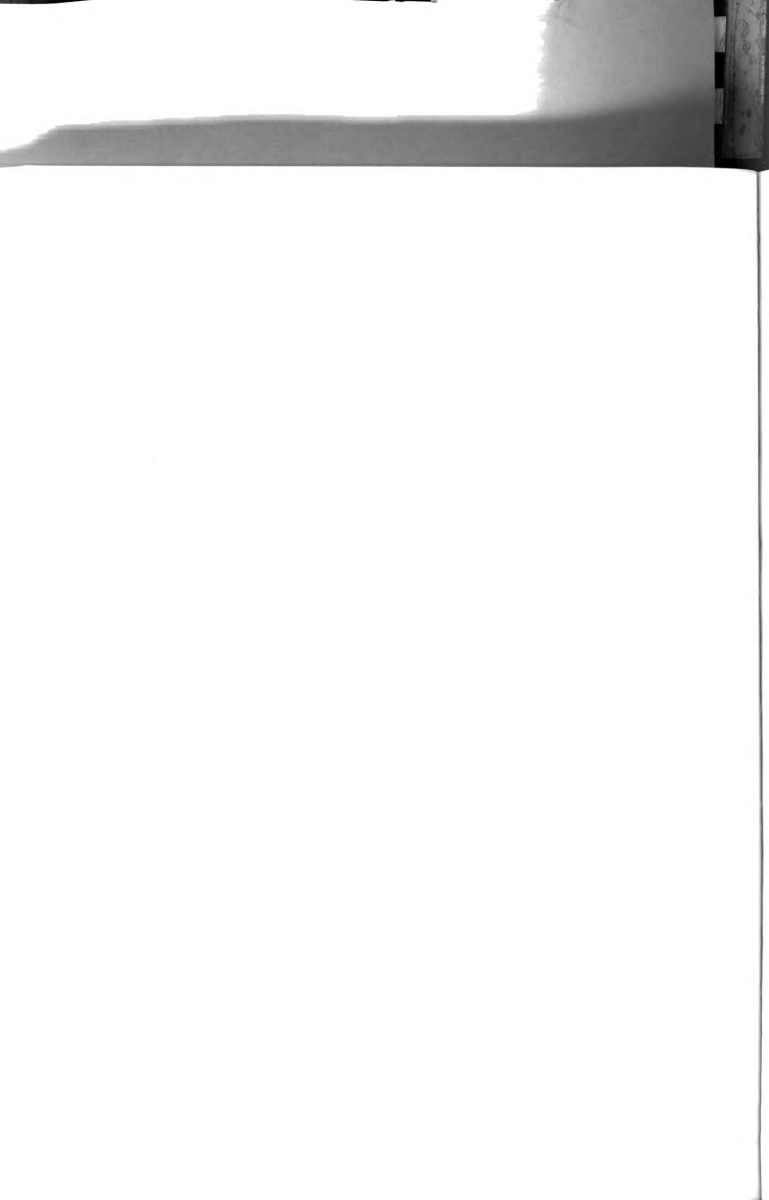
Administration and supervision of instruction was ranked first by 19 administrators; curriculum planning and improvement by 12; and research and evaluation by 12. The priority rankings were assigned points of one (1) for the first, two (2) for the second, and three (3) for the third. Combining all the rankings in priority groupings according to average weighted ranks of the different areas resulted in the following: administration and supervision of instruction, 1.3; research and evaluation, 1.78; curriculum planning and improvement, 1.65; test construction and testing, 1.91; and school development





TABLE VIII. IN-SERVICE TRAINING NEEDS OF ADMINISTRATORS OF AGRICULTURAL SCHOOLS OF THE PHILIPPINES AS PERCEIVED BY THEM.

| Area of Need                                  | Number of Adminis-<br>trators Indicating<br>Need According to<br>Priority |        |       | Total | Ave.<br>weigh-<br>ted<br>Rank | Prior-<br>ity<br>Group-<br>ings<br>of<br>Needs |
|-----------------------------------------------|---------------------------------------------------------------------------|--------|-------|-------|-------------------------------|------------------------------------------------|
|                                               | First                                                                     | Second | Third |       |                               |                                                |
|                                               | (1)                                                                       | (2)    | (3)   |       |                               |                                                |
| N %                                           |                                                                           |        |       |       |                               |                                                |
| Administration and supervision of instruction | 19                                                                        | 4      | 2     | 25    | 78.1                          | First                                          |
| Curriculum Planning and improvement           | 12                                                                        | 11     | 3     | 26    | 81.3                          |                                                |
| Research and evaluation                       | 12                                                                        | 9      | 6     | 27    | 84.4                          |                                                |
| Test construction and testing                 | 8                                                                         | 9      | 6     | 23    | 71.9                          |                                                |
| School development programs                   | 8                                                                         | 12     | 6     | 26    | 81.3                          |                                                |
| Staff organization and management             | 7                                                                         | 9      | 6     | 22    | 68.8                          | Second                                         |
| School finance and budgeting                  | 8                                                                         | 7      | 7     | 22    | 68.8                          |                                                |
| Public relations                              | 8                                                                         | 5      | 7     | 20    | 62.5                          |                                                |
| Mgt. and supervision of agric. projects       | 8                                                                         | 8      | 7     | 23    | 71.9                          |                                                |
| Supervised farming and FFP work               | 5                                                                         | 12     | 6     | 23    | 71.9                          |                                                |
| Guidance and counseling                       | 4                                                                         | 12     | 8     | 24    | 75.0                          |                                                |
| Audio-visual methods of instruction           | 7                                                                         | 6      | 11    | 24    | 75.0                          |                                                |
| Leadership training                           | 4                                                                         | 8      | 8     | 20    | 62.5                          |                                                |



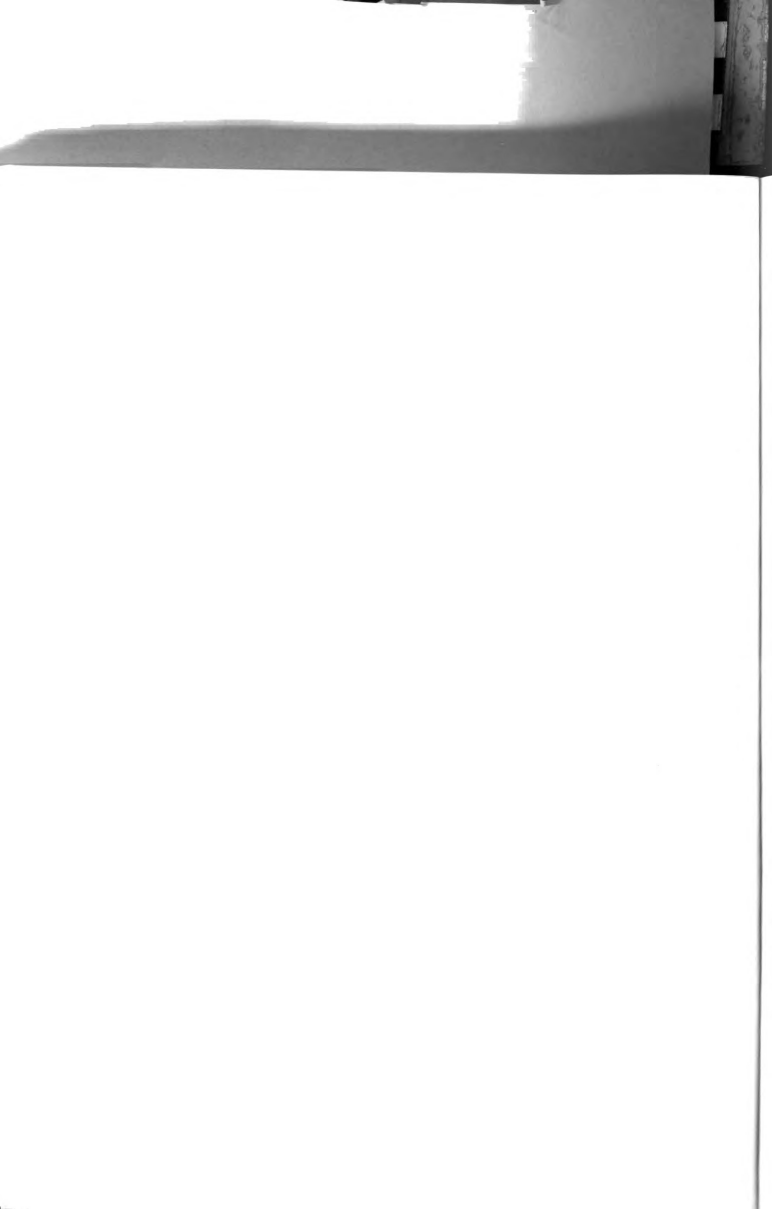


programs, 1.92, for the first priority group. Staff organization and management, 1.95; school finance, 1.95; public relations, 1.95; and management and supervision of agricultural projects, 1.96 for the second priority group. Supervised farming and FFP work, 2.04; guidance and counseling, 2.17; audio-visual methods of instruction, 2.17; and leadership training, 2.2 for the third priority group.

Most of the areas of need (or related needs) appearing in the first and second priority groups of needs of administrators as indicated by them also appear in the first, second and third priority grouping of needs of teachers as indicated by the administrators. These areas are administration and supervision of instruction, curriculum planning and improvement, research and evaluation, test construction and testing, staff organization and management, and public relations. This would seem to suggest that administrators tended to "think" that teachers had great need for in-service training in areas in which they themselves were in need. The association or relationship is more than casual. This deduction, however, needs to be investigated further.

#### Type, Scope, and Participation of Teachers in In-Service Training Programs

Out of 858 teachers from 32 schools from 1 to 33 teachers, or a total of 444, participated in in-service training programs





during the five years covered by the study. This represents a five-year mean of 13.9 teachers per school, or 2.8 teachers per year per school. At this rate it would take 10 years before all teachers would be able to attend or participate in regional or national in-service training programs, assuming of course that different teachers attend each year. (See Table IX).

The types of regional and national in-service training programs participated in and the extent of participation by teachers from the 32 agricultural schools as reported by the administrators are given in Table X. The number of teachers participating in each type during the five-year period covered by the study are: workshop, 242 or 28.2 percent; conferences and conventions, 149 or 17.4 percent; summer school classes, 117 or 13.6 percent; and professional or refresher classes, 59 or 6.9 percent. The five-year percentages of attendance by groups of teachers at any or all programs held during the five-year period ranged from 16.9 to 68.1 percent. It was highest among farm mechanics teachers, and lowest among social science teachers. The percent attendance by the different groups follows: agriculture 65.3 percent; homemaking teachers, 50.4 percent; applied science teachers, 43.5 percent; mathematics teachers, 21 percent; health and physical education teachers, 57.7 percent; and others, 58.3 percent.

The average per year per school attendance by type of

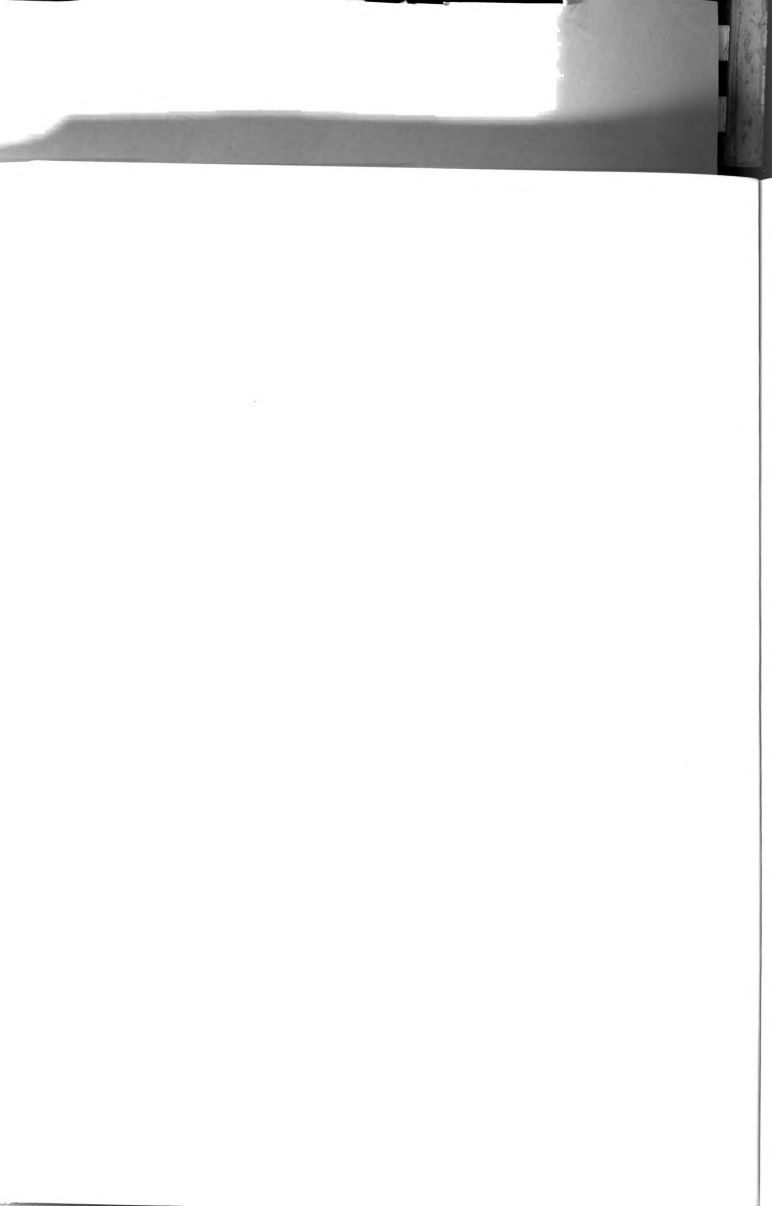


TABLE IX. PROPORTION OF TEACHERS OF AGRICULTURAL SCHOOLS  
ATTENDING ONE OR MORE IN-SERVICE TRAINING  
ACTIVITIES FROM 1956 to 1960 AS REPORTED BY THE  
PRINCIPALS AND SUPERINTENDENTS OF 32 SCHOOLS

| Respondent<br>Schools             | Number of<br>Teachers | Teachers Attending<br>In-Service Train-<br>ing Programs |                | Mean Number<br>Attending<br>Per Year | Percent<br>Attending<br>Per Year |
|-----------------------------------|-----------------------|---------------------------------------------------------|----------------|--------------------------------------|----------------------------------|
| <u>School No.</u>                 |                       | <u>Number</u>                                           | <u>Percent</u> |                                      |                                  |
| 1                                 | 30                    | 22                                                      | 73.3           | 4.4                                  | 14.7                             |
| 2                                 | 44                    | 26                                                      | 59.1           | 5.2                                  | 11.8                             |
| 3                                 | 36                    | 21                                                      | 58.3           | 4.2                                  | 11.7                             |
| 4                                 | 36                    | 21                                                      | 58.3           | 4.2                                  | 11.7                             |
| 5                                 | 30                    | 19                                                      | 63.3           | 3.8                                  | 12.7                             |
| 6                                 | 26                    | 12                                                      | 46.2           | 2.4                                  | 9.2                              |
| 7                                 | 35                    | 24                                                      | 68.6           | 4.8                                  | 13.7                             |
| 8                                 | 24                    | 12                                                      | 50.0           | 2.4                                  | 10.0                             |
| 9                                 | 18                    | 3                                                       | 16.7           | 0.6                                  | 3.3                              |
| 10                                | 29                    | 13                                                      | 44.8           | 2.6                                  | 9.0                              |
| 11                                | 23                    | 9                                                       | 39.1           | 1.8                                  | 7.8                              |
| 12                                | 19                    | 7                                                       | 36.8           | 1.4                                  | 7.4                              |
| 13                                | 14                    | 2                                                       | 14.3           | 0.4                                  | 2.9                              |
| 14                                | 49                    | 33                                                      | 67.4           | 6.6                                  | 13.5                             |
| 15                                | 22                    | 9                                                       | 40.9           | 1.8                                  | 8.2                              |
| 16                                | 21                    | 8                                                       | 38.1           | 1.6                                  | 7.6                              |
| 17                                | 20                    | 6                                                       | 30.0           | 1.2                                  | 6.0                              |
| 18                                | 29                    | 13                                                      | 44.8           | 2.6                                  | 9.0                              |
| 19                                | 36                    | 25                                                      | 69.5           | 5.0                                  | 13.9                             |
| 20                                | 30                    | 18                                                      | 60.0           | 3.6                                  | 12.0                             |
| 21                                | 18                    | 6                                                       | 33.3           | 1.2                                  | 6.7                              |
| 22                                | 26                    | 12                                                      | 46.2           | 2.4                                  | 9.2                              |
| 23                                | 17                    | 3                                                       | 17.7           | 0.6                                  | 3.5                              |
| 24                                | 12                    | 1                                                       | 8.3            | 0.2                                  | 1.7                              |
| 25                                | 47                    | 30                                                      | 63.8           | 6.0                                  | 12.8                             |
| 26                                | 22                    | 14                                                      | 63.6           | 2.8                                  | 12.7                             |
| 27                                | 22                    | 12                                                      | 54.6           | 2.4                                  | 10.9                             |
| 28                                | 30                    | 14                                                      | 46.7           | 2.8                                  | 9.3                              |
| 29                                | 23                    | 10                                                      | 43.5           | 2.0                                  | 8.7                              |
| 30                                | 18                    | 6                                                       | 33.3           | 1.2                                  | 6.7                              |
| 31                                | 29                    | 20                                                      | 69.0           | 4.0                                  | 13.8                             |
| 32                                | 23                    | 13                                                      | 56.5           | 2.6                                  | 11.3                             |
| T o t a l                         | 858                   | 444                                                     | 51.8           | 88.8                                 | 10.4                             |
| Average per school year           |                       |                                                         |                | 2.8                                  |                                  |
| Average per school per five years |                       |                                                         |                | 13.9                                 |                                  |
| Median per school per year        |                       |                                                         |                | 2.5                                  |                                  |
| S.D. of the means                 |                       |                                                         |                | + 1.7                                |                                  |





TABLE X. TYPES OF REGIONAL AND NATIONAL IN-SERVICE TRAINING ACTIVITIES ATTENDED BY TEACHERS OF 32 AGRICULTURAL SCHOOLS FROM 1956 TO 1960 AS REPORTED BY THEIR PRINCIPALS AND/OR SUPERINTENDENTS.

| Classi-<br>fica-<br>tion of<br>Teachers | Total<br>on<br>Staffs | Teachers attending |                |                 |                                       | Number<br>Attend-<br>ing any<br>or all | Ave.<br>No.<br>per<br>year<br>all<br>sch. | Ave.<br>No.<br>per<br>year<br>per<br>sch. |
|-----------------------------------------|-----------------------|--------------------|----------------|-----------------|---------------------------------------|----------------------------------------|-------------------------------------------|-------------------------------------------|
|                                         |                       | Work-<br>shop      | Prof.<br>Class | Summer<br>Class | Confer-<br>ence or<br>Conven-<br>tion |                                        |                                           |                                           |
| Agric.                                  | N 225                 | 75                 | 17             | 34              | 62                                    | 147                                    | 29.4                                      | 0.92                                      |
|                                         | % 26.2                | 33.3               | 7.6            | 15.1            | 27.6                                  | 65.4                                   |                                           |                                           |
| F. M.                                   | N 94                  | 41                 | 5              | 12              | 7                                     | 64                                     | 12.8                                      | 0.40                                      |
|                                         | % 10.9                | 43.6               | 5.3            | 12.8            | 7.5                                   | 68.1                                   |                                           |                                           |
| H. E.                                   | N 95                  | 38                 | 10             | 13              | 13                                    | 49                                     | 9.8                                       | 0.31                                      |
|                                         | % 11.1                | 40.0               | 10.5           | 13.7            | 13.7                                  | 51.6                                   |                                           |                                           |
| Lang.                                   | N 137                 | 26                 | 15             | 31              | 30                                    | 69                                     | 13.8                                      | 0.43                                      |
|                                         | % 15.9                | 18.9               | 10.9           | 22.6            | 21.9                                  | 50.4                                   |                                           |                                           |
| Soc.<br>Science                         | N 65                  | 6                  | 1              | 2               | 5                                     | 11                                     | 2.2                                       | 0.07                                      |
|                                         | % 7.6                 | 9.2                | 1.5            | 3.1             | 7.7                                   | 16.9                                   |                                           |                                           |
| Applied<br>Science                      | N 92                  | 29                 | 4              | 10              | 7                                     | 40                                     | 8.0                                       | 0.25                                      |
|                                         | % 10.7                | 31.5               | 4.4            | 10.9            | 7.6                                   | 43.5                                   |                                           |                                           |
| Mathe-<br>matics                        | N 62                  | 3                  | 4              | 7               | 6                                     | 13                                     | 2.6                                       | 0.08                                      |
|                                         | % 7.2                 | 4.8                | 6.5            | 11.3            | 9.7                                   | 21.0                                   |                                           |                                           |
| Health<br>& P. E.                       | N 52                  | 11                 | 3              | 6               | 13                                    | 30                                     | 6.0                                       | 0.19                                      |
|                                         | % 6.1                 | 21.2               | 5.8            | 11.5            | 25.0                                  | 57.7                                   |                                           |                                           |
| Others                                  | N 36                  | 13                 | -              | 2               | 6                                     | 21                                     | 4.2                                       | 0.13                                      |
|                                         | % 4.2                 | 36.1               | -              | 5.6             | 16.7                                  | 58.3                                   |                                           |                                           |
| Total                                   | N 858                 | 242                | 59             | 117             | 149                                   | 444                                    | 88.8                                      | 2.78                                      |
|                                         | % 100                 | 28.2               | 6.9            | 13.6            | 17.4                                  | 51.8                                   |                                           |                                           |
| Ave./<br>school                         | N 27                  | 7.6                | 1.8            | 3.7             | 4.7                                   | 13.9                                   |                                           |                                           |
| Average<br>per yr.                      |                       | 1.5                | 0.4            | 0.7             | 0.9                                   | 2.8                                    |                                           |                                           |



programs were: workshops, 1.5; professional classes, 0.4; summer school classes, 0.7; and conferences and conventions, 0.9; or a cumulative average of 2.8 teachers per year per school.

As a group, more vocational teachers participated in more in-service training programs at the regional and national level than did academic or related subjects teachers, both in terms of number and percent. This was because most of the regional and national workshops and conferences held were in the vocational areas.

The scope and types of in-service training programs participated in by the 248 respondent teachers within the five-year period covered by the study are shown in Table XI. Thirty or 12.1 percent of the teachers participated only in local in-service training programs; 14 or 5.7 percent participated in regional programs only; 14 or 5.7 percent participated in national programs only; 50 or 20.2 percent participated in local and regional programs; 21 or 8.4 percent participated in local and national programs; 12 or 4.8 percent participated in national and regional programs; and 65 or 26.2 percent in local, regional and national programs. Forty-two or 16.9 percent did not participate in any in-service training activity at all during the five-year period covered by the study. The sample had a higher five-year percentage attendance at any or all in-service training programs



TABLE XI. NUMBER OF TEACHERS AND SCOPE OR LEVEL OF  
IN-SERVICE TRAINING ACTIVITY ATTENDED  
FROM 1956 - 1960.

| Type of Program                | Number | Percent |
|--------------------------------|--------|---------|
| Local programs only            | 30     | 12.1    |
| Regional programs only         | 14     | 5.7     |
| National programs only         | 14     | 5.7     |
| Local and regional programs    | 50     | 20.2    |
| Local and national programs    | 21     | 8.4     |
| National and regional programs | 12     | 4.8     |
| Local, regional and national   | 65     | 26.2    |
| None                           | 42     | 16.9    |
| T o t a l                      | 248    | 100.0   |



held at the regional and national levels (approximately 71 percent) than the percentage attendance of the population which was 52 percent as shown in Table X. This may be explained by the fact that teachers with less than five years of experience in the Bureau of Public Schools, among whom possibly was found a greater proportion of the non-participating teachers, were discriminated by the sampling design. This explanation seems to be supported by the data in Table XII which shows that more than two-thirds of the teachers sampled fall within the group with 5-10 years service.

Relationship of Years of Service and Participation  
in In-Service Training Programs

Table XII reveals that the group 10-15 years had consistently the highest percentage of participation in all types of in-service program or activity, except summer classes. The percent participation by succeeding older groups gradually went down in inverse relationship with length of service, with the exception of conventions or conferences where the percentage attendance rose slightly with the 25-30 and 30-35 groups. Figure 2 shows the profiles of the percentage participation by the respective teacher groups. The total percentage attendance for each year-of-service-group was highest with the 5-10 group and gradually diminished: 5-10, 87 percent; 10-15, 83 percent; 15-20, 75 percent; 20-25, 63 percent;





TABLE XII. YEARS OF TENURE AND ATTENDANCE AT IN-SERVICE  
TRAINING PROGRAMS OF 248 TEACHERS OF AGRICULTURE  
SCHOOLS OF THE PHILIPPINES FROM 1956 - 1960.

| Type of in-service<br>Activity  | Years of Tenure |               |               |               |              |               | Total<br>(248) |      |
|---------------------------------|-----------------|---------------|---------------|---------------|--------------|---------------|----------------|------|
|                                 | 5 -10<br>(167)  | 10-15<br>(30) | 15-20<br>(16) | 20-25<br>(16) | 25-30<br>(8) | 30-up<br>(11) |                |      |
|                                 |                 |               |               |               |              |               |                |      |
| <u>Number attending:</u>        |                 |               |               |               |              |               |                |      |
|                                 | N               | 97            | 22            | 10            | 7            | 3             | 5              | 144  |
| Workshop                        | %               | 58.1          | 73.3          | 62.5          | 43.8         | 37.5          | 45.5           | 58.1 |
|                                 | A               | 19.4          | 4.4           | 2.0           | 1.6          | 0.6           | 1.0            | 18.8 |
| Conventions)<br>Conferences)    | N               | 51            | 18            | 7             | 6            | 4             | 6              | 92   |
|                                 | %               | 30.5          | 60.0          | 43.8          | 37.5         | 50.0          | 54.6           | 37.1 |
|                                 | A               | 10.2          | 3.6           | 1.4           | 1.2          | 0.8           | 1.2            | 18.4 |
| Educ. trips)<br>School visits)  | N               | 70            | 18            | 8             | 7            | 2             | 4              | 109  |
|                                 | %               | 41.9          | 60.0          | 50.0          | 43.8         | 25.0          | 36.4           | 43.9 |
|                                 | A               | 14.0          | 3.6           | 1.6           | 1.4          | 0.4           | 0.8            | 21.8 |
| Demonstration<br>Teaching, etc. | N               | 84            | 16            | 5             | 5            | 3             | 5              | 118  |
|                                 | %               | 50.3          | 53.3          | 31.3          | 31.3         | 37.5          | 45.5           | 45.6 |
|                                 | A               | 16.8          | 3.2           | 1.0           | 1.0          | 0.6           | 1.0            | 23.6 |
| Professional<br>Classes         | N               | 22            | 8             | 3             | 1            | 1             | 3              | 38   |
|                                 | %               | 13.2          | 26.7          | 18.8          | 6.3          | 12.5          | 27.3           | 15.3 |
|                                 | A               | 4.4           | 1.6           | 0.6           | 0.2          | 0.2           | 0.6            | 7.6  |
| Summer Classes                  | N               | 32            | 7             | 4             | 4            | 1             | 3              | 51   |
|                                 | %               | 12.2          | 23.3          | 25.0          | 25.0         | 12.5          | 27.3           | 20.6 |
|                                 | A               | 6.4           | 1.4           | 0.8           | 0.8          | 0.2           | 0.6            | 10.2 |
| T o t a l                       | N               | 148           | 25            | 12            | 10           | 5             | 6              | 206  |
|                                 | %               | 88.6          | 83.3          | 75.0          | 62.5         | 62.5          | 54.5           | 83.1 |
|                                 | A               | 29.6          | 5.0           | 2.4           | 2.0          | 1.0           | 1.2            | 41.2 |
| Percent/year                    |                 | 17.7          | 16.7          | 15.0          | 12.5         | 12.5          | 10.9           | 16.6 |

\* N - number  
% - percent  
A - average



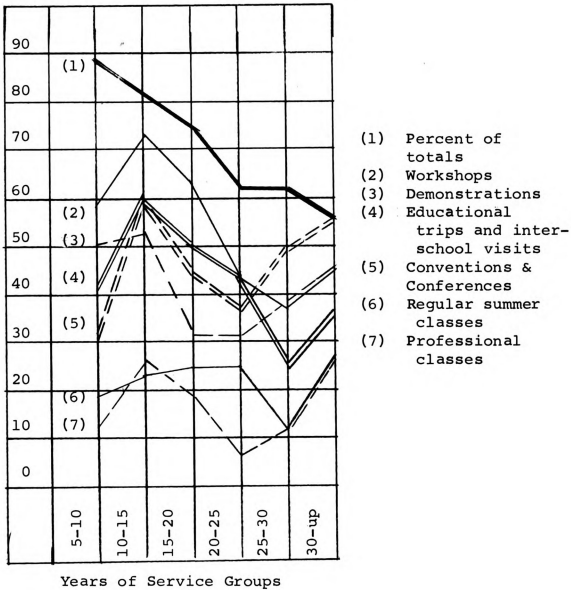


Figure 2. Profiles of percent attendance of 248 teachers classified by years of service showing the inverse relationship between years of service and participation in in-service training programs.



25-30, 63 percent; and 30-35, 55 percent. The mean number of teachers participating per year from each group behaved in practically the same fashion as the percentages of total attendance (Table XIIA): 5-10, 29.6; 10-15, 5; 15-20, 2.4; 20-25, 2; 25-30, 1; and 30-35, 1.2 teachers.

The relationships noted above seem to justify the inference that "the older the teacher is in the service the less frequent is his participation in in-service training programs," or the hypothesis that "The participation of teachers in in-service training programs tends to be inversely related to the length of years of service." Whether this indicates increasing competency in solving their own problems is a matter for further investigation.

#### Relation of Teaching Major to Major Assignment

Table XIII shows the relationship between the teaching major (field of specialization) and the assignment of the 248 teachers studied. Thirty-five teachers, or 14.1 percent were teaching courses for which they were not qualified; 17, or 6.9 percent were teaching subjects only in their minor fields of study. The greatest number of teachers assigned to teach subjects for which they were not qualified was found among agriculture teachers, which was 12, and least with language and mathematics teachers with 1 each. In the case of mathematics



TABLE XIII. TEACHING MAJOR AND ASSIGNMENT OF 248 RESPONDENT  
TEACHERS FROM 1956 - 1960.

| Teaching<br>Major | Teaching Assignment |      |                    |      |            |      |        |      | T o t a l |       |
|-------------------|---------------------|------|--------------------|------|------------|------|--------|------|-----------|-------|
|                   | Major Only          |      | Major and<br>Minor |      | Minor Only |      | Others |      |           |       |
|                   | N                   | %    | N                  | %    | N          | %    | N      | %    | N         | %     |
| Agriculture       | 32                  | 42.1 | 32                 | 42.1 | -          | -    | 12     | 15.8 | 76        | 30.7  |
| Farm Mechanics    | 25                  | 67.6 | 5                  | 13.5 | -          | -    | 7      | 18.9 | 37        | 14.9  |
| Homemaking        | 15                  | 57.9 | 3                  | 11.5 | 4          | 15.4 | 4      | 15.4 | 26        | 10.5  |
| Language          | 28                  | 49.1 | 24                 | 42.1 | 4          | 7.0  | 1      | 1.8  | 57        | 23.0  |
| Social Science    | 8                   | 30.8 | 9                  | 34.6 | 5          | 19.2 | 4      | 15.4 | 26        | 10.5  |
| Applied Sci       | 5                   | 35.7 | 3                  | 21.4 | -          | -    | 6      | 42.9 | 14        | 5.7   |
| Mathematics       | 4                   | 33.3 | 3                  | 25.0 | 4          | 33.3 | 1      | 8.3  | 12        | 4.8   |
| T o t a l         | 117                 | 47.2 | 79                 | 31.9 | 17         | 6.9  | 35     | 14.1 | 248       | 100.0 |





teachers, however, the figure is misleading. The table shows that there were only 12 teachers from the 25 schools who were teaching mathematics as a major assignment. This means that several other teachers were teaching the subject as a minor assignment.

Table XIV shows that assignment had little or no relationship with participation in in-service training programs.

The average attendance at local, regional and national in-service training programs by the 248 teachers from 1956 to 1960 is shown in Table XV in the Appendix. Workshops at any or all levels were participated in by 144 teachers (58 percent) for an average of 3 times in five years, or an average of 1.7 times in five years for all respondent teachers. Ninety-two teachers (37 percent) attended conventions and conferences for an average of 3.4 times in five years, or 1.3 times in five years for all teachers. One hundred nine teachers (44 percent) participated in educational trips and inter-school visits for an average of 3 times in five years, or 1.3 times each for 248 teachers.

One hundred and eighteen teachers participated in demonstration teaching 3.3 times in five years, or 1.5 times for all respondents. Thirty-eight teachers attended professional classes 1.8 times each in five years, or an over-all average of 0.3 times for all teachers. Only 51 teachers attended summer

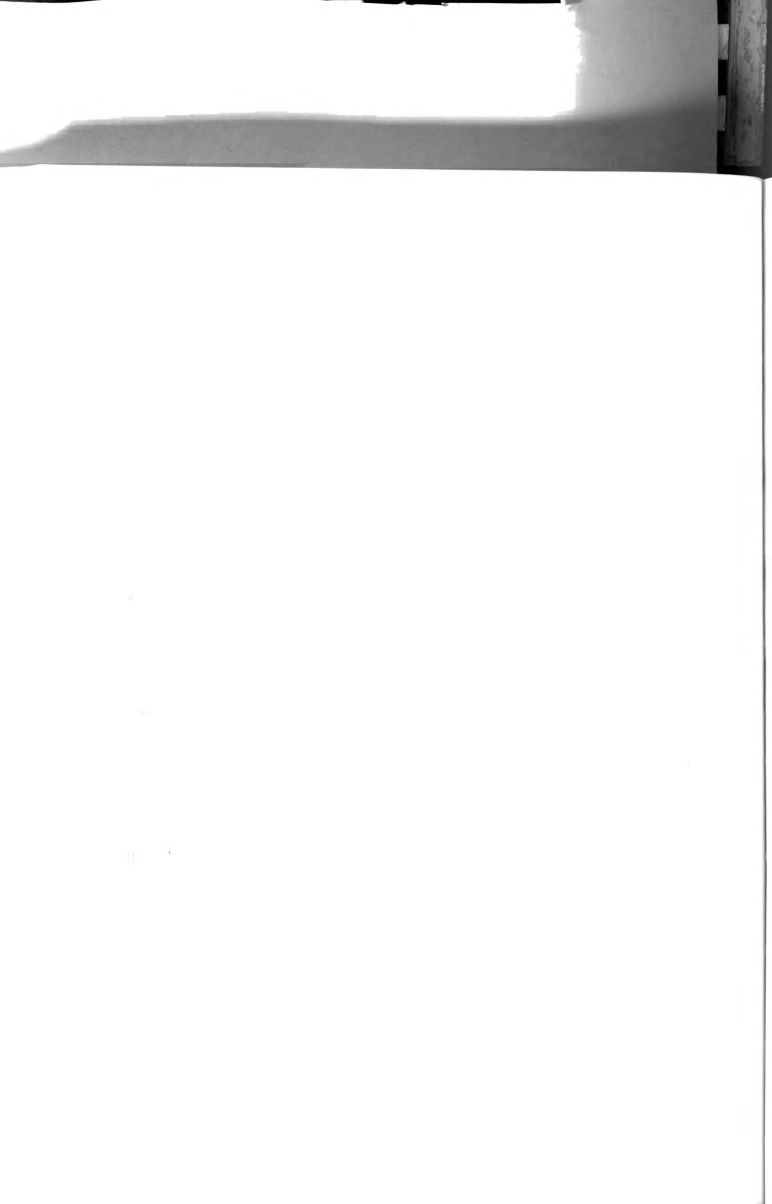


TABLE XIV. PARTICIPATION OF TEACHERS IN REGIONAL AND NATIONAL IN-SERVICE TRAINING PROGRAMS GROUPED ACCORDING TO CLASSIFICATION AND TEACHING ASSIGNMENT.

| Classification | Number attending one or more programs |       |                 |       |            |       |        |      |     |       | T o t a l |
|----------------|---------------------------------------|-------|-----------------|-------|------------|-------|--------|------|-----|-------|-----------|
|                | Major Only                            |       | Major and Minor |       | Minor Only |       | Others |      |     |       |           |
|                | N                                     | %     | N               | %     | N          | %     | N      | %    | N   | %     |           |
| Agriculture    | 26                                    | 81.3  | 23              | 71.9  | -          | -     | 6      | 50.0 | 55  | 72.4  |           |
| Farm Mechanics | 23                                    | 92.0  | 3               | 60.0  | -          | -     | 7      | 100  | 33  | 89.2  |           |
| Homemaking     | 13                                    | 86.7  | 3               | 100.0 | 2          | 50.0  | 1      | 25.0 | 19  | 73.1  |           |
| Language       | 14                                    | 50.0  | 15              | 62.5  | 4          | 100.0 | -      | -    | 33  | 57.9  |           |
| Social Science | 3                                     | 37.5  | 5               | 55.6  | -          | -     | 3      | 75.0 | 11  | 42.3  |           |
| Applied Sci.   | 5                                     | 100.0 | 3               | 100.0 | -          | -     | 6      | 100  | 14  | 100.0 |           |
| Mathematics    | 4                                     | 100.0 | 3               | 100.0 | 3          | 75.0  | 1      | 100  | 11  | 91.7  |           |
| T o t a l      | 88                                    | 75.2  | 55              | 69.6  | 9          | 52.9  | 24     | 68.6 | 176 | 71.0  |           |

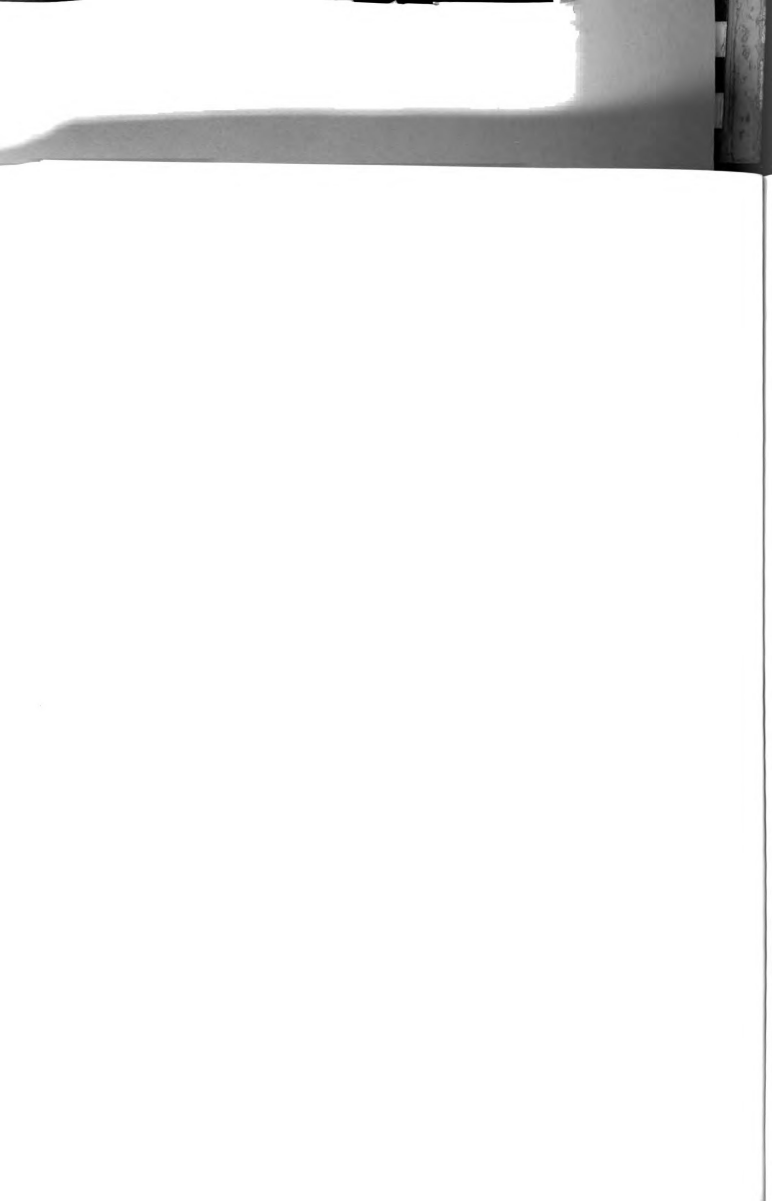


school for an average of 1.8 times during the five years covered by the study.

The 206 teachers who participated in any or all types of in-service training programs held during the five years covered by the study attended for an average of 2.9 times, or 1.1 times for each of the 248 teachers. This means that each teacher was able to attend or participate only once in just one in-service training activity in five years.

Based on the number of participants, workshops were the most attended or more frequently conducted. Professional classes were the least attended or least frequently conducted.

Table XVI in the Appendix gives the number and percent attendance by teachers according to teaching assignment. Participation in workshops was highest among farm mechanics teachers with 32, or 86.5 percent attending; and lowest among mathematics teachers with only 3, or 25 percent attending. This is explained by the fact that there were no workshops held for mathematics teachers. Combining all the participants at all levels and for all types of in-service training programs shows that social science teachers participated the least (58 percent). Science teachers had 100 percent participation. This may be attributed to the fact that the Director of Public Schools required them to attend refresher courses and workshops on science teaching starting in 1957. The high percentage of



participation by agriculture, farm mechanics and homemaking teachers is explained primarily by the fact that most of the in-service training programs sponsored by the Central Office at the regional and national levels stressed these curricular areas of instruction. The comparative percentages of participation by groups are: agriculture, 72 percent; farm mechanics, 89 percent; homemaking, 74 percent; language, 58 percent; social science, 42 percent; applied science, 100 percent; and mathematics, 92 percent; or a combined percentage attendance of 83 percent.

The average number of teachers attending any or all regional and national in-service training programs was 35.2 teachers per year. By groups the averages were: agriculture, 11; farm mechanics, 6.6; homemaking, 3.8; language, 6.6; social science, 2.2; applied science, 2.8; and mathematics, 2.2 teachers per year.

A comparison of the percentages of participation or attendance by teachers of agricultural schools at regional and national in-service training programs as reported by administrators from 32 schools and by 248 teachers from 25 schools is shown in Table XVII. The proportion of the actual number of teachers under each subject classification group to the total on the staff of all schools did not vary widely from the proportion of the groups of teachers in the sample to the total



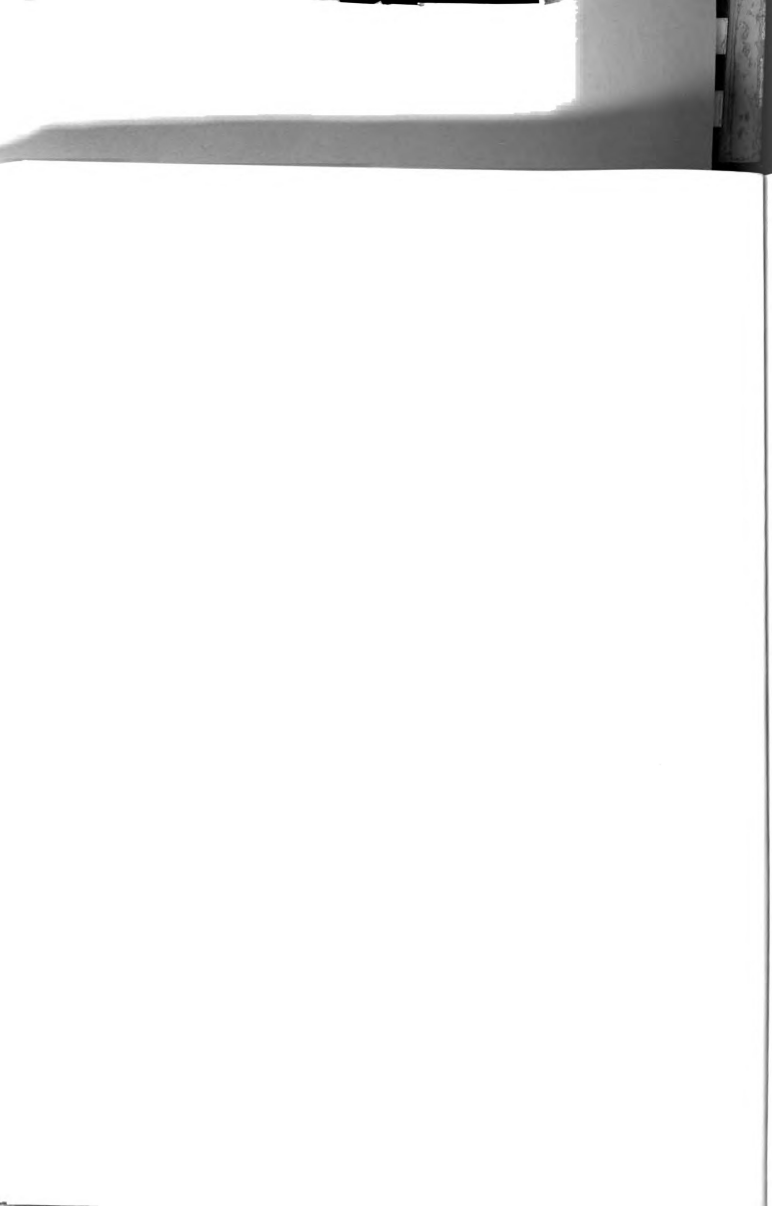
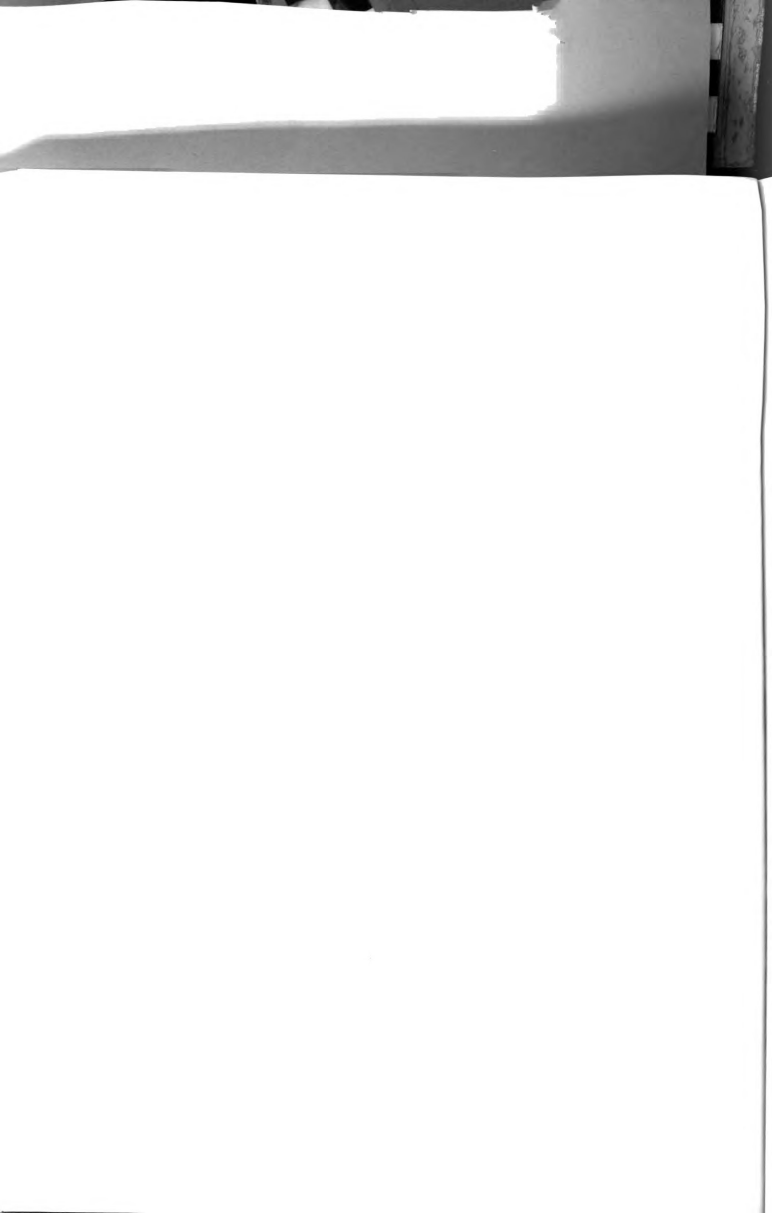


TABLE XVII. A COMPARISON OF THE PARTICIPATION OF TEACHERS OF AGRICULTURAL SCHOOLS IN REGIONAL AND NATIONAL IN-SERVICE TRAINING PROGRAMS FROM 1956 TO 1960 AS REPORTED BY ADMINISTRATORS AND BY TEACHERS.

| Classification of Teachers | Total on Staff |       | Number Attending as Reported by Administrators |      | Total No. of Respondents |       | Attendance of Respondents |       |
|----------------------------|----------------|-------|------------------------------------------------|------|--------------------------|-------|---------------------------|-------|
|                            | N              | %     | N                                              | %    | N                        | %     | N                         | %     |
| Agriculture                | 225            | 26.2  | 147                                            | 65.3 | 76                       | 30.7  | 55                        | 72.4  |
| Farm Mechanics             | 94             | 10.9  | 64                                             | 68.1 | 37                       | 14.9  | 33                        | 89.2  |
| Homemaking                 | 95             | 11.1  | 49                                             | 51.6 | 26                       | 10.5  | 19                        | 73.1  |
| Language                   | 137            | 16.0  | 69                                             | 50.4 | 57                       | 23.0  | 33                        | 57.9  |
| Social Science             | 65             | 7.6   | 11                                             | 16.9 | 26                       | 10.5  | 11                        | 42.3  |
| Applied Science            | 92             | 10.7  | 40                                             | 43.5 | 14                       | 5.7   | 14                        | 100.0 |
| Mathematics                | 62             | 7.2   | 13                                             | 21.0 | 12                       | 4.8   | 11                        | 91.7  |
| Health and P.E.            | 52             | 6.1   | 30                                             | 57.7 | -                        | -     | -                         | -     |
| Others                     | 36             | 4.2   | 21                                             | 58.3 | -                        | -     | -                         | -     |
| T o t a l                  | 858            | 100.0 | 444                                            | 51.8 | 248                      | 100.0 | 176                       | 71.0  |

Correlation + 0.22



of the sample. With the exception of science and mathematics teachers the ratios of the different group samples to the total sample were nearly equal to, or slightly higher than the corresponding ratios of the actual population groups to the total of the population. In the case of language and mathematics teachers the ratios of these groups to the total sample were slightly lower than the corresponding ratios found in the population.

The percentages of participation by the respondent teachers in regional and national in-service training programs correlated positively but only slightly (+ 0.22) with the percentages of attendance of all the teachers in the 32 schools. The higher percentage of attendance found in the actual population was due primarily to the fact that teachers with less than five years experience were not included in the sample, but were included in the reports of the administrators.

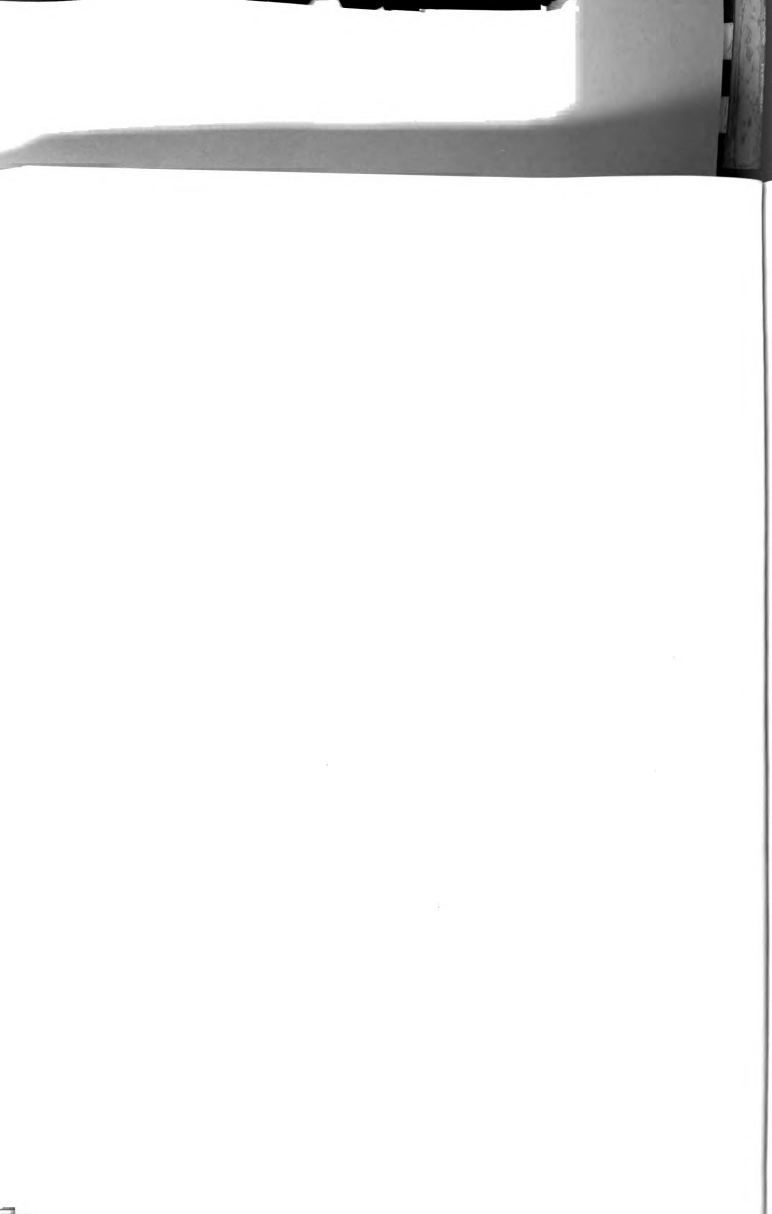
#### Participation by Administrators in In-Service Training Programs

The types of in-service education programs and the extent of participation by administrators of agricultural schools are shown in Table XVIII. Of the 32 respondent administrators, 27 participated in administrators' conventions; 28 in workshops; 22 in educational trips; 21 in seminars; 19 in teachers'



TABLE XVIII. LENGTH OF TENURE, TYPES OF IN-SERVICE ACTIVITY, AND PARTICIPATION OF 32 RESPONDENT SCHOOL ADMINISTRATORS OF AGRICULTURAL SCHOOLS AT ONE OR MORE IN-SERVICE TRAINING PROGRAMS.

| Type of In-Service Activity Attended | Number Participating by Tenure |             |              |              |              |              | T o t a l |      |
|--------------------------------------|--------------------------------|-------------|--------------|--------------|--------------|--------------|-----------|------|
|                                      | 1-5<br>(1)                     | 6-10<br>(4) | 11-15<br>(6) | 16-20<br>(7) | 21-25<br>(7) | 26-up<br>(7) | N<br>(32) | %    |
| Adm. convention                      | -                              | 3           | 5            | 6            | 6            | 7            | 27        | 84.4 |
| Workshop                             | 1                              | 3           | 5            | 7            | 6            | 6            | 28        | 87.5 |
| Educational trips                    | 1                              | 3           | 5            | 5            | 4            | 4            | 22        | 68.8 |
| Seminar                              | -                              | 4           | 3            | 5            | 5            | 4            | 21        | 65.6 |
| Teachers' convention-                |                                | 1           | 5            | 5            | 4            | 4            | 19        | 59.4 |
| Inter-school visit                   | 1                              | 3           | 6            | 5            | 5            | 4            | 24        | 75.0 |
| Symposium                            | -                              | -           | 2            | 1            | 2            | 3            | 8         | 25.0 |
| Farmers' convention                  | 1                              | 3           | 5            | 5            | 4            | 4            | 22        | 68.6 |
| Professional class                   | 1                              | 2           | 2            | 4            | 1            | 4            | 14        | 43.6 |
| Average number                       |                                |             |              |              |              |              |           |      |
| Attending all                        | .5                             | 2.4         | 4.2          | 4.8          | 4.1          | 4.3          | 20.5      | 64.1 |
| Types of Programs                    |                                |             |              |              |              |              |           |      |



conventions; 24 in inter-school visits; 8 in symposiums; 22 in farmers' conventions; and 14 in professional classes.

Grouped according to years of service the average number of administrators attending each of the 9 types of in-service activity listed follows: 1 - 5, 0.5; 6 - 10, 2.4; 11 - 15, 4.2; 16 - 20, 4.8; 21 - 25, 4.1; 26 - up, 4.3.

The average attendance or number participating rose steadily with the increase in years of service, reaching a maximum at the 16-20-year group; then it declined. The average number participating from the "26 - up" group appeared higher because the administrators placed in this group had an interval of 10 years rather than 5 as in the other groups. The most senior administrator in point of service had 36 years experience, followed by two others with 33 and 32 years, respectively. Were these three taken as a separate group the average attendance for the 26 - 30 group would have been 2.3 and the 31 - 36 group, 2.0.

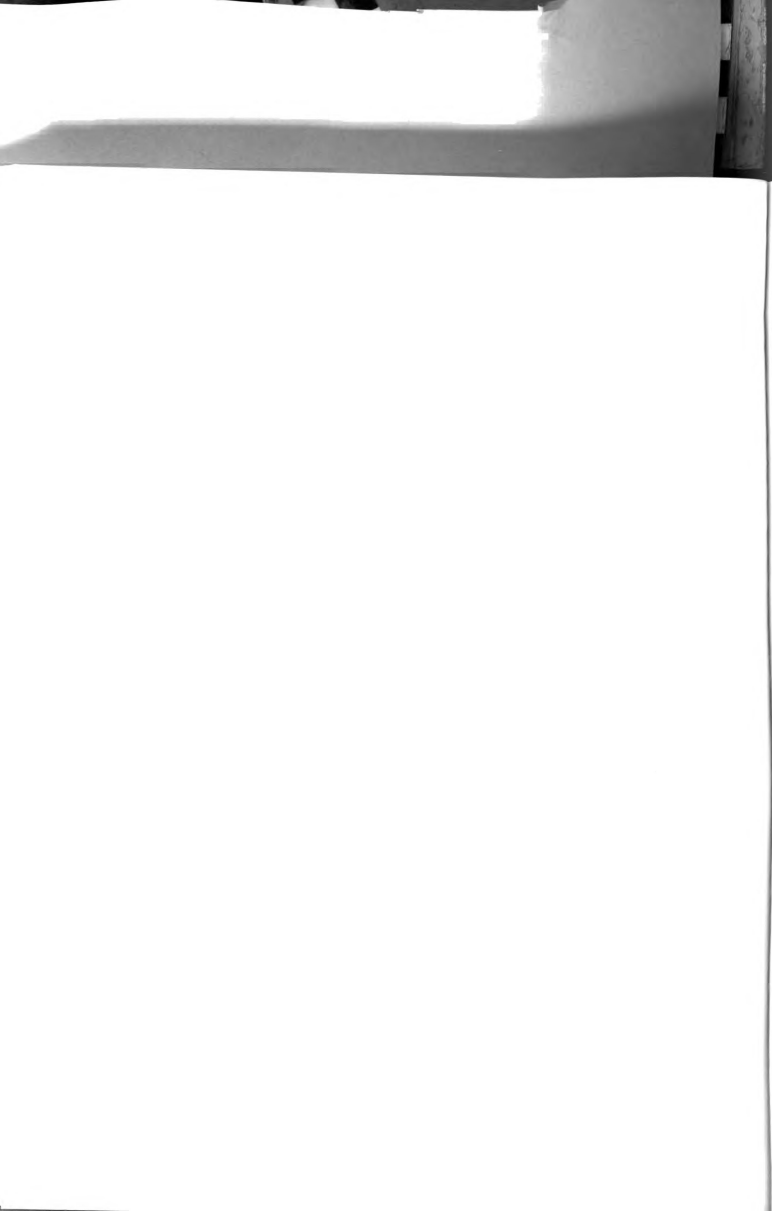
The relationship of length of tenure to the number of local in-service training activities organized and conducted by administrators is shown in Table XIX. Fourteen, or 44 percent of the administrators conducted workshops; 12, or 38 percent conducted seminars; 26, or 81 percent used demonstration teaching as an in-service training device; 22, or 69 percent conducted professional meetings; and 14, or 44 percent organized symposiums.





TABLE XIX. LENGTH OF TENURE AND TYPE OF IN-SERVICE TRAINING ACTIVITIES ORGANIZED AND CONDUCTED BY 32 RESPONDENT SCHOOL ADMINISTRATORS OF AGRICULTURAL SCHOOLS OF THE PHILIPPINES ON A LOCAL BASIS.

| Type of In-service                                                             | Administrators conducting In-service Activity Grouped According to Years of Tenure |      |       |       |       |       | T o t a l |      |
|--------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------|-------|-------|-------|-------|-----------|------|
|                                                                                | 1-5                                                                                | 6-10 | 11-15 | 16-20 | 21-25 | 26-up |           |      |
|                                                                                | (1)                                                                                | (4)  | (6)   | (7)   | (7)   | (7)   | (32)      |      |
|                                                                                |                                                                                    |      |       |       |       |       | N         | %    |
| Workshop                                                                       | -                                                                                  | 1    | 2     | 4     | 4     | 3     | 14        | 43.8 |
| Seminar                                                                        | -                                                                                  | 3    | 1     | 3     | 3     | 2     | 12        | 37.5 |
| Demonstrations                                                                 | 1                                                                                  | 4    | 2     | 7     | 6     | 6     | 26        | 81.3 |
| Professional meeting                                                           | -                                                                                  | 1    | 5     | 7     | 4     | 5     | 22        | 68.8 |
| Symposium                                                                      | -                                                                                  | 2    | 2     | 4     | 3     | 3     | 14        | 43.8 |
| Average number of Administrators conducting all types of In-service Activities | .2                                                                                 | 2.2  | 2.4   | 5.0   | 4.0   | 3.8   | 17.6      | 55.0 |



The average number of administrators organizing or conducting all of the five in-service training devices listed according to years of service are: 1-5, 0.2; 6-10, 2.2; 11-15, 2.4; 16-20, 5.0; 21-25, 4.0; 26-up, 3.8, or a total of 17.6 administrators. Like the participation in in-service training, the average number of administrators from each year-of-service group which organized or conducted local in-service programs rose steadily and reached its peak with the 16-20 group, and fell steadily from thence.

Table XX shows the relationship of average number participating and average number organizing or conducting in-service training programs. There was a high positive correlation (+ 0.81) between these two factors. Had the 26-up group been broken still further into five-year interval groups the correlation coefficient would have been much higher. However, this was not done in view of the negligible number involved.

#### Why Teachers Had Limited Participation in In-Service Training Programs

It has been shown that the 248 teachers studied participated only 1.1 times in five years in in-service training programs (Table XV). Table XXI shows the reasons why. The most important reason was "limited or no opportunity," given

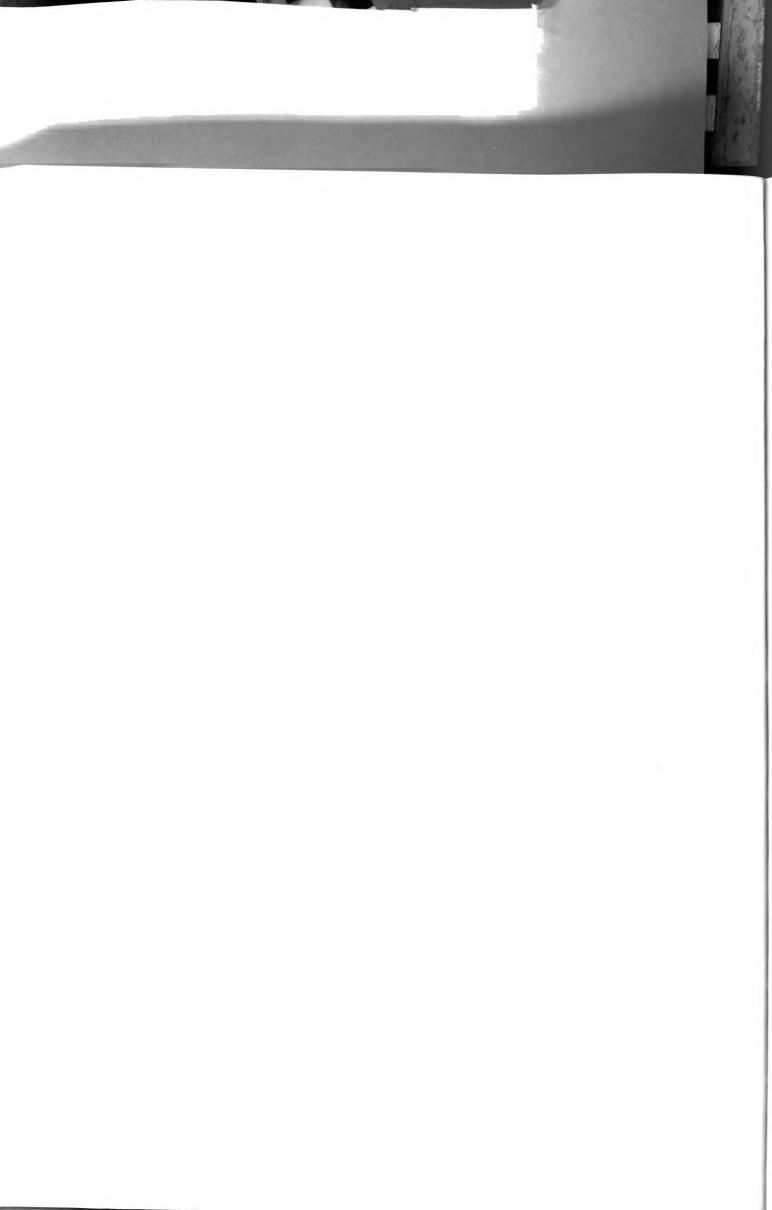


TABLE XX. RELATIONSHIPS OF THE YEARS OF TENURE OF ADMINISTRATORS, AVERAGE NUMBER PARTICIPATING IN IN-SERVICE TRAINING, AND AVERAGE NUMBER CONDUCTING IN-SERVICE TRAINING PROGRAMS FOR THEIR TEACHERS.

| Years of<br>Tenure | Number of<br>Cases | Average Number<br>Participating<br>In All Types<br>Activities<br>Listed |      | Average Number<br>Conducting All 5<br>Types of In-service<br>Activities<br>Listed |      |
|--------------------|--------------------|-------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------|------|
|                    |                    | N                                                                       | %    | N                                                                                 | %    |
| 1 - 5              | 1                  | .5                                                                      | 50.0 | .2                                                                                | 20.0 |
| 6 - 10             | 4                  | 2.4                                                                     | 60.0 | 2.2                                                                               | 55.0 |
| 11 - 15            | 6                  | 4.2                                                                     | 70.0 | 2.4                                                                               | 40.0 |
| 16 - 20            | 7                  | 4.8                                                                     | 68.6 | 5.0                                                                               | 71.4 |
| 21 - 25            | 7                  | 4.1                                                                     | 58.6 | 4.0                                                                               | 57.1 |
| 26 - up            | 7                  | 4.3                                                                     | 61.4 | 3.8                                                                               | 54.3 |
| T o t a l          | 32                 | 20.5                                                                    | 64.0 | 17.6                                                                              | 55.0 |

Coefficient of Correlation

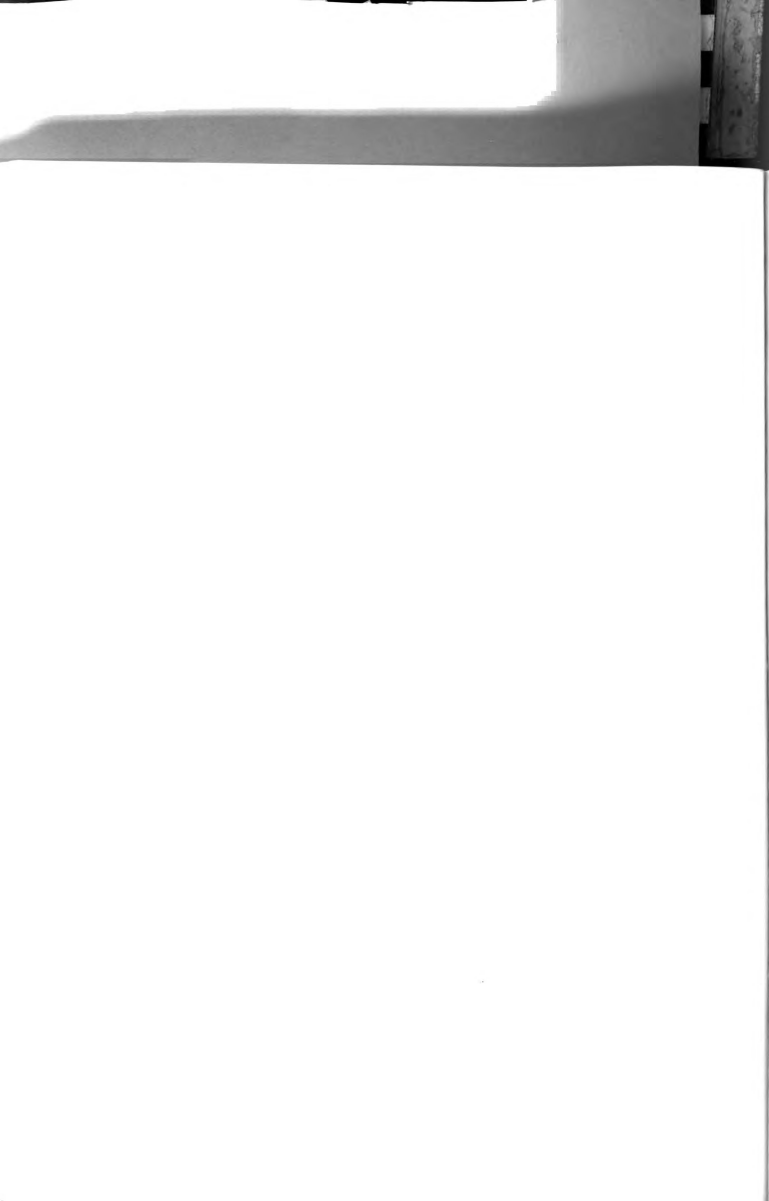
+ 0.81



TABLE XXI. REASONS GIVEN BY RESPONDENT TEACHERS FOR THEIR LIMITED PARTICIPATION OR NON-PARTICIPATION IN REGIONAL AND NATIONAL NON-CREDIT IN-SERVICE TRAINING ACTIVITIES CONDUCTED FROM 1956 - 1960.

| Reasons                       | Classification of Teachers by<br>Subject Taught |            |            |            |           |            |           | Total Rank<br>(248) |     |
|-------------------------------|-------------------------------------------------|------------|------------|------------|-----------|------------|-----------|---------------------|-----|
|                               | Agri.                                           | F. M.      | H. E.      | Lang.      | Soc. Sci. | Appl. Sci. | Math.     |                     |     |
|                               | (76)                                            | (37)       | (26)       | (57)       | (26)      | (14)       | (12)      |                     |     |
| Do not feel need              | N 1<br>% 1.3                                    | --<br>--   | -<br>-     | 2<br>3.5   | 1<br>3.8  | -<br>-     | -<br>-    | 4<br>1.6            | 5th |
| Subject not in interest field | N 9<br>% 11.8                                   | 4<br>10.8  | 1<br>3.8   | 13<br>22.8 | 4<br>15.3 | 3<br>21.4  | 3<br>25.0 | 37<br>14.9          | 3rd |
| Lack of private funds         | N 20<br>% 26.3                                  | 9<br>24.3  | 7<br>26.9  | 11<br>19.3 | 6<br>23.1 | 3<br>21.4  | -<br>-    | 56<br>22.6          | 2nd |
| Family responsibility         | N 7<br>% 9.2                                    | 4<br>10.8  | 3<br>11.5  | 11<br>19.3 | 2<br>7.7  | 1<br>7.1   | 3<br>25.0 | 31<br>12.5          | 4th |
| Limited or no opportunities   | N 58<br>% 76.3                                  | 21<br>56.8 | 20<br>76.9 | 41<br>71.9 | 8<br>30.8 | 13<br>92.9 | 8<br>66.7 | 153<br>61.7         | 1st |





by 153 or 62 percent of the teachers; followed by "lack of private funds" which was checked by 56 or 23 percent of the teachers. The other reasons were: "subject not in interest field," checked by 37 teachers; "family responsibility," checked by 31 teachers; and "do not feel the need," checked by 4 teachers.

The reasons given by teachers for their limited attendance at professional classes and regular summer school paralleled those which they gave for their limited participation in non-credit in-service training activities. "Year-round service" was ranked first in importance by 179 or 72 percent of the teachers. This partly explains the reason why the teachers had limited or no opportunity to attend or participate in non-credit in-service training programs held at the regional and national levels. Another important reason was the limited number of in-service programs held. The Central Office also limited the number of teachers allowed to participate in the regional and national programs held for financial reasons and in order not to disrupt the essential services of the schools.

Ninety-one, or 37 percent, of the teachers said they could not afford to go on study leave during summer without pay. Forty-five, or 18 percent, gave "not allowed to use sick leave for study" as a reason for their limited attendance in summer classes, while 41, or 17 percent, were limited by

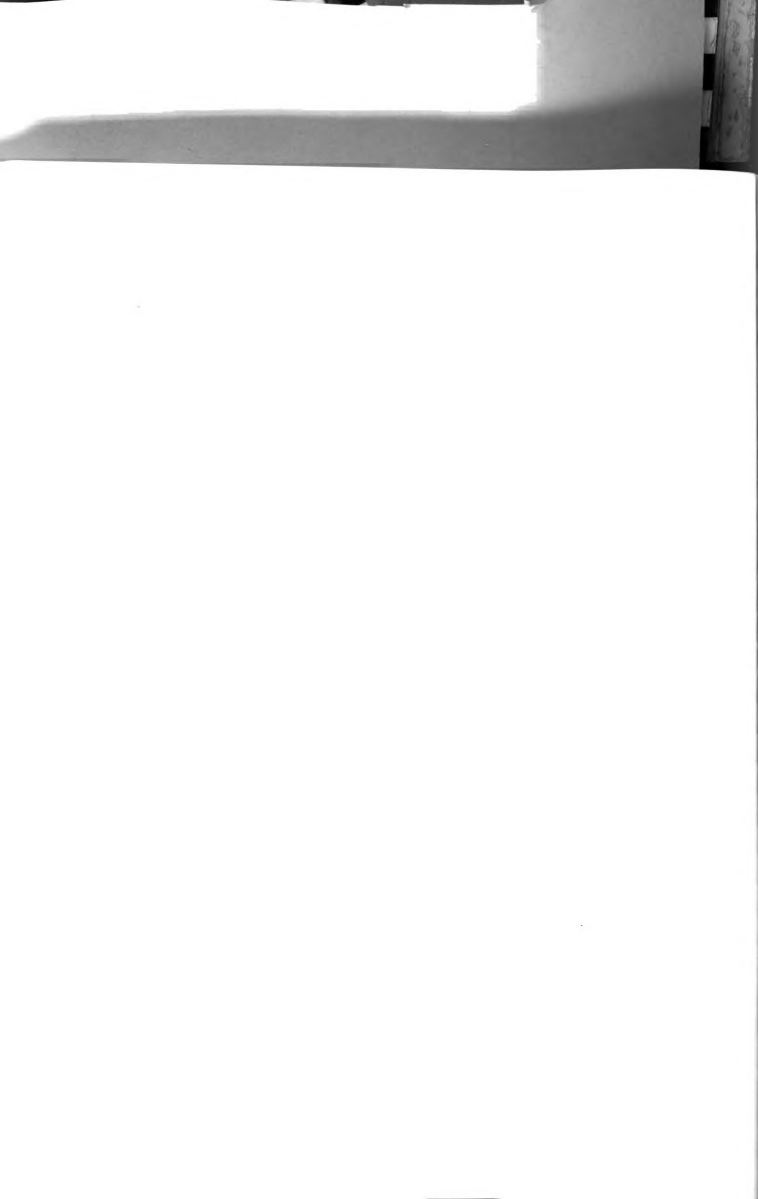
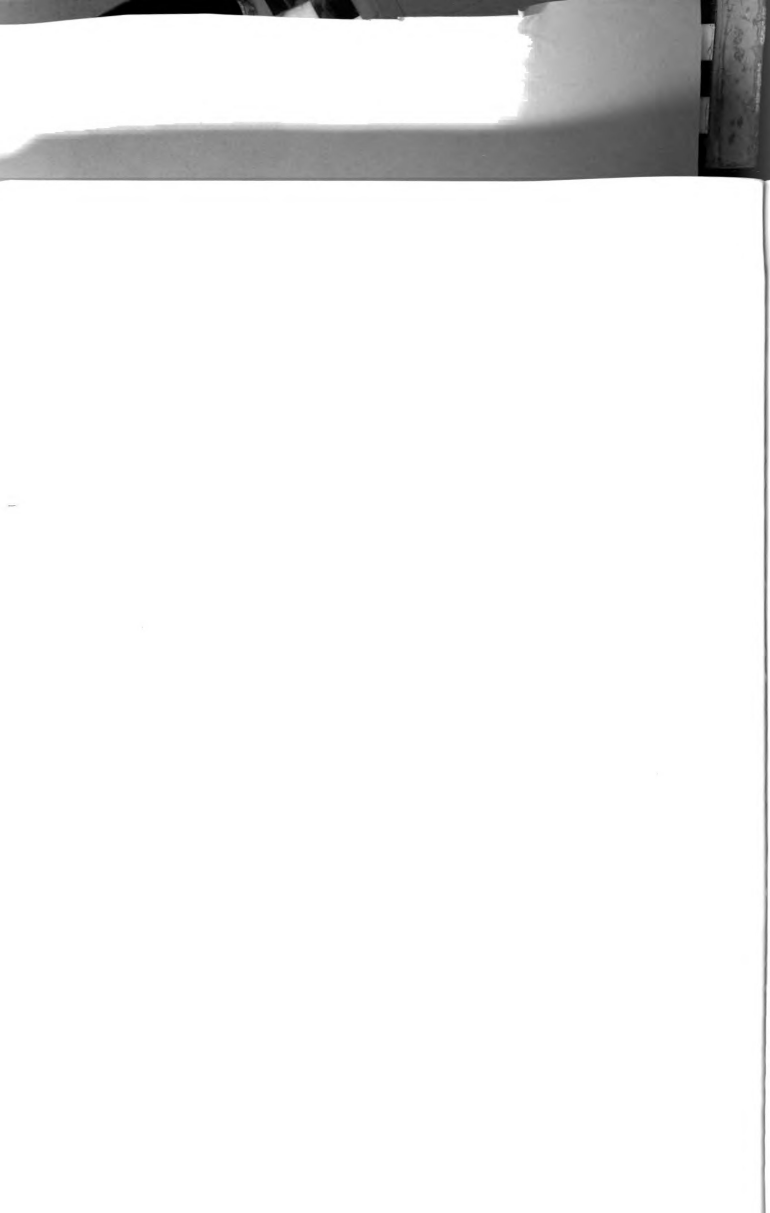


TABLE XXII. REASONS GIVEN BY RESPONDENT TEACHERS FOR THEIR LIMITED ATTENDANCE OR NON-ATTENDANCE AT REGULAR SUMMER SCHOOL CLASSES FOR REFRESHER TRAINING OR FOR ADVANCED CREDITS FROM 1956-1960.

| Reasons      |   | Classification of Teachers by<br>Subject Taught |       |       |       |              |              |       | Total Rank<br>(248) | Rank |
|--------------|---|-------------------------------------------------|-------|-------|-------|--------------|--------------|-------|---------------------|------|
|              |   | Agri.                                           | F. M. | H. E. | Lang. | Soc.         | Appl.        | Math. |                     |      |
|              |   | (76)                                            | (37)  | (26)  | (57)  | Sci.<br>(26) | Sci.<br>(14) | (12)  |                     |      |
| Year-round   | N | 56                                              | 25    | 23    | 42    | 9            | 12           | 12    | 179                 | 1st  |
| Service      | % | 73.7                                            | 67.6  | 88.5  | 73.7  | 34.6         | 34.7         | 100   | 72.2                |      |
| Can't afford | N | 36                                              | 13    | 9     | 21    | 5            | 3            | 4     | 91                  | 2nd  |
| study leave  | % | 47.4                                            | 35.1  | 34.9  | 36.8  | 19.2         | 21.4         | 25.0  | 36.7                |      |
| w/o pay      |   |                                                 |       |       |       |              |              |       |                     |      |
| Not allowed  | N | 18                                              | 7     | 5     | 7     | 4            | 3            | 1     | 45                  | 3rd  |
| to use sick  | % | 23.7                                            | 18.9  | 19.2  | 12.3  | 15.3         | 21.4         | 8.3   | 18.2                |      |
| leave for    |   |                                                 |       |       |       |              |              |       |                     |      |
| study        |   |                                                 |       |       |       |              |              |       |                     |      |
| Lack pri-    | N | 12                                              | 7     | 6     | 10    | 2            | 2            | 2     | 41                  | 4th  |
| vate funds   | % | 15.8                                            | 18.9  | 23.1  | 17.5  | 7.7          | 14.3         | 16.7  | 16.5                |      |
| Lack of      | N | 2                                               | -     | -     | 4     | -            | -            | 1     | 7                   | 5th  |
| incentives   | % | 2.6                                             | -     | -     | 7.0   | -            | -            | 8.3   | 2.8                 |      |
| Do not feel  | N | 1                                               | -     | -     | -     | -            | -            | 1     | 2                   | 6th  |
| need         | % | 1.3                                             | -     | -     | -     | -            | -            | 8.3   | 0.8                 |      |



"lack of private funds." Seven teachers gave "lack of incentives" as a reason; 2 said they did not feel the need.

Administrators were asked to rank eight items listed in the questionnaire as probable reasons for the limited participation by teachers at regional and national in-service training programs held within the five years embraced by the study. The responses of the administrators are given in Table XXIII in the order of importance based on the weighted scale ranks. "Service required throughout year" was ranked by the 32 administrators as the most important reason with scale rank of 4.43, followed by "service of most teachers throughout year indispensable," with 4.21; "limited school funds for travel," with 3.77; "General Office limits number of teachers," with 3.66; "limited subject fields offered," with 3.52; "teachers lack funds," with 3.42; "limited paid vacation leave," with 3.14; and "few workshops held," with 3.07 scale points as the least important. It is significant to note that all the reasons from most important to least important were given mean scale points of higher than 3.0 which was the midpoint on the scale.

A comparison of the reasons checked by teachers and by administrators for the limited or non-participation by the former in regional and national in-service training programs is shown in Table XXIV. The teachers and administrators agreed

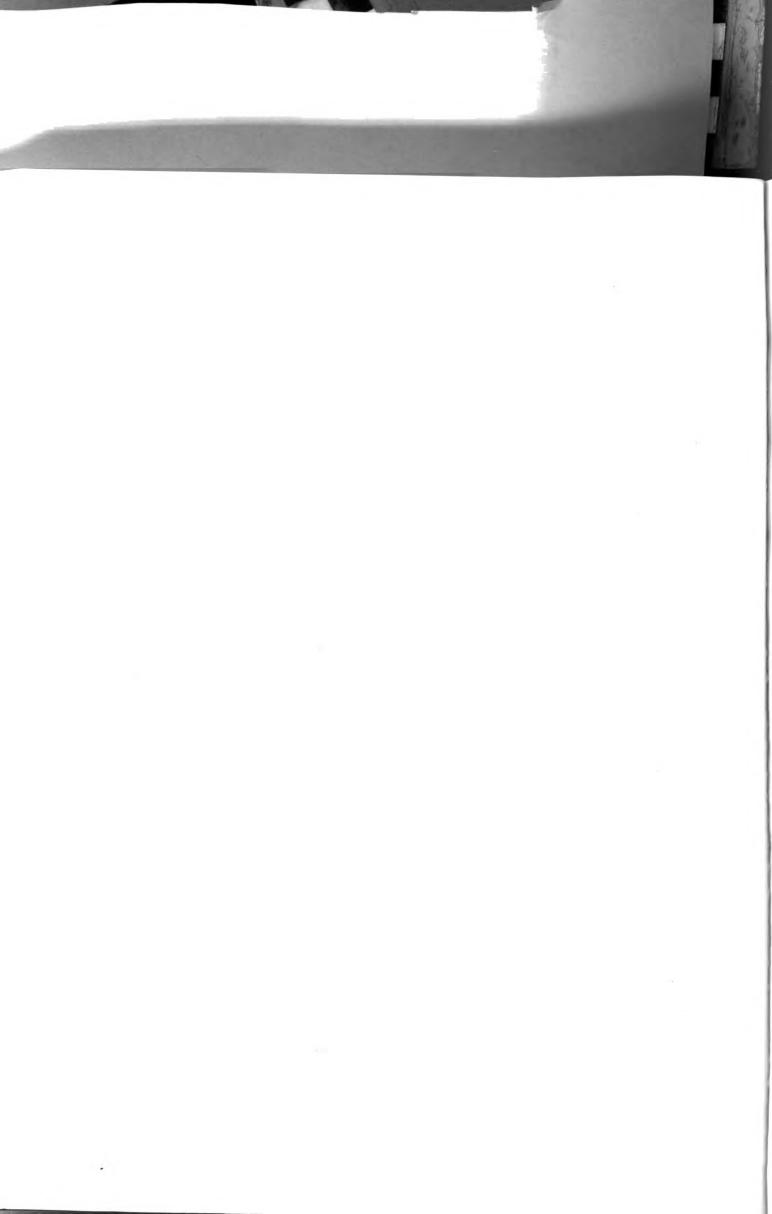


TABLE XXIII. REASONS GIVEN BY ADMINISTRATORS FOR THE LIMITED PARTICIPATION BY TEACHERS OF AGRICULTURAL SCHOOLS OF THE PHILIPPINES AT REGIONAL OR NATIONAL IN-SERVICE TRAINING PROGRAMS HELD FROM 1956 - 1960.

| R e a s o n s                          | Number of Administrators Giving Reason According to Scale of Importance * |   |   |   |    | Total<br>(32) | Average Scale Rank | Ranked Importance |
|----------------------------------------|---------------------------------------------------------------------------|---|---|---|----|---------------|--------------------|-------------------|
|                                        | 1                                                                         | 2 | 3 | 4 | 5  |               |                    |                   |
| Service required throughout year       | 1                                                                         | 4 | 1 | 4 | 23 | 32            | 4.43               | 1st               |
| Service of most teachers indispensable | 1                                                                         | - | 5 | 9 | 14 | 29            | 4.21               | 2nd               |
| Limited school funds for travel        | 1                                                                         | 3 | 7 | 6 | 10 | 27            | 3.77               | 3rd               |
| G.O. limits number of teachers         | 4                                                                         | 3 | 4 | 6 | 11 | 27            | 3.66               | 4th               |
| Limited subject field offered          | 1                                                                         | 3 | 9 | 6 | 6  | 25            | 3.52               | 5th               |
| Teachers lack funds                    | 3                                                                         | 2 | 7 | 4 | 7  | 23            | 3.42               | 6th               |
| Limited paid vacation leave            | 4                                                                         | 3 | 3 | 8 | 3  | 21            | 3.14               | 7th               |
| Few workshops held                     | 4                                                                         | 6 | 4 | 8 | 4  | 26            | 3.07               | 8th               |

\* Scale point values: 5 - Most important  
 4 - More important  
 3 - Important  
 2 - Less important  
 1 - Least important





TABLE XXIV. COMPARISON OF THE RANKED IMPORTANCE OF REASONS GIVEN BY TEACHERS AND BY ADMINISTRATORS FOR THE LIMITED PARTICIPATION IN REGIONAL AND NATIONAL IN-SERVICE TRAINING PROGRAMS OF TEACHERS FROM 1956 - 1960.

| R e a s o n s                                                         | According to Teachers |         |        | According to Administrators |               |
|-----------------------------------------------------------------------|-----------------------|---------|--------|-----------------------------|---------------|
|                                                                       | Number                | Percent | Rank** | Scale Rank*                 | Priority Rank |
| Do not feel the need                                                  | 4                     | 1.6     | 6th    | --                          | --            |
| Family responsibilities                                               | 31                    | 12.4    | 5th    | --                          | --            |
| Subject limited or not in interest field                              | 37                    | 14.9    | 4th    | 3.52                        | 3rd           |
| Lack of private funds                                                 | 56                    | 28.6    | 3rd    | 3.42                        | 4th           |
| Limited opportunity (Service required throughout year)                | 153                   | 61.7    | 1st    | 4.21                        | 1st           |
| Limited paid vacation leave (Not allowed to use sick leave for study) | 91                    | 36.7    | 2nd    | 3.14                        | 5th           |
| Limited school funds for travel                                       | --                    | --      | --     | 3.77                        | 2nd           |
| G. O. limits number attending                                         | --                    | --      | --     | 3.07                        | 6th           |

\*\* Ranking based on percentage of teachers giving reason.

\* Scale point values: 5 - Most important  
 4 - More important  
 3 - Important  
 2 - Less important  
 1 - Least important



as to the most important reason - "limited opportunity or service required throughout year," but differed in the others. The reason considered by teachers as second in importance was ranked by administrators fifth; what was ranked second by administrators was not ranked by teachers. The reasons ranked third and fourth in importance by teachers were ranked fourth and third, respectively by the administrators.

Table XXV shows the reasons given by administrators as to why the local in-service training programs which they organized and conducted for their teachers were limited. The most important reason was "too busy with administrative duties." Twenty-nine administrators out of 32 gave this reason an average scale rating of 4.13. "Teachers have little time" was rated second in importance with a scale rating of 3.66. "Teachers do not feel the need" received a scale rating of 2.42; "teacher-leadership lacking," 2.4; and "lack of incentives," 2.12.

#### Evaluation of In-Service Training Programs

To obtain a picture as to how the in-service training programs conducted for teachers from 1956 to 1960 benefited teachers of agricultural schools, administrators were asked to check from a list which of two, three, four or five values listed in the questionnaire fitted most closely their estimates



TABLE XXV. REASONS GIVEN BY ADMINISTRATORS FOR THE LIMITED NUMBER OF IN-SERVICE ACTIVITIES WHICH THEY ORGANIZED AND CONDUCTED LOCALLY RANKED ACCORDING TO IMPORTANCE ON A FIVE-POINT SCALE (1 - 5).

| R e a s o n s                       | Number of administrators giving reason according to scale of importance |   |    |    |    |            | Average importance in scale points | Ranked importance* |
|-------------------------------------|-------------------------------------------------------------------------|---|----|----|----|------------|------------------------------------|--------------------|
|                                     | 1                                                                       | 2 | 3  | 4  | 5  | Total (32) |                                    |                    |
| Too busy with administrative duties | 2                                                                       | 3 | 1  | 6  | 17 | 29         | 4.13                               | 1st                |
| Teachers have little time           | 4                                                                       | - | 4  | 12 | 7  | 27         | 3.66                               | 2nd                |
| Teachers do not feel the need       | 9                                                                       | 7 | 4  | 2  | 4  | 27         | 2.42                               | 3rd                |
| Teacher-leadership lacking          | 7                                                                       | 5 | 11 | -  | 2  | 25         | 2.40                               | 4th                |
| Lack of incentives                  | 9                                                                       | 6 | 8  | 2  | -  | 25         | 2.12                               | 5th                |



of the benefits derived from these programs. The responses of the administrators are shown in Table XXVI.

Eleven administrators said participating teachers benefited and improved their efficiency and effectiveness very much; 18 said much; and 3 said very little. To the question, "Have teachers who did not attend or participate been benefited?," 6 administrators said all were; 16 said more than half were; 3 said less than half were; 6 said very few were; and 1 said none were.

To the question whether the in-service programs held were sufficient or not, 2 administrators said the number was sufficient; 28 said the number was insufficient; 5 said the scope of the programs were broad enough; 11 said the programs were limited in scope.

Twenty-three administrators said they or some of their teachers participated in planning the in-service training programs; 9 said they did not. Only two administrators said that all the things which teachers learned from in-service training programs were immediately implemented; 24 said most were; and 6 said few were.

Five administrators said that all the subjects discussed at in-service programs were important and practical; 26 said most were; and 1 said few were.

More than half, or 17 administrators said workshops,





TABLE XXVI. CUMULATIVE EVALUATION OF IN-SERVICE TRAINING ACTIVITIES ATTENDED BY TEACHERS OF AGRICULTURAL SCHOOLS OF THE PHILIPPINES BY PRINCIPALS AND SUPERINTENDENTS OF THESE SCHOOLS

| Item or Criteria                                                                                              | Descriptive measure of benefits derived from in-service activities | Number of Administrators voting |      |
|---------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|---------------------------------|------|
|                                                                                                               |                                                                    | N                               | %    |
| 1. Participating teachers benefited and improved their efficiency and effectiveness.                          | Very much                                                          | 11                              | 34.4 |
|                                                                                                               | Much                                                               | 18                              | 56.3 |
|                                                                                                               | Very little                                                        | 3                               | 9.4  |
| 2. Have teachers who did not attend or participate been benefited?                                            | All were                                                           | 6                               | 18.8 |
|                                                                                                               | More than half were                                                | 16                              | 50.0 |
|                                                                                                               | Less than half were                                                | 3                               | 9.4  |
|                                                                                                               | Very few were                                                      | 6                               | 18.3 |
|                                                                                                               | None were                                                          | 1                               | 3.1  |
| 3. Were there enough in-service programs of sufficiently broad scope held?                                    | Number sufficient                                                  | 2                               | 6.3  |
|                                                                                                               | Number insufficient                                                | 28                              | 87.5 |
|                                                                                                               | Scope broad enough                                                 | 5                               | 15.6 |
|                                                                                                               | Scope too limited                                                  | 11                              | 34.4 |
| 4. How long would you like workshops or conventions and conferences to be?                                    | Less than one week                                                 | 2                               | 6.3  |
|                                                                                                               | One week                                                           | 8                               | 25.0 |
|                                                                                                               | Two weeks                                                          | 17                              | 53.1 |
|                                                                                                               | Three weeks or more                                                | 5                               | 15.6 |
| 5. Did you or your teachers participate in planning the activities?                                           | Yes                                                                | 23                              | 71.9 |
|                                                                                                               | No                                                                 | 9                               | 28.1 |
| 6. Were the knowledges learned, information gained, or decisions made immediately implemented in your school? | All were                                                           | 2                               | 6.3  |
|                                                                                                               | Most were                                                          | 24                              | 75.0 |
|                                                                                                               | Few were                                                           | 6                               | 18.3 |
|                                                                                                               | None were                                                          | --                              | --   |
| 7. Were the subjects or problems discussed at in-service programs important and practical?                    | All were                                                           | 5                               | 15.6 |
|                                                                                                               | Most were                                                          | 26                              | 81.3 |
|                                                                                                               | Few were                                                           | 1                               | 3.1  |
|                                                                                                               | None were                                                          | -                               | --   |



conventions and conferences should be held for at least two weeks; 8 said one week; 5 said three weeks or more; and 2 said less than one week.

Teachers who participated in one or more in-service training programs (206) at any level were asked to evaluate the program or programs which they attended by checking very true, partially true, or not true opposite each of 18 positive statements regarding the in-service training programs which they attended, or the benefits they derived. A summary of the teachers' evaluation is given in Table XXVII.

The three categories of responses were assigned scale points: very true - 1; partially true - 2; and not true - 3. On the basis of these scale points the average weighted rank of each item in the checklist were computed. All but two items received an average weighted scale rank of less than 2.0. The exceptions were Items 2 and 6. The first concerns the involvement of teachers in the planning of in-service training programs in which 50 teachers said they did not participate; 41 said they participated in some; and 22 said they participated in all or most. The scale rank of 2.2 given to Item 6 is more favorable than not since the statement is positive on the negative side: "Many topics or problems of which I have great need were not discussed." In other words, the 35 teachers who checked this item as not true were really



TABLE XXVII. EVALUATION OF THE IN-SERVICE TRAINING ACTIVITIES FOR TEACHERS OF AGRICULTURAL SCHOOLS FROM 1956 - 1960 BY TEACHERS IN ATTENDANCE.

| Statements about the in-service training activities attended and the benefits derived. | V.T.<br>(1)* | P.T.<br>(2)* | N.T.<br>(3)* | Weighted<br>Scale<br>Rank |
|----------------------------------------------------------------------------------------|--------------|--------------|--------------|---------------------------|
| <u>Planning of programs:</u>                                                           |              |              |              |                           |
| 1. Activities were well planned.                                                       | 96           | 33           | 0            | 1.3                       |
| 2. Helped plan activities.                                                             | 22           | 41           | 50           | 2.3                       |
| 3. Principal/Superintendent helped plan activities                                     | 37           | 36           | 44           | 1.6                       |
| 4. Activities well organized and carried out satisfactorily.                           | 72           | 58           | 2            | 1.5                       |
| <u>Importance of subjects:</u>                                                         |              |              |              |                           |
| 5. Had felt need for all or most topics discussed.                                     | 65           | 44           | 9            | 1.5                       |
| 6. Many topics or problems I had great need for not discussed.                         | 16           | 70           | 35           | 2.2                       |
| <u>Benefits derived:</u>                                                               |              |              |              |                           |
| 7. Learned much new insight & skills.                                                  | 89           | 37           | 0            | 1.3                       |
| 8. Have improved very much.                                                            | 63           | 58           | 0            | 1.5                       |
| 9. Satisfied with opportunities for in-service training.                               | 15           | 47           | 5            | 1.8                       |
| 10. Total school program improved.                                                     | 55           | 61           | 9            | 1.6                       |
| <u>Method of programs:</u>                                                             |              |              |              |                           |
| 11. Leaders skilled in communicating ideas and guiding discussions.                    | 69           | 55           | 3            | 1.5                       |
| 12. Leaders encouraged participation and accepted ideas of teachers.                   | 86           | 40           | 4            | 1.4                       |
| 13. Resource persons helpful and fully utilized.                                       | 88           | 38           | 2            | 1.3                       |
| 14. All topics thoroughly discussed.                                                   | 48           | 72           | 11           | 1.9                       |
| <u>Application of learnings:</u>                                                       |              |              |              |                           |
| 15. Immediately applied.                                                               | 72           | 53           | 1            | 1.4                       |
| 16. Led in local in-service programs.                                                  | 46           | 62           | 11           | 1.9                       |
| <u>Opportunities for participation:</u>                                                |              |              |              |                           |
| 17. Teachers' opportunities nil.                                                       | 33           | 55           | 26           | 1.9                       |
| 18. Too few in-service programs held.                                                  | 74           | 51           | 3            | 1.4                       |

\*Scale points: V.T. (very true) - 1  
P.T. (partially true - 2  
N.T. (not true) - 3



saying that all the problems and topics for which they had a pressing need were taken up.

Attention is invited, however, to Items 17 and 18. The relatively low scale points (1.9 and 1.4, respectively) assigned to these items are more unfavorable than favorable. A "very true" response to these items indicates weaknesses in the in-service training programs provided.

In general teachers agreed with administrators as to the benefits derived from and the effectiveness of the in-service training programs attended or participated in by teachers. They also agreed, generally, on the weaknesses of the programs.

#### Improvement of In-Service Training Programs

The steps recommended by 50 percent or more of both the administrators and teachers (32 plus 248) are presented in Table XXVIII. These are listed in the order of importance based on the total number or percent of the administrators and teachers making the recommendations.

1. Summer Classes. One hundred and sixty-seven, or 59.6 percent of the administrators and teachers (24 + 143) recommended that more teachers be given opportunity to attend summer classes on official time but personal expense; 152, or 56.4 percent (21 + 137) recommended that qualified administrators be authorized to organize and conduct credit courses on



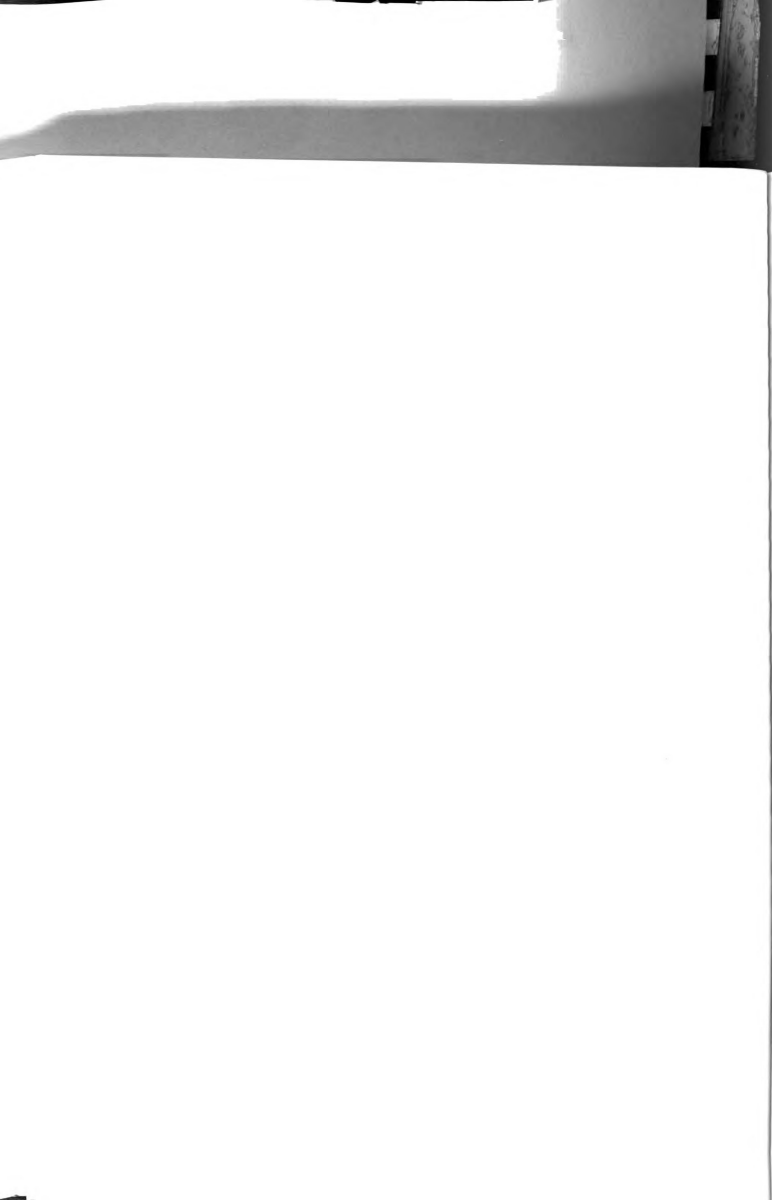


TABLE XXVIII. STEPS SUGGESTED BY SCHOOL ADMINISTRATORS AND TEACHERS TO IMPROVE THE QUALITY OF IN-SERVICE TRAINING PROGRAMS AND INCREASE THE OPPORTUNITIES OF TEACHERS OF AGRICULTURAL SCHOOLS TO ATTEND.

| Recommended steps<br>to be taken                                                                                                                                                                                               | Number of<br>Administrators Recom-<br>mending |      | Number of<br>Teachers<br>Recommend-<br>ing |      | Total<br>(280) |      | Group<br>Ranks |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|------|--------------------------------------------|------|----------------|------|----------------|
|                                                                                                                                                                                                                                | N                                             | %    | N                                          | %    | N              | %    |                |
| <u>Summer classes:</u>                                                                                                                                                                                                         |                                               |      |                                            |      |                |      |                |
| More teachers be<br>given opportunity<br>to attend on of-<br>ficial time but<br>personal expense.                                                                                                                              | 24                                            | 75.0 | 143                                        | 57.7 | 167            | 59.6 | 1st            |
| Qualified adminis-<br>trators be author-<br>ized to organize<br>and conduct credit<br>courses on graduate<br>level during summer<br>or school year on<br>school campus by<br>arrangement with<br>teacher-training<br>colleges. | 21                                            | 65.6 | 137                                        | 55.2 | 158            | 56.4 | 2nd            |
| Teachers be given<br>opportunity to<br>attend summer<br>school once every<br>two years partly<br>on official time<br>and partly on<br>vacation and sick<br>leave time.                                                         | 16                                            | 50.0 | 130                                        | 52.4 | 146            | 52.1 | 3rd            |
| State colleges and<br>universities en-<br>couraged to organize<br>off-campus credit<br>courses.                                                                                                                                | 22                                            | 68.8 | 121                                        | 48.8 | 143            | 51.1 | 4th            |

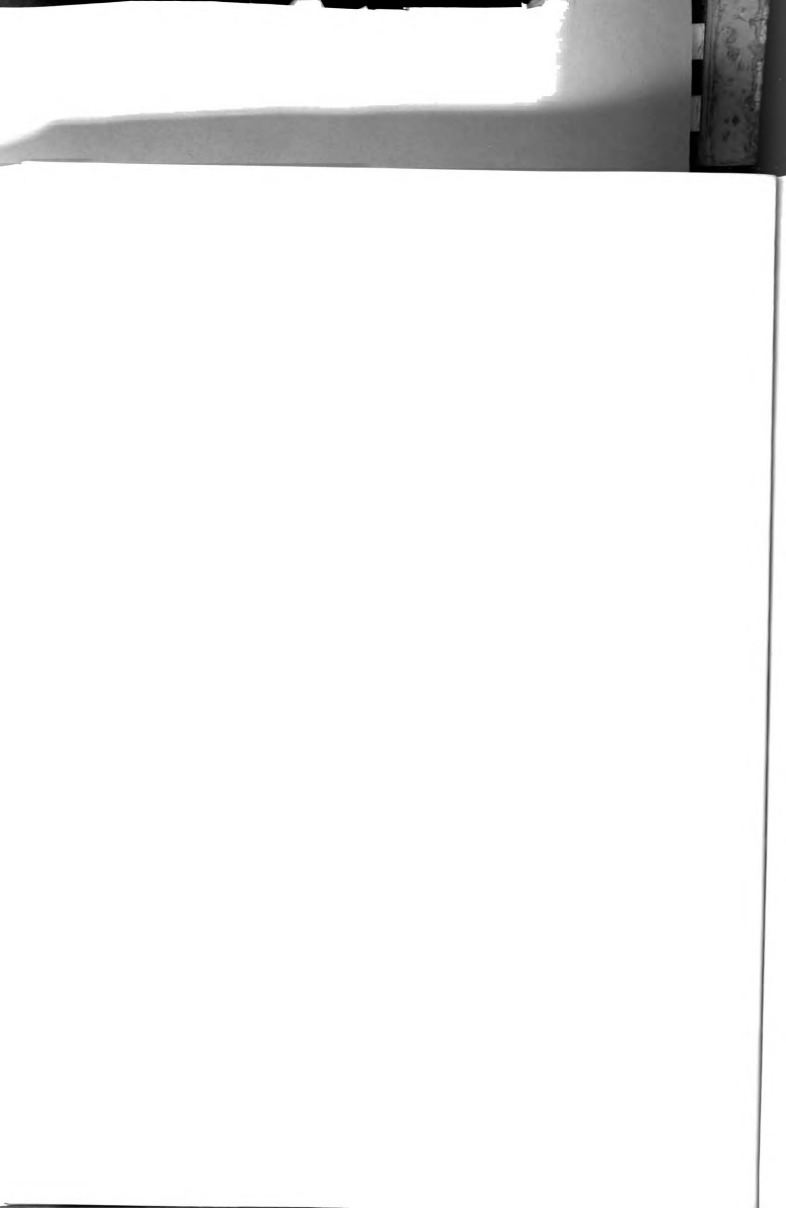


TABLE XXVIII (Continued)

| Recommended steps<br>to be taken                                                                                                                   | Number of<br>Administra-<br>tors Recom-<br>mending |      | Number of<br>Teachers<br>Recommend-<br>ing |      | Total<br>(280) |      | Group<br>Ranks |
|----------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|------|--------------------------------------------|------|----------------|------|----------------|
|                                                                                                                                                    | N                                                  | %    | N                                          | %    | N              | %    |                |
| <u>Workshops and<br/>Conventions:</u>                                                                                                              |                                                    |      |                                            |      |                |      |                |
| More workshops be<br>held                                                                                                                          | 24                                                 | 75.0 | 172                                        | 69.4 | 196            | 70.0 | 1st            |
| Should deal<br>with subjects<br>teachers' feel<br>need for.                                                                                        | 22                                                 | 68.8 | 171                                        | 68.9 | 193            | 68.9 | 2nd            |
| Teachers and<br>administrators<br>be involved in<br>planning activi-<br>ties.                                                                      | 26                                                 | 81.3 | 144                                        | 58.1 | 170            | 60.7 | 5th            |
| Schools earmark<br>adequate sums<br>out of allotments<br>for traveling<br>expenses of teach-<br>ers attending in-<br>service training<br>programs. | 18                                                 | 56.3 | 157                                        | 63.3 | 175            | 62.5 | 3rd            |
| Specific funds<br>be allocated<br>yearly by G. O.<br>for workshops.                                                                                | 28                                                 | 87.5 | 146                                        | 58.9 | 174            | 62.1 | 4th            |
| Teachers attend-<br>ing workshops<br>be selected<br>based on indivi-<br>dual needs                                                                 | 19                                                 | 59.4 | 148                                        | 59.7 | 167            | 59.6 | 6th            |
| Outstanding<br>teachers and<br>administrators<br>be utilized as<br>resource persons.                                                               | 21                                                 | 65.6 | 128                                        | 51.6 | 149            | 53.2 | 7th            |



TABLE XXVIII (Continued)

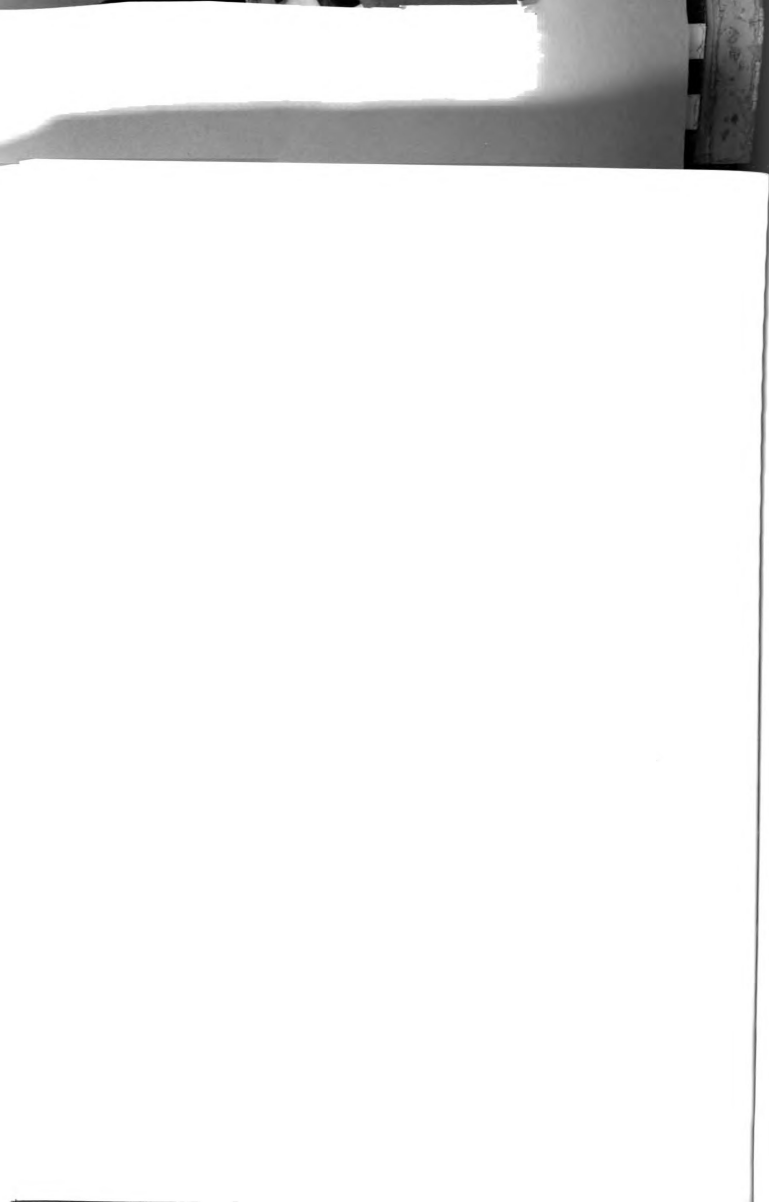
| Recommended steps<br>to be taken                                                                                                                            | Number of<br>Administrators Recom-<br>mending |      | Number of<br>Teachers<br>Recommend-<br>ing |      | Total<br>(280) |      | Group |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|------|--------------------------------------------|------|----------------|------|-------|
|                                                                                                                                                             | N                                             | %    | N                                          | %    | N              | %    |       |
| <u>Other in-service<br/>training devices</u>                                                                                                                |                                               |      |                                            |      |                |      |       |
| Inter-school<br>visits by<br>teachers and<br>administrators.                                                                                                | 27                                            | 84.4 | 168                                        | 67.7 | 195            | 69.6 | 1st   |
| More local in-<br>service pro-<br>grams be held                                                                                                             | 21                                            | 65.6 | 159                                        | 64.1 | 180            | 64.3 | 2nd   |
| <u>Other steps<br/>recommended:</u>                                                                                                                         |                                               |      |                                            |      |                |      |       |
| Use of school<br>vehicles for<br>educational<br>trips be al-<br>lowed.                                                                                      | 21                                            | 65.6 | 165                                        | 66.5 | 186            | 66.4 | 1st   |
| Each school<br>earmark at<br>least 500<br>pesos from pro-<br>duction income<br>for purchase<br>of professional<br>and technical<br>books, journals,<br>etc. | 20                                            | 62.5 | 156                                        | 62.9 | 176            | 62.9 | 2nd   |
| Convention or<br>workshop sche-<br>dules provide<br>time for re-<br>laxation and<br>informal dis-<br>cussions                                               | 23                                            | 71.9 | 147                                        | 59.3 | 171            | 61.1 | 3rd   |
| Relaxation of<br>restrictions on<br>travel of teachers<br>outside province<br>for purposes of<br>in-service growth.                                         | 22                                            | 68.8 | 135                                        | 54.4 | 157            | 56.1 | 4th   |



the graduate level during summer or regular school year on the campuses of agricultural schools by arrangement with any of the state teacher-training institutions. One hundred and forty-six, or 52.1 percent recommended that teachers be given opportunity to attend summer school once every two years partly on official time and partly on vacation and sick-leave time; and 143, or 51.1 percent recommended that state colleges and universities be encouraged to organize and conduct off-campus classes for graduate credits at centers accessible to teachers.

2. Workshops and Conventions. One hundred and ninety-six, or 70 percent of the administrators and teachers recommended that more workshops dealing on various aspects of the school program be held regularly each year; 193, or 68.9 percent recommended that workshops deal with subjects of which the school and the teachers have felt needs. One hundred and seventy-five, or 62.5 percent recommended that each agricultural school earmarks adequate amounts out of its yearly allotment for the traveling expenses of teachers participating in regional and national workshops; 174, or 62.1 percent recommended that the General Office allocates specific funds each year to finance workshops and conventions; 170, or 60.7 percent recommended that teachers and administrators be involved in planning workshop and convention activities. One





hundred sixty-seven, or 59.6 percent recommended that teachers attending regional and national workshops be selected on the basis of individual needs; and 149, or 53.2 percent recommended that outstanding teachers and administrators be utilized as resource persons at regional and national workshops.

3. Other In-Service Training Devices. More than fifty percent of the administrators and teachers also recommended the following: (1) Inter-school visitation be developed as an important in-service training device; (2) More local in-service programs be conducted; (3) Follow-up visits by teacher-training institutions of their graduates; and (4) Refresher courses be conducted on the campuses of some agricultural schools.

4. Other Steps Recommended. Four other steps were recommended by more than 50 percent of the administrators and teachers, namely: (1) Use of school vehicles for educational trips of teachers; (2) Schools earmark at least 500 pesos from their production incomes yearly for the purchase of professional and technical books, and subscription to professional and technical magazines and journals; (3) Convention or workshop schedules should provide time for relaxation and informal group discussions by teacher-participants; and (4) Relaxation of restrictions imposed by the General Office on the travel of teachers outside of their stations for purposes of



in-service growth.

5. Scope of In-Service Programs. On the level or scope of in-service programs 50 percent of the administrators recommended that regional programs should be given the greatest emphasis (Table XXIX). On the other hand, 83 teachers (33.5 percent) recommended that in-service training programs held at all levels (local, regional and national) be given increased emphasis. Combining the recommendations by both administrators and teachers gave "all" 91 votes for first rank; "regional," second; "national," third; and "local," fourth. The vote difference given to national and local programs was very insignificant.

In sum, administrators and teachers, together, recommended that all levels of in-service training programs be given increased emphases.

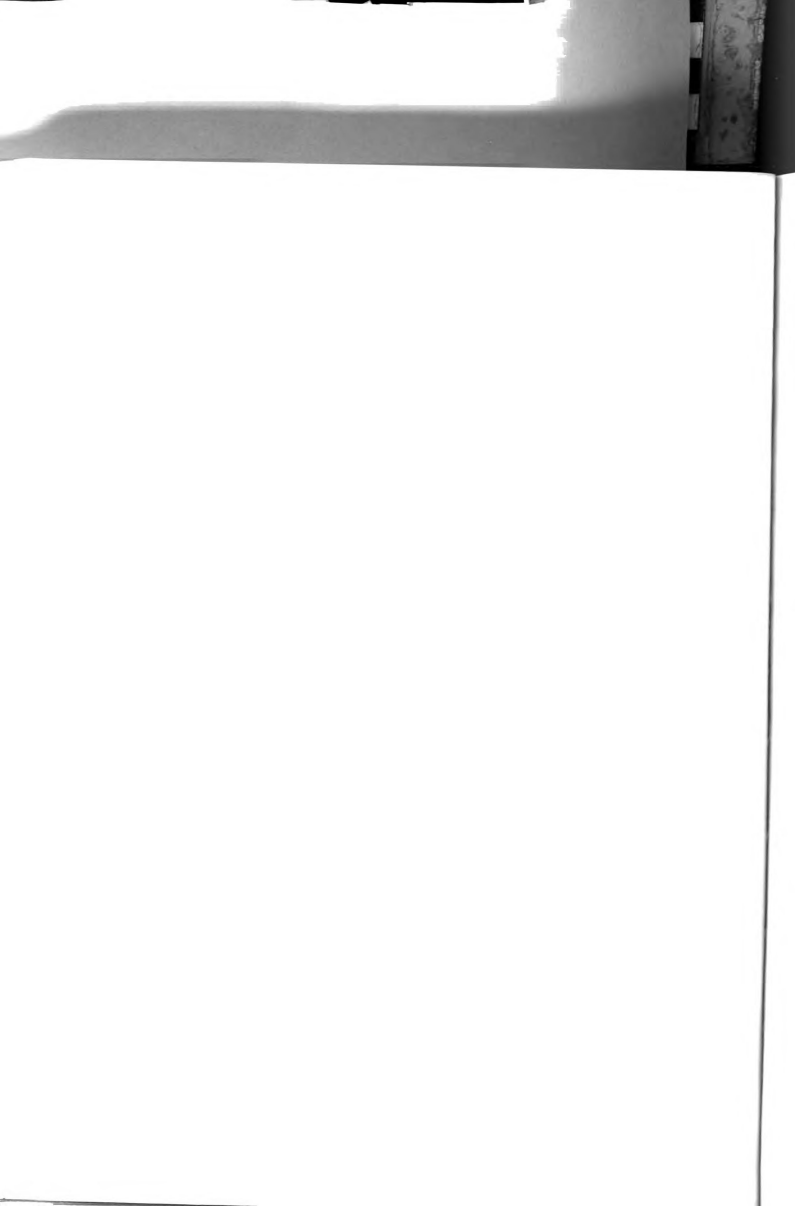


TABLE XXIX. GEOGRAPHIC SCOPE OF IN-SERVICE TRAINING PROGRAMS WHICH SHOULD BE GIVEN INCREASED EMPHASES ACCORDING TO THE OPINION OF ADMINISTRATORS AND TEACHERS IN AGRICULTURAL SCHOOLS.

| Locale of in-service<br>Training Program | Administrators<br>Voting<br>(32) |       | Teachers<br>Voting<br>(248) |      | Total<br>(280) |      | Vote<br>Rank |
|------------------------------------------|----------------------------------|-------|-----------------------------|------|----------------|------|--------------|
|                                          | N                                | %     | N                           | %    | N              | %    |              |
| Local                                    | 7                                | 21.9  | 46                          | 18.6 | 53             | 18.9 | 4th          |
| Regional                                 | 16                               | 50.0  | 66                          | 26.6 | 82             | 29.3 | 2nd          |
| National                                 | 1                                | 3.1   | 53                          | 21.4 | 54             | 19.3 | 3rd          |
| All (local, regional<br>and national)    | 8                                | 25.0  | 83                          | 33.5 | 91             | 32.5 | 1st          |
| T o t a l                                | 32                               | 100.0 | 248                         | 100  | 280            | 100  |              |

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## CHAPTER V

BASIS AND PROPOSALS FOR IMPROVING  
IN-SERVICE TRAINING PROGRAMS

Up to this point it has been shown that (1) teachers of agricultural schools of the Philippines have many felt in-service training needs, and (2) the in-service training programs provided at the local, regional, and national levels are inadequate to meet these needs.

In this chapter an attempt shall be made (1) to interpret the implications of the findings on the program of in-service education and pre-service teacher training in general, (2) to formulate principles and guidelines from the results of the study in light of trends and existing practices to form the basis for planning and improving the in-service education of teachers in the Philippines, and (3) to make specific proposals as to how the current in-service training programs provided for teachers of agricultural schools of the Philippines may be improved and expanded in scope and number so as to meet the needs and maximize the opportunities of teachers for in-service professional and educational growth. If successful in this attempt objectives Nos. 7 to 10 would have been accomplished.

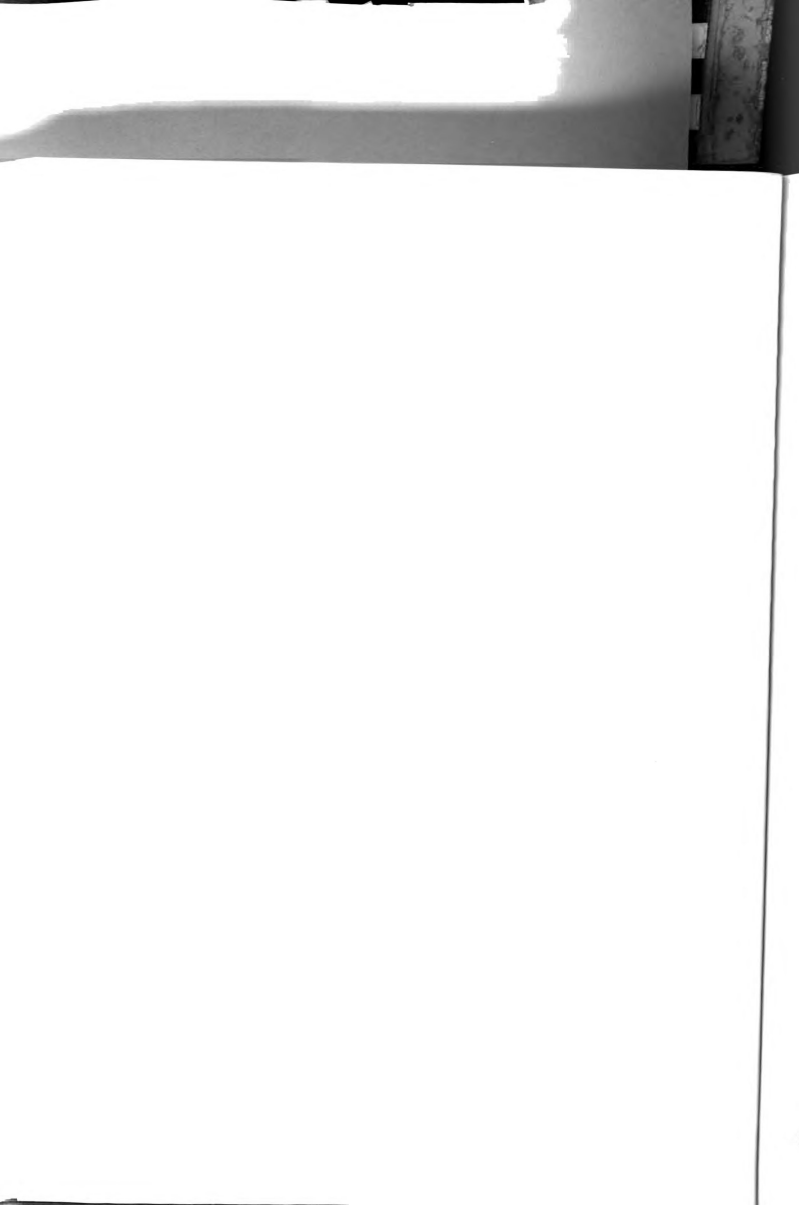




### Implications of the Findings

The data on the educational qualifications and the teaching assignment of teachers (Tables III and XIII) indicate that there still exists a relatively high disparity between major and minor fields of specialization in the college pre-service preparation of teachers and the subjects teachers are assigned to teach. The fact that 14 percent of the teachers were teaching subjects which they were not qualified to teach emphasizes this point. This has important implications for the employment practices or screening of teacher-applicants and on the in-service training programs. The presence on the school staff of many unqualified teachers poses a serious problem to school administrators. To upgrade these teachers, it would seem that the holding of appropriate and adequate in-service training programs is the best remaining alternative available to administrators. However, this is not a permanent solution. It will not stop the further employment of poorly qualified teachers. The possibility of evolving a certification policy which would minimize or completely eliminate the problem of having too many unqualified teachers on the faculty should be also explored.

It was suggested in Table II that a sizable proportion of the teachers are 1-10 years in the service. If true now, no doubt the rapid increase in the number of agricultural



schools by conversion of existing general high schools and creation of new ones which necessitates the employment of new teachers beyond the normal requirements due to annual increments in enrollments will swell the number of young teachers more and more. Consequently, an intensified program of in-service education will be needed to meet even the most urgent needs of beginning teachers.

The trend suggested in Table IV that more and more teachers (28.6 percent as against 25 percent reported by Cedillo in 1955) are earning college credits after employment is encouraging, but as the relatively small percentage able to earn credits indicate not enough is being done. Local school administrators and the Central Office should try to provide opportunities to many more teachers and promote this trend by providing well-planned in-service education programs, including the offering of more graduate courses.

The in-service training needs expressed by teachers and administrators in several broad fields and specialized areas suggest: (1) that the pre-service education received by teachers left much to be desired. This could be attributed to several causes such as the rapid accumulation of new knowledge and change in subject matter, the low standards of instruction in some colleges, and, importantly, the lack of coordination between teacher-training institutions on one hand and the



Bureau of Public Schools on the other. The lack of coordination has been recognized not too long ago and some action has already been taken by high officials of the Department of Education and Bureau of Public Schools. Much has been accomplished since then but one serious limitation still exists: the coordination now in operation is among state teacher-training institutions and the Bureau of Public Schools only. No direct cooperation exists between the public schools and private teacher-training institutions which supply the greater bulk of academic or related subject teachers. Since academic teachers have as much need for in-service education as vocational teachers it seems appropriate to suggest that private teacher-training institutions be also involved in the cooperative program.

(2) It seems imperative that in-service training programs to be planned for the future be as comprehensive as possible so as to be responsive to the needs of all teachers. A similar prescription for in-service education programs intended for principals and superintendents also seems appropriate. Such programs will necessarily draw heavily upon the professional, technical, and financial resources of the Bureau of Public Schools and the individual schools. However, no effort and no resource should be spared for the sake of economy in pushing these programs forward.



The low percentage of teachers able to attend or participate in in-service training programs each year (less than 3 from each school) suggests that more programs should be held, or that more teachers should be given the opportunity to attend whatever programs will be held. Both steps will of course pose administrative difficulties, financially and in terms of disruption of services. These difficulties, however, could be minimized by good programming and scheduling of activities.

The data in Table XI also indicate that teachers have not been given equal opportunities to participate in the various types and levels of in-service training programs. For instance, to cite only the extremes, 42 teachers never participated in any program at all in five years, whereas 65 participated in at least one or more at each level (local, regional, and national). If a balanced growth is to be achieved a more equitable allocation of opportunities to participate in in-service training programs is necessary.

The picture depicted in Table XIIA presents yet another problem which planners of in-service training programs must face. The data here show that beyond 15 years of service the percentage participation by teachers in in-service training programs declines continuously as the teachers get older and older in the service. While the evidence is inconclusive because





of the scantiness of the sample, whatever the real reasons are the decline should be investigated. It seems the down-trend occurs much too early in the professional career of the teacher. A possible explanation is suggested by Table XXIV: limited opportunities, and the inability of teachers to take advantage of the few offered them, for lack of funds as a result of low salaries and increasing family responsibilities. Although not considered by the teachers as an important reason, lack of incentives could be an important factor in the decline of participation. Regardless of the true causes the trend should be a matter of concern, and how to avoid it, or prolong the period of increasing participation to 20 or more years of service, should be investigated. If the decline in participation goes unchecked a situation in which too many teachers are not growing or have not grown professionally could result.

Another interesting, if not potentially significant, information may be gleaned by comparing the trend exhibited in Table XII-A to that portrayed in Table XX. By inspection the trends are not exactly congruent. The down-trend in the teachers' participation in in-service training programs begins after 15 years of service, while the down-trends in the participation and the number of in-service training programs conducted by administrators begin their dips after 20 years of service. It is apparent, however, that a positive relationship





exists between these trends. This would seem to suggest that the loss in attendance at in-service training programs by administrators, and the corresponding drop in the number of in-service training activities conducted by them, could be important factors, perhaps direct causes, of the decline in the teachers' participation in in-service training programs after 15 years of service. The evidence, however, is insufficient to make the assumption conclusive, but its implication to the over-all in-service training program deserves more than passing attention.

Most of the reasons given by teachers and administrators for their limited or non-participation in in-service training programs are actual. These are concomitant conditions accompanying the agricultural schools' programs and the regulations governing their operation. Unless radical changes are introduced in the school program itself, these problems will continue to persist. As suggested earlier, however, more effective programming and scheduling of school activities would minimize the negating influences of these factors upon the participation of teachers in in-service training programs.

That 29 out of 32 administrators said they were too busy with their administrative duties to provide adequate in-service training activities for teachers would seem to reflect the administrators perception of their roles as



professional leaders of their respective schools. It appears that they attach more importance to the aspects of administration than to supervision and the improvement of instruction. Since improvement of instruction depends to a great extent upon the professional leadership of the administrator in his role as supervisor, it is desirable that much more of this official's time be devoted to helping his teachers.

The fact that both the administrators and the teachers considered the in-service training programs which they attended or participated in as generally effective and helpful to them should not cause administrators and Central Office supervisors to lapse into satisfied complacency. Rather this should prod them into intensifying their efforts to provide more incentives and opportunities for all teachers to upgrade themselves and grow professionally and educationally in the service.

The recommendations by teachers that in-service training programs at the local, regional and national levels all be given increased emphases merits thoughtful considerations. This step, if taken and carried out effectively and successfully, would ensure the widest possible participation by teachers in in-service training programs. However, one is cautioned from taking a hasty decision in this regard for it cannot be denied that an in-service training program carried on with equal and increasing intensity at all levels would



require the services of several highly qualified professional and technical personnel, more and better facilities, and more funds. Unless these are available in increasing proportions annually there is danger that such programs would miscarry. This does not mean, however, that it is not feasible. It can be practical subject to the availability of adequate personnel, facilities and funds. As long as these are not assured at the onset, it would seem better to plan for the improvement of in-service programs at all levels as a long range objective rather than as an immediate goal. However, administrators should do all they can to provide optimum conditions to enable teachers to achieve the fulfillment of their in-service training desires at all levels. This calls for a national program that is coordinated with regional and local programs.

The recommendation of administrators that regional in-service training programs, in preference but not to de-emphasize local and national programs, be given increased emphasis appears to be a more realistic first step approach. One regional workshop is estimated to cost about a third as much as one national program but yet able to serve the same number or more teachers. For the same amount of money regional programs would serve three times more people than national programs could. Further examination of the problems involved, however, may reveal the same weaknesses as are inherent with national programs. For instance, while funds will





enable more teachers to attend regional workshops during the school year their absence from their schools one week or more at a time would multiply the problem of service disruption. This was one of the limiting factors why relatively few teachers had been permitted to attend and participate in regional or national workshops in the past.

Again these facts should not be the only bases for decision. The advantages of assembling more teachers from several provinces or from all over the country in one place in order to deliberate on common problems should not be overlooked. The sharing of experiences and ideas, the discussion of common problems and issues in education, the decisions and agreements arrived at, and the fellowship that being together for a common purpose engenders are sure to result in the broadening of the professional outlook of teachers.

The problem of how to provide adequate number of in-service training programs of any or all types is compounded by the fact that teachers of agricultural schools, if one may generalize from the data in Table XV, have had only one chance to attend or participate in in-service training programs in five years. This means that if all teachers were to be given just one chance every year the in-service training programs would have to be multiplied five times. Thought of the magnitude of the task in terms of resource requirements is enough



hypnotize one into inaction. This should not deter administrators from doing something constructive, however. Passive indifference is not the answer to the problem. The prescription is for administrators not to plan the "big jump" in one giant step, but in short and easy but effective strides designed to achieve lasting benefits, irrespective of whether the plan begins at the local, regional or national level.

In planning programs of in-service education the differences in perceptions of teachers' needs by administrators and by teachers should be reconciled. The question as to what subjects or problems should be taken up in in-service programs is not an either-or proposition. It is not a question of whose judgment or decision should prevail. It is a matter for cooperative decision between teachers and administrators. A consensus is essential to assure the effectiveness and success of the in-service training program.

#### Implications of Practices in Pre-Service Preparation and In-Service Training and Trends in Education

It is now generally recognized by educators that the pre-service preparation does not complete the education of the teacher. It takes a continuing program of in-service education to make him the kind of teacher he needs to be every day in a rapidly changing society. It is not over-exaggerating to say that the teacher needs to be "different" and better



educated every day if he is to keep up with progress and expect to accomplish his task creditably.

Admitting these propositions as indisputable, whose responsibility is it to continue educating the teacher? The answer is: In-service education should be regarded as the collective responsibility of teacher-training institutions, the Bureau of Public Schools and local school administrators.

Practices in the United States show that the responsibility for providing in-service training for teachers has been jointly assumed by the State Department of Education and teacher-training institutions, with other government agencies and private enterprises contributing significantly to the success and effectiveness of the program. Teacher-training institutions, particularly the land grant colleges and universities carry a major share of the job. The great variety of devices and techniques used and the extent and scope of in-service programs sponsored by land grant institutions for teachers attest to this fact. Some of the more common practices are:

- (1) Visits by staff members of teacher-education departments with beginning as well as old teachers.
- (2) Workshops, conferences, and seminars.
- (3) Supplying printed information, bulletins, teaching guides, technical and professional publications, etc.
- (4) Demonstrations and exhibits.
- (5) Educational travel or trips.
- (6) Agricultural and educational fairs.
- (7) Consultant services, including services from other agencies and private industry, etc.
- (8) Professional guidance.



- (9) Research and experimentation.
- (10) Adequate library facilities for the professional readings of teachers.
- (11) Graduate programs (a) on-campus, (b) off-campus, (c) correspondence.

More important than the mere mention of these programs, however, is the fact that in Michigan, as in the other States, an excellent working relationship exists between the State Board of Education, local school administration, and the teacher-training institutions. Planning in-service training programs is done on a cooperative basis by staffmen of the universities and supervisors from the State Department of Education or Office of the Superintendent of Public Instruction. Recognition of their joint responsibilities is back of this cooperative relationship.

One of the basic tenets why teacher-training institutions should assume a positive and active role in the in-service education of teachers was expressed by Byram in 1941<sup>26</sup> in this wise: "The follow-up of teachers is essential to adequate appraisal of the effectiveness of pre-service preparation." Surely this cannot be successfully disputed for as the saying goes, "By their fruits ye shall know them." The idea that the responsibility of teacher-training institutions terminates

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<sup>26</sup> Harold M. Byram, "Do We Have Standards for In-Service Education of Teachers in Vocational Agriculture?" Presentation Teacher Trainers Breakfast Meeting, 1934-1956. American Vocational Association, 1956, p. 25.





upon the graduation of teacher-trainees is no longer acceptable. The institution that wishes nothing but the best in its products will want to know how its products are doing. A follow-up program is one way to find out. The itinerant teacher-trainer employed in many states carries the principal burden of follow-up on behalf of the teacher-training institution.

The various practices just cited and mentioned in Chapter IV illustrate the many varieties of devices used in the United States. These were mentioned merely to be used as reference points by Philippine educators. These are not models to be indiscriminately copied; rather these are raw materials to be remoulded and/or built upon. They should be modified to suit local conditions.

The low quality of instruction received by teacher-trainees from several private institutions in the Philippines has been bewailed and documented on many occasions. Considering the fact that nearly 70 percent<sup>27</sup> of public school teachers are products of private teacher-training institutions the deficiency has tremendous significance to the program of in-service education. A realistic in-service education program requires the improvement of pre-service instruction and involvement of teacher-training institutions in providing

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<sup>27</sup> Report of Board of National Education, Philippines. Op. cit., p. 113.



in-service training programs for teachers. Follow-up programs for their graduates as well as their involvement under a co-operative basis with the Bureau of Public Schools in providing in-service education for teachers should form an important part of the total teacher-preparation programs of private institutions, state colleges and universities preparing teachers. To get them to cooperate would probably require action from the Department of Education, but the Bureau of Public Schools should start the movement by implementing the recommendations contained in the report of the Board of National Education, that selected public schools be made available for off-campus teaching of private schools. If this recommendation is effected a follow-up program for their trainees and employed graduates by private teacher-training institutions would probably logically follow. Thus would begin a fruitful co-operative working relationship between Bureau of Public Schools officials and educators of private institutions.

Some policies of the Bureau of Public Schools, Department of Education, or the General Auditing Office are not conducive to a favorable climate for the in-service growth of teachers of agricultural schools. For example, Santiago<sup>28</sup> found in her study of the in-service training activities of

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<sup>28</sup> Alicia Santiago, op. cit., p. 515.



public secondary school teachers of Manila that teachers wished they had professional and technical books and other references in the school library for their use. Public school libraries, however, are conspicuously lacking in these much needed facilities because bureau policies and/or regulations prohibit the use of school funds for this purpose. Instead, teachers are enjoined, sometimes required, to buy their own professional books or subscribe to their own magazines and journals. In principle there is nothing wrong with this, for, as the carpenter equips himself with the necessary tools in order to practice his trade, so must teachers provide themselves with the needed equipment to practice their profession. Unfortunately, the low salary paid to teachers and the high cost of living makes it next to impossible for teachers to buy these books.

Certain regulations governing the operation of agricultural schools also constitute another source of negating factors in the promotion of comprehensive programs of in-service education for teachers of these schools. For instance, under the Vacation and Sick Leave law it takes three years of continuous service without a single day of absence for a teacher to accumulate enough vacation credits in order to be able to attend a 6-week summer school program for graduate work or professional study.

The rate of growth in the number and enrollment of



agricultural schools constitutes another problem which must be reckoned with. There is danger that the vocational agriculture program may expand beyond the optimum capabilities of the professionally trained personnel to handle, and when it does a serious lowering of instructional standards is bound to result. To preclude this possibility both the pre-service preparation and the in-service education programs for teachers must be improved and intensified, the latter expanded in scope. These calls for the mobilization of professional and technical resources, which are available but unfortunately not maximally being utilized.

The trend in curricular emphasis towards the sciences and mathematics also adds another facet to the already complex problem. The study revealed that 14 of the respondent teachers were teaching science subjects as a major assignment, only half of whom were qualified to teach these subjects. This attests to the growing seriousness of this problem. The evidence further show that in most, if not all the 25 schools, some teachers are teaching many other subjects for which they were not trained as shown by the relatively large proportion of teachers teaching subjects other than their major or minor field of specialization. To provide effective instruction in the sciences fully qualified teachers must be employed and adequate laboratory facilities, equipment and supplies made





available. Only the first is directly related to in-service education but the ultimate outcome depends on the second.

From the foregoing discussion it may be deduced that agricultural schools, and all education for that matter, are faced with many problems. Basic of all, as Guiang<sup>29</sup> indicated, is finance. However, the multiplicity and complexity of these problems are no excuse for educators to remain complacent. They must do something to remedy the problems and meet the pressing needs of the total school program. The development of a good in-service education program is one answer.

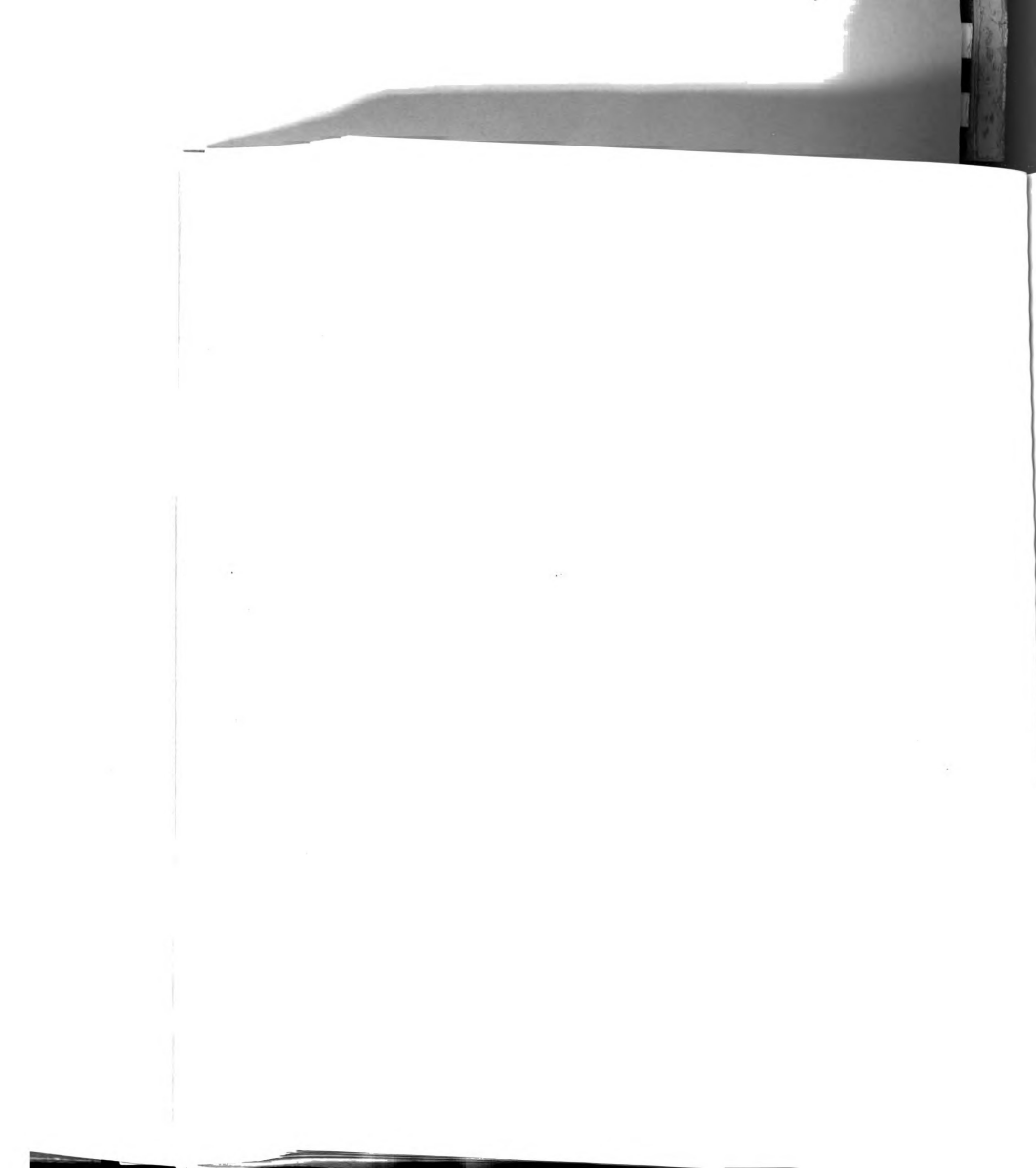
#### Guidelines for Action

The following principles derived from the findings and significant information found in practices in the United States, in the literature reviewed, and upon actual conditions obtaining in the Philippines, are offered to give direction to whatever action will be taken to intensify and improve the in-service training programs provided for teachers of agricultural schools as a result of this study.

Principle 1. In-service education is a co-function of and is intrinsically connected with pre-service teacher-training. The philosophy of teacher education should embrace both

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<sup>29</sup>Pedro G. Guiang, Vocational Education in the Philippines, Bur. of Public Schools, Manila, P. I., 1955, pp. 295-7.



pre-service and in-service education of teachers. The two should not be dissociated for their relationship is fundamental to the total program of education. Coordination of college programs with the demands and job specifications in the public schools is essential in order to close the gap or disparity between college major preparation and major teaching assignment.

In planning in-service training programs school officials should solicit the cooperation of professional and technical personnel of teacher-training institutions, as well as plan for the utilization of all available resources of the community. The continuing education of teachers should be regarded as the collective responsibility of public school officials and officials or educators of teacher-training schools.

Principle 2. The responsibility for providing adequate and appropriate in-service training programs for teachers should be jointly assumed by the Central Office of the Bureau of Public Schools, local school administrators, and teacher-training institutions.

An appropriate body composed of representatives of the General Office, school administrators, and teacher-training institutions should be formed to define the appropriate roles of each entity and to coordinate the functions so as to achieve maximum benefits from the cooperative program. Private teacher-training institutions should be included in the cooperative program.



Principle 3. The program of in-service education should provide and meet the needs of all members of the professional staff.

The in-service education program should be designed to achieve a balanced growth among all members of the teaching force. It should provide training in all the curricular areas as well as other aspects of the total school program. This requires a comprehensive program planned on a continuing basis. The content, activities and procedures to be used should be evolved cooperatively by teachers, administrators, supervisors and representatives of teacher-training institutions. Local, regional and national programs should be coordinated and synchronized. Equal opportunities should be provided for all teachers.

Principle 4. The amount and quality of the professional and educational in-service growth of teachers are directly related to the amount of encouragement which they receive and the incentives and opportunities provided them by school officials.

A long-range plan should be developed such that all teachers are able and given the opportunity to participate in in-service training programs at the regional and national levels, and to pursue professional or graduate courses during summer or school year, within a specified cycle of time.

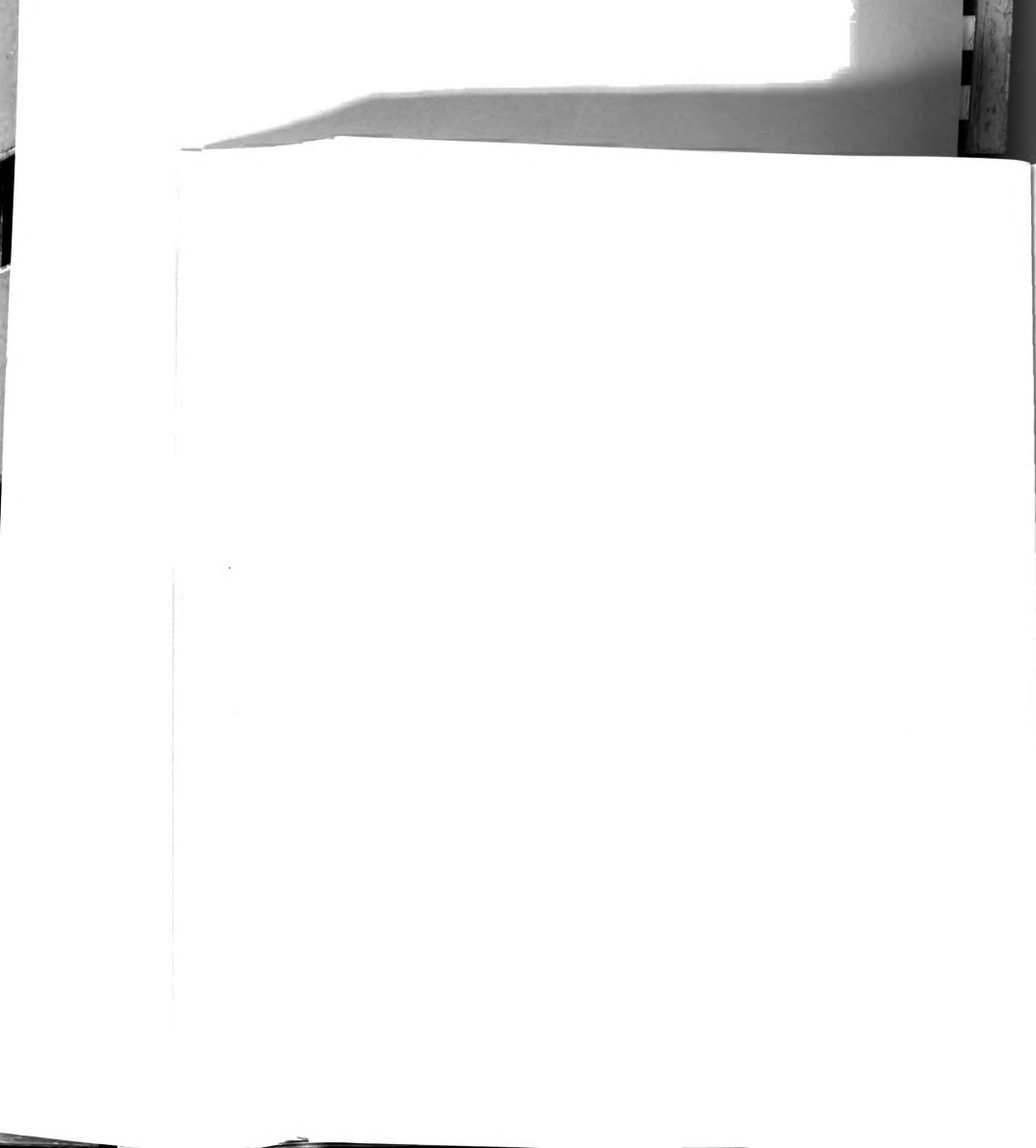


While priorities of needs should be the basis for scheduling teacher-participation in in-service education programs, it is essential that the opportunities be equalized as much as possible for all teachers in order to maintain a balanced growth in the staff. Administrators and supervisors should spare no effort in encouraging teachers to strive for self-improvement. Incentives in the form of salary increases and recognition for outstanding accomplishments should be provided or given to deserving teachers. The less efficient teachers should be given more professional and friendly attention by administrators and supervisors.

Principle 5. In planning in-service training programs those who will be affected, i.e., the teachers and other participants, should be involved.

In-service activities cannot be planned to meet the needs of teachers unless the teachers for whom the program is being developed are consulted about their needs and actively participate in planning the activities. The judgment of administrators about teachers' needs does not necessarily coincide with what teachers feel to be their needs as demonstrated by the evidence compiled in this study. These should be reconciled. Administrators should encourage the staff to exercise initiative and leadership in this regard. Positive administrative support is essential.





Principle 6. All teachers, new or old, need in-service training. All should be encouraged and given the opportunity for educational and professional growth through in-service education.

Beginning teachers need more guidance and in-service training attention in some aspects of the school program, but the needs of the latter (older teachers) should not be ignored. It would seem that after so many years in the teaching service teachers need to acquire a new stock of knowledge in subject matter and methods of instruction. The decline in participation by teachers in in-service training activities after 15 years of service should be checked. More of the older teachers should be encouraged to attend refresher courses or regular summer graduate work. One in-service program, say workshop, cannot be designed to serve all teachers. As many workshops as there are special areas of interest and needs of teachers should be planned and conducted. The opportunity to attend summer school for advanced graduate work should be available to all.

Principle 7. The amount of teacher-participation in and the quality and effectiveness of in-service training programs tend to be related to the quality of the professional leadership available.

Administrators are in need of in-service education just like teachers. The leadership abilities of the administrator,



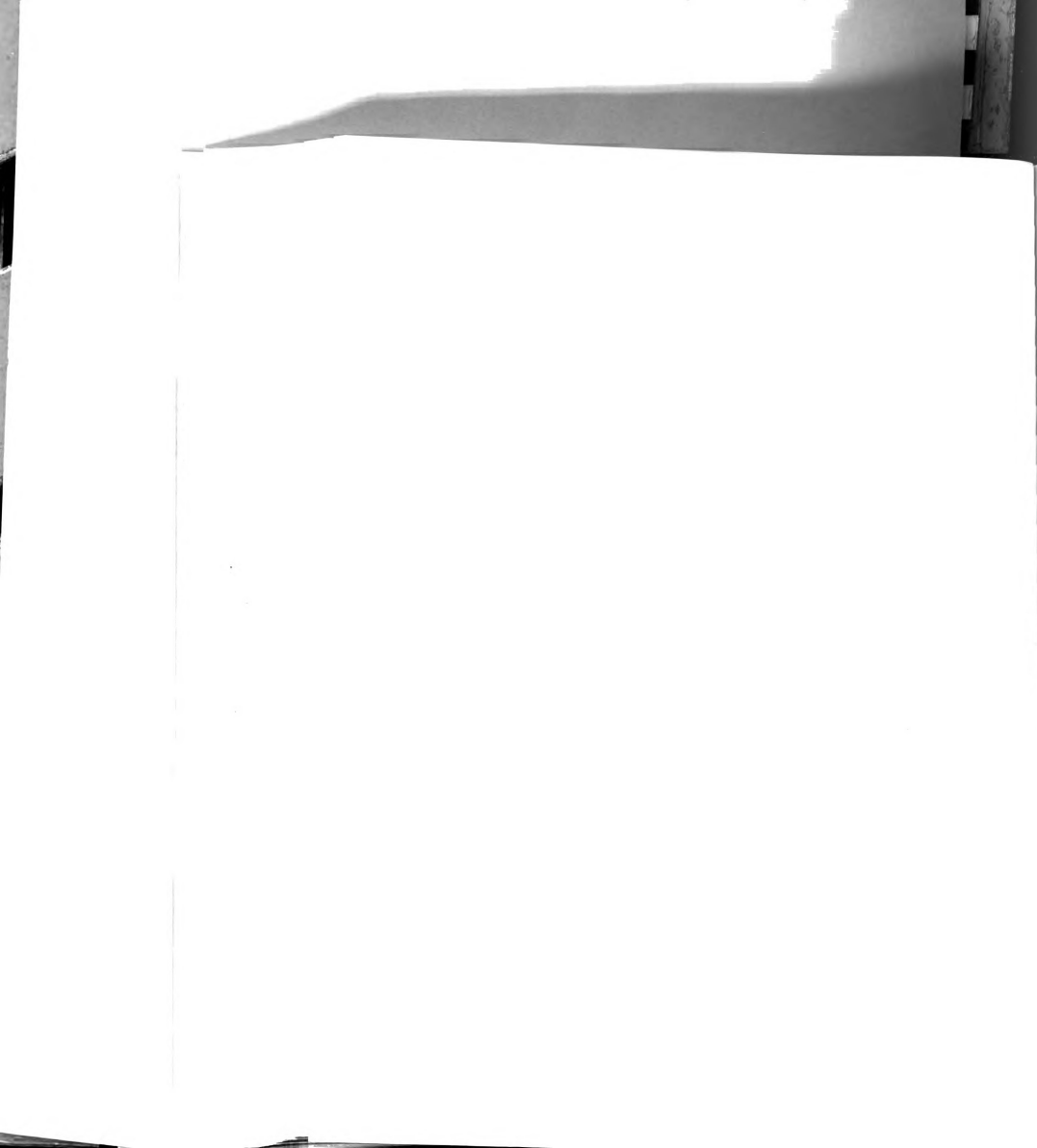
as well as his technical know-how and professional competence must grow as the teachers' skills and abilities increase in order for him to perform effectively his role as professional leader of his school. If the administrative ability and professional know-how of the leader are ever in doubt his effectiveness is lost. In-service training programs should, therefore, make provisions for all administrators to be able to improve their professional and technical competencies and leadership skills.

Principle 8. The in-service education program should help bring about good working relationship and conditions for the members of the staff.

The establishment of cooperation among members of the staff in solving school problems, along with the promotion of good working conditions, including the acquisition, proper allocation and use of facilities should be among the major aims of in-service training.

Principle 9. The in-service education program should be geared and result in the improvement of the curriculum of the agricultural schools.

The attainment of the objectives of the vocational agriculture program requires that all teachers properly understand their individual and collective roles in carrying out the program. Mere employment does not pre-suppose that the teachers



so employed have the necessary understandings and proper attitudes toward the program. Well-planned orientation programs for new and beginning teachers should be an important part of the in-service training program of each school.

Principle 10. In-service training programs at the local, regional and national levels, including graduate programs sponsored by teacher-training institutions, should complement each other.

The planning of in-service training programs at the various levels, whether for credit or non-credit, should be coordinated in such a way that there is continuity and relatedness of the experiences of teacher-participants. Provisions should be made for the effective implementation and transference of these experiences to teachers in the individual schools who are not able to participate in the regional and national programs. National and regional programs should be designed to be "duplicated" and/or continued at the local level by the participants from each local school for the benefit of those who have not. A plan should be evolved by administrators and supervisors from the Central Office to follow through this principle.

Principle 11. A good in-service training program is self-sustaining.

Each activity or program of activities should be planned



such that each participant achieves self-fulfillment and leaves each training session craving for more. Three important prescriptions are indicated for this principle: (1) Active participation by teachers in planning the programs, (2) Selection and use of highly qualified resource persons, consultants, and leaders, and (3) Administrative support in the immediate application or implementation of things learned. Nothing can be more frustrating to teachers than to attend workshops, or other forms of programs in which subjects they have no need for or interest in are discussed; or where, after the workshop, teachers are unable to apply or implement any or most of what they learned.

Principle 12. The in-service training program should be responsive to the needs of teachers and sufficiently flexible as to be easily kept in gear with new developments in subject matter and methods, and kept abreast with scientific and technological progress and innovations.

At each level a research committee should be created to keep track of the new mass of knowledge, techniques, and procedures that are constantly being discovered or invented through research studies in the fields of education, applied sciences, and social sciences so that these new developments could be incorporated in the in-service training activities of teachers. The research committee of the Central Office



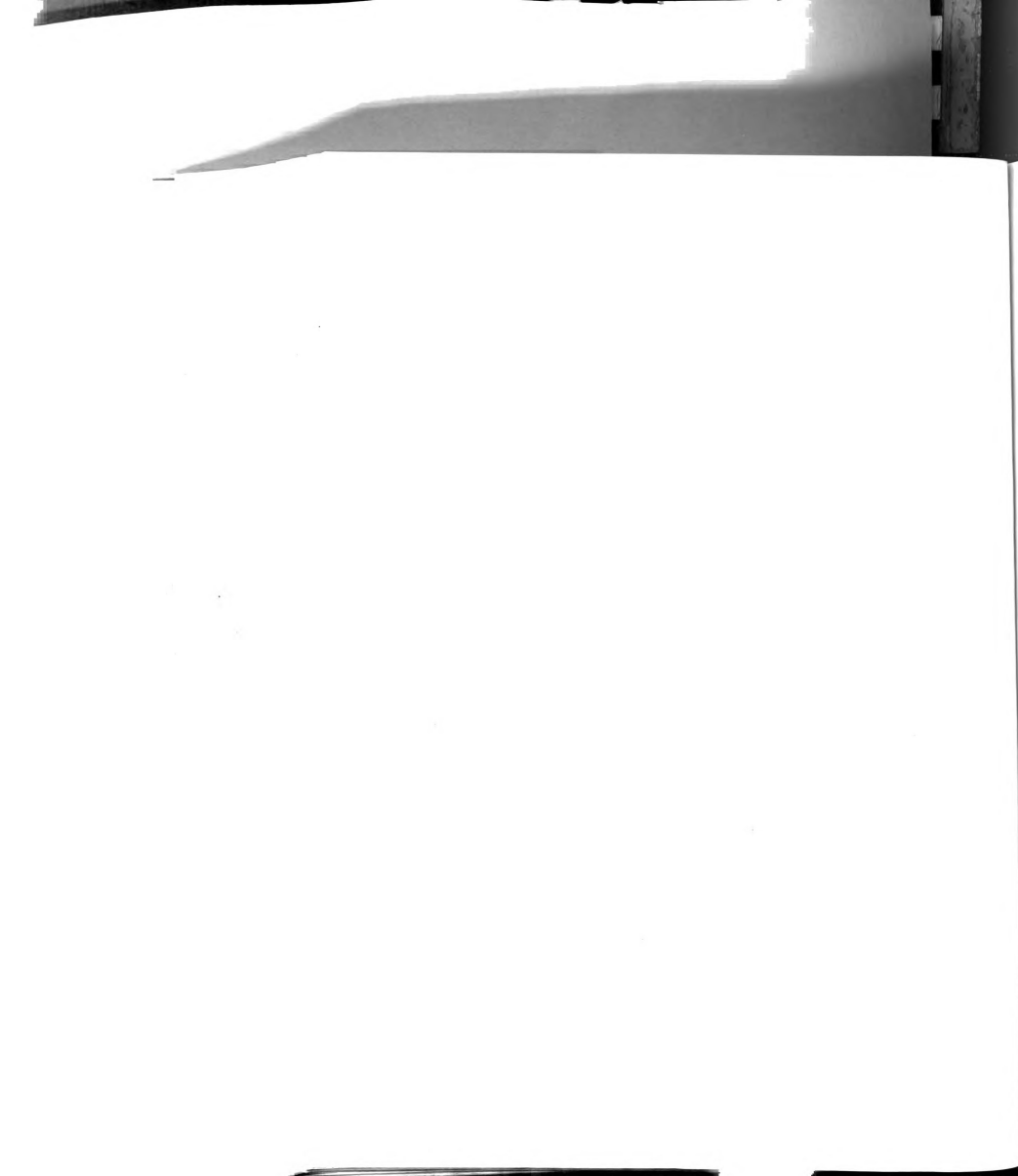


should publish and supply each agricultural school with abstracts of significant research studies and technological developments, including a bibliography of the sources of the materials so that schools desiring to obtain the original publication could do so easily. Visits by subject-matter specialists or area supervisors from the Central Office, or division offices, should be made more frequent, particularly for newly established schools. The task of making teachers sensitive to new developments requires the use of all mass communications media which the Central Office is able to muster and make available to local schools.

Principle 13. The in-service training program should provide the teachers with professional, technical, and cultural reading materials supplied by the Central Office or acquired by the individual schools through purchases or subscription by authorized expenditures of school funds.

The conspicuous lack of professional, technical, and cultural reading materials in the libraries of agricultural schools should be remedied if teachers are to be encouraged through self-initiated study to supplement the formal training they receive from organized group in-service training programs. Individual schools should be authorized to appropriate funds from their production incomes for this purpose.

Principle 14. The in-service training program should



encourage creativity among administrators and teachers of local schools to plan for and implement procedures and techniques designed to improve local programs of in-service education and the program of instruction.

Greater autonomy should be given to local school administrators and teachers to plan for and introduce innovations in the implementation of the vocational agriculture program based on the results of action research or experiments conducted by the teachers of the school. The development of local initiative in evaluating the local program of instruction should be encouraged by allowing administrators of these schools to introduce whatever procedures or techniques are considered appropriate to remedy weaknesses in the local program, without first securing the approval of the Director of Public Schools, provided the innovations to be introduced are not in contravention to existing policies and regulations.

Principle 15. In-service training should be provided for the clerical and administrative personnel of the school.

The school is an organizational unit whose total program depends on the entire personnel force for effective implementation. As such the long range program should be designed to improve all services and the personal welfare of all members of the organization. Like teachers members of the clerical staff need to be kept abreast with improved practices and

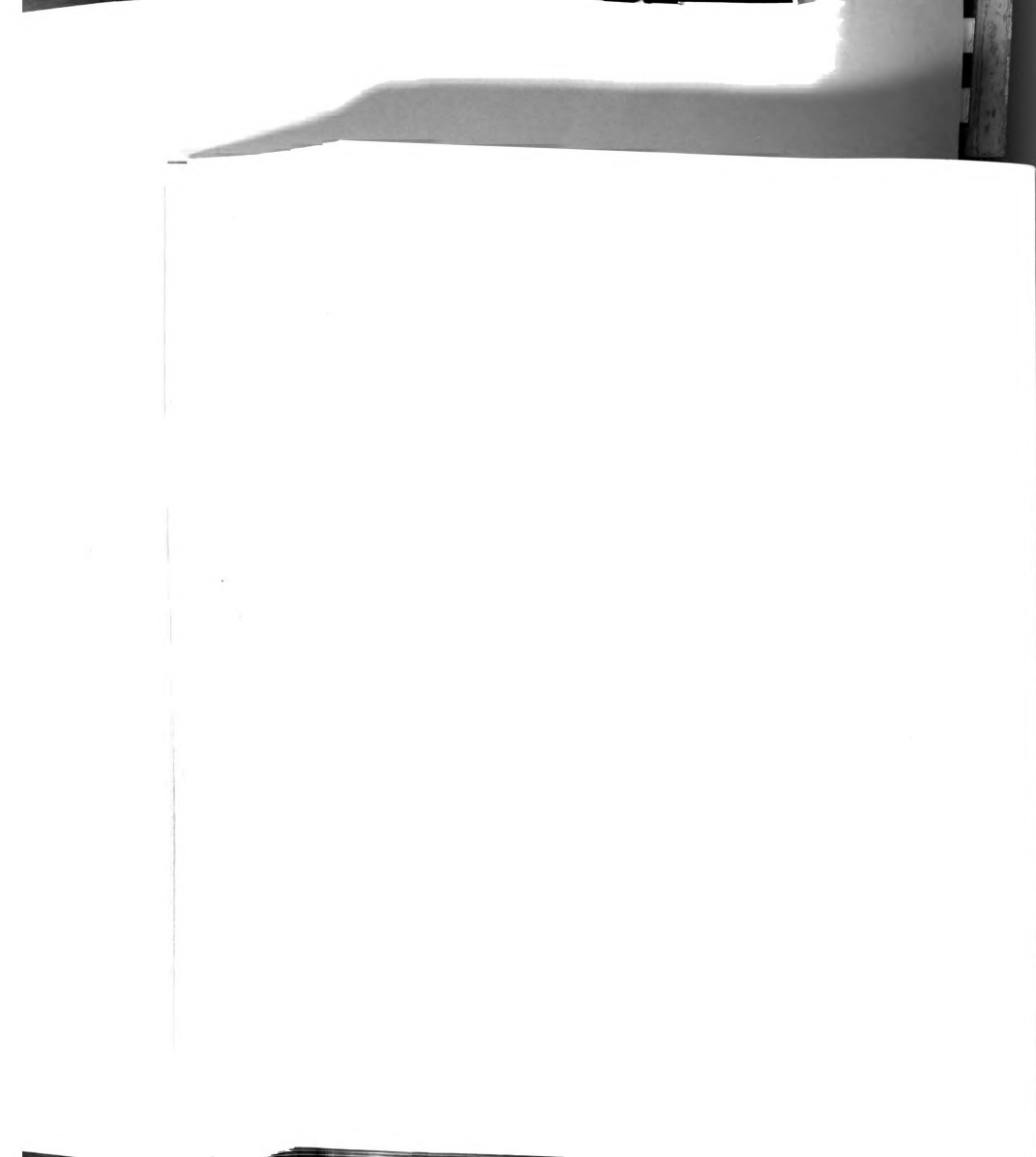


techniques in office management, report and correspondence work, record keeping, and other related jobs. They need training, too, in public relations, and an acquaintance of the philosophy and objectives of the vocational agriculture program. The facilitating function of the services performed by clerical personnel to the instructional program cannot be coordinated effectively with instruction unless the personnel understand very well the various aspects of the total school program.

In planning long range in-service training activities, whether these be for the local, regional, or national level, the clerical and administrative staffs should also be involved. In some cases special programs for them should be provided. In others, particularly at the local level where the inter-relationships of the various school services such as instructional, administrative, and clerical are discussed, they should join the teachers. Effective coordination of the different service functions cannot be attained unless teachers, clerks, and others on the school staff, understand and appreciate fully the inter-dependence of the different roles which they play in carrying out the total program of the school.

Principle 16. The in-service education program should be continuously evaluated.

A realistic and systematic appraisal of the in-service training program should be one of the many activities included



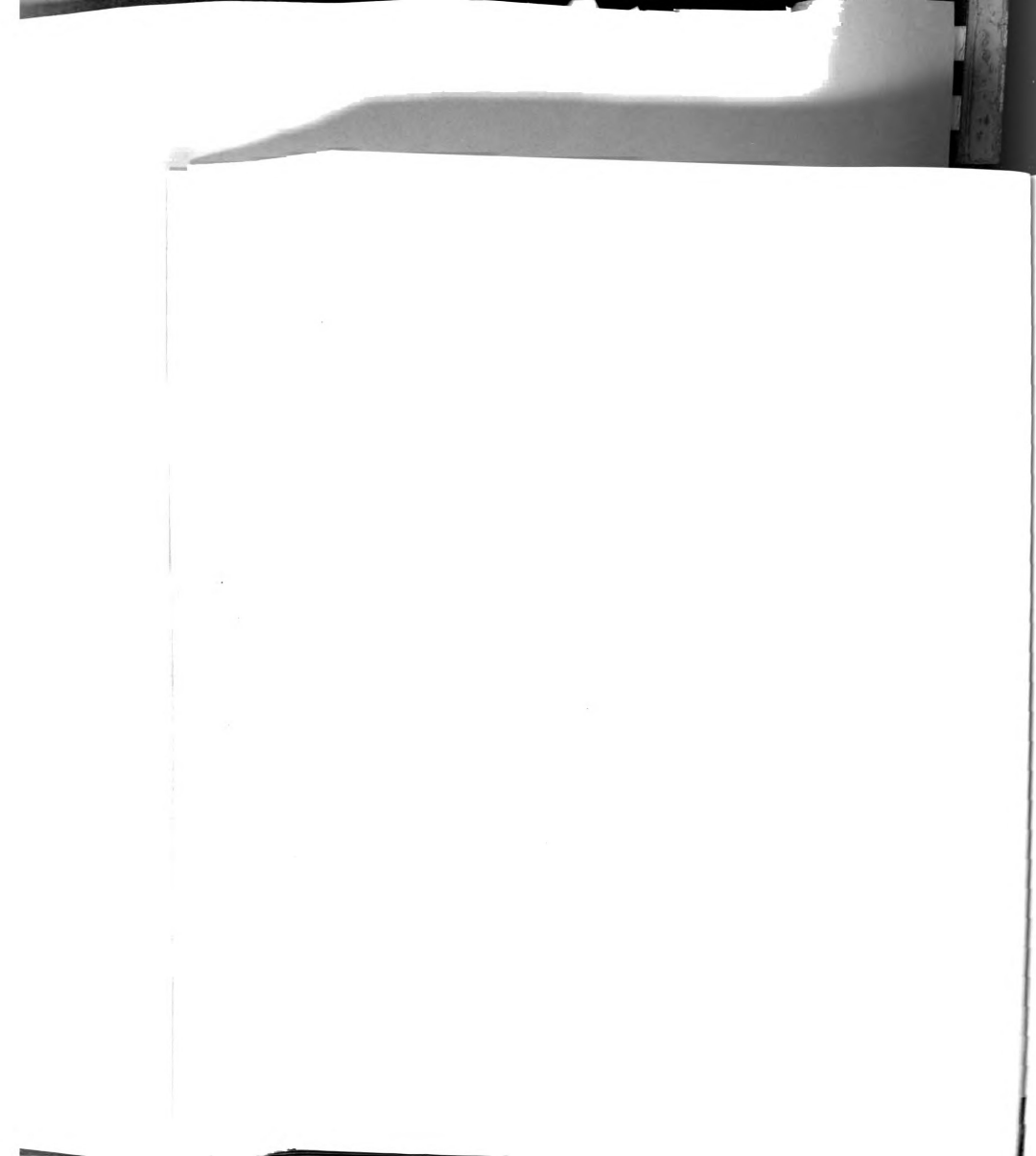
in the program. It is essential that the strengths and weaknesses of the program and the benefits derived be continually inventoried and subjected to critical examination. Only by identifying the strong and weak points of the program could it be intelligently adjusted and improved to make it responsive to the needs of teachers, the school, and the demands of the profession.

#### Specific Proposals

Based on the findings and in light of trends in education in general, and in vocational education in particular, the following proposals are submitted for consideration:

Proposal 1. A body composed of school administrators, teachers, supervisors, and representatives of the community should be created to evaluate the total program of vocational agricultural education. The ultimate aim of in-service education is the improvement of instruction. This program cannot be intelligently planned and directed unless the strengths and weaknesses of the instructional program for which it is designed to improve are identified. There are indications that the philosophy and objectives, as well as the administrative and curriculum procedures have many shortcomings. These need to be critically examined and re-defined if necessary, and new policies and regulations formulated to keep the program of

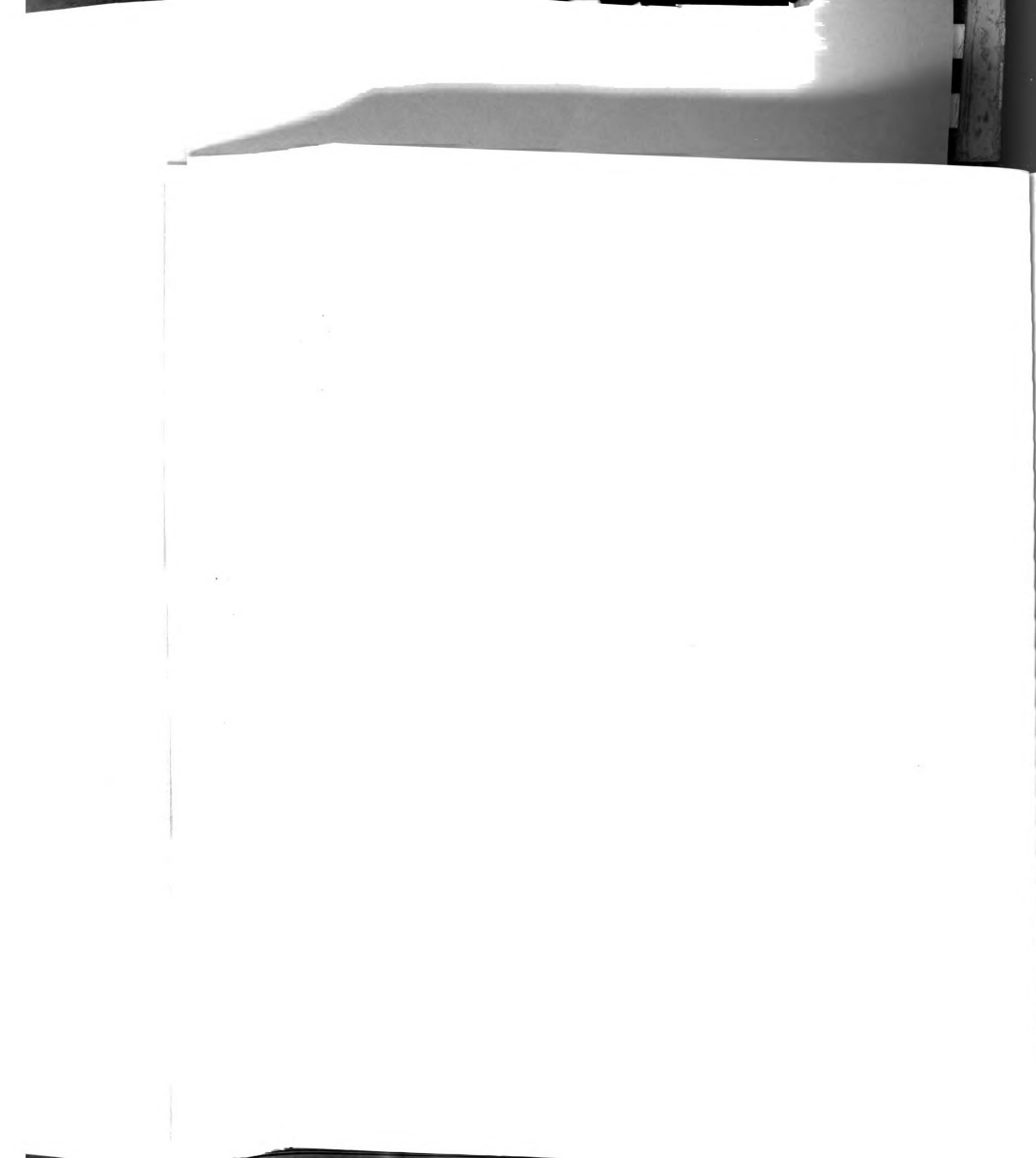




vocational agricultural education responsive to changing conditions. Curriculum changes made in the past have been found to be less than satisfactory because these were based principally upon the subjective judgment of felt needs by administrators and supervisors rather than upon objective facts gathered systematically through evaluation procedures.

The principal tasks of the proposed evaluation body should be: (1) To plan for a continuous and systematic evaluation of the total agricultural education program (including teacher education and in-service training); (2) To organize committees at the local and regional levels to carry out the objectives of the program; (3) To formulate principles and procedures and to prepare a guidebook for evaluators to follow in conducting the evaluation; (4) To coordinate the activities of regional and local committees and task forces; (5) To compile, analyze, and interpret the information gathered by the various committees at the local and regional levels; (6) To formulate and recommend the approval and adoption of policies, regulations, and legislative proposals necessary to legitimize and/or authorize the implementation of the various recommendations; and (7) To publish the results of the evaluation.

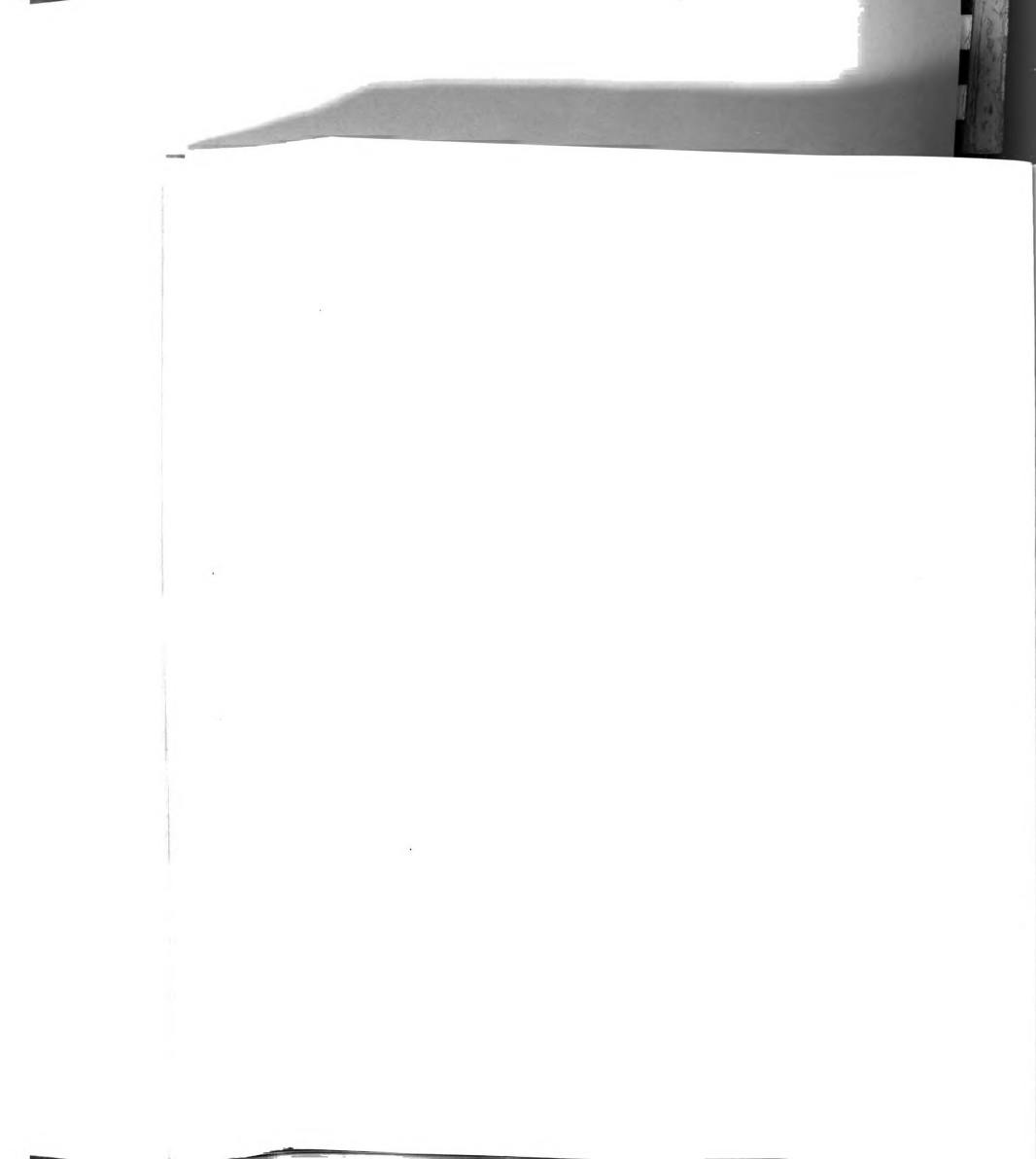
An in-service training program should be held along these lines to prepare the various individuals for the jobs they will perform in carrying out the evaluation program.



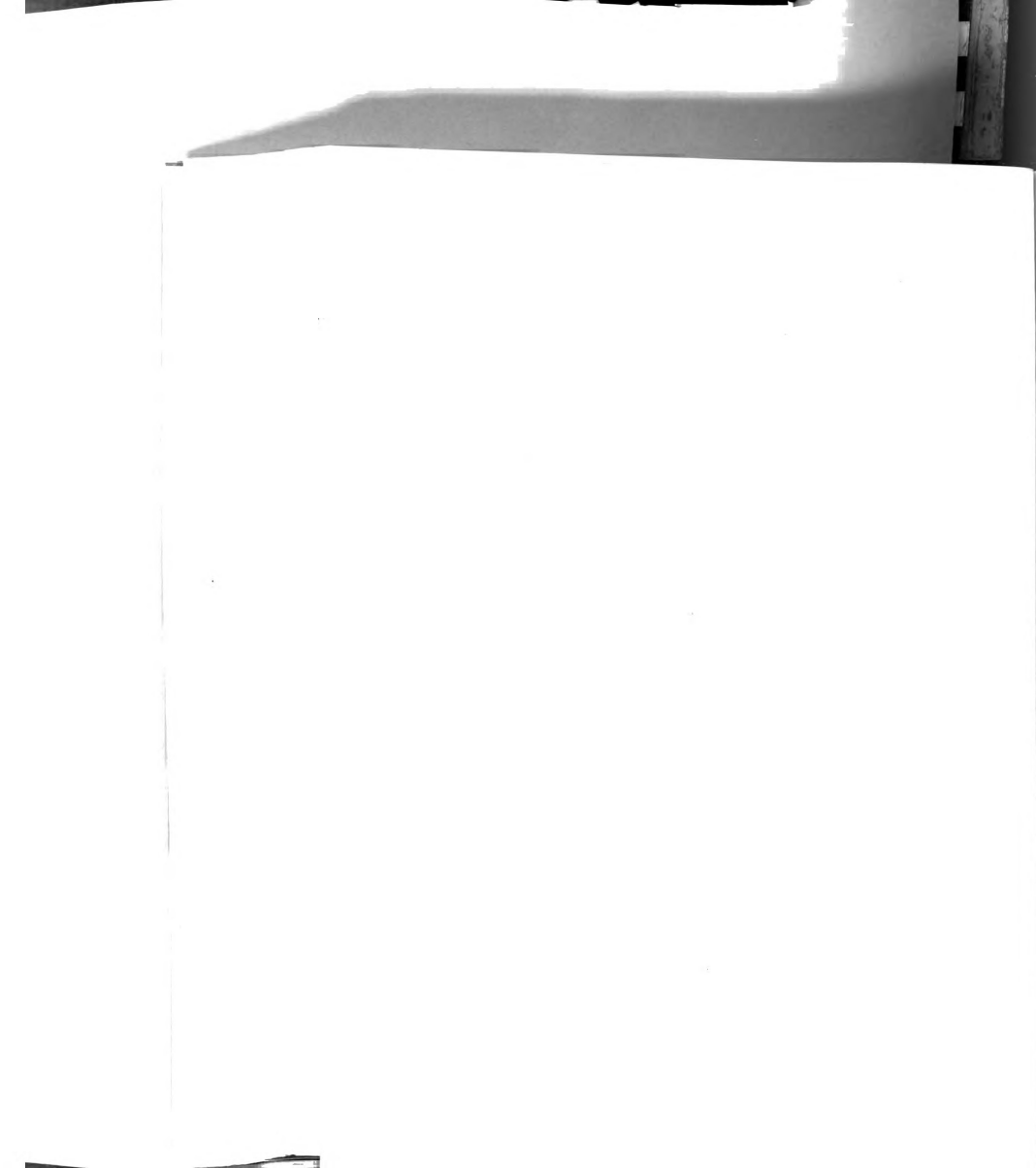
Proposal 2. Along with the new philosophy and objectives of vocational agricultural education a new philosophy of in-service education which is purposeful and oriented to educational trends and to the philosophy, objectives, and procedures of the vocational agriculture program should be evolved. The program of in-service education should extend beyond the school setting and transcend the traditional boundaries of education. Activities should become interwoven with the social fabric of community life. Educational experiences are not confined to the school situation. In-service training experiences should have continuity, relatedness, or relevance to everyday living. The in-service program should provide for the integration of the functions of the various agencies (formal and informal) which should share the responsibility for providing the in-service education program.

The objectives of in-service education may be restated thus:

1. To provide continuity in the educational growth of professional school personnel.
  - a. Upgrade the educational qualifications of teachers.
  - b. Enrich the experiences and knowledge of subject matter of teachers.
  - c. Broaden the educational, and socio-cultural background of teachers.
  - d. Keep teachers abreast with new knowledge about children and the learning process, and new techniques and trends in education.
  - e. Provide graduate programs for teachers.

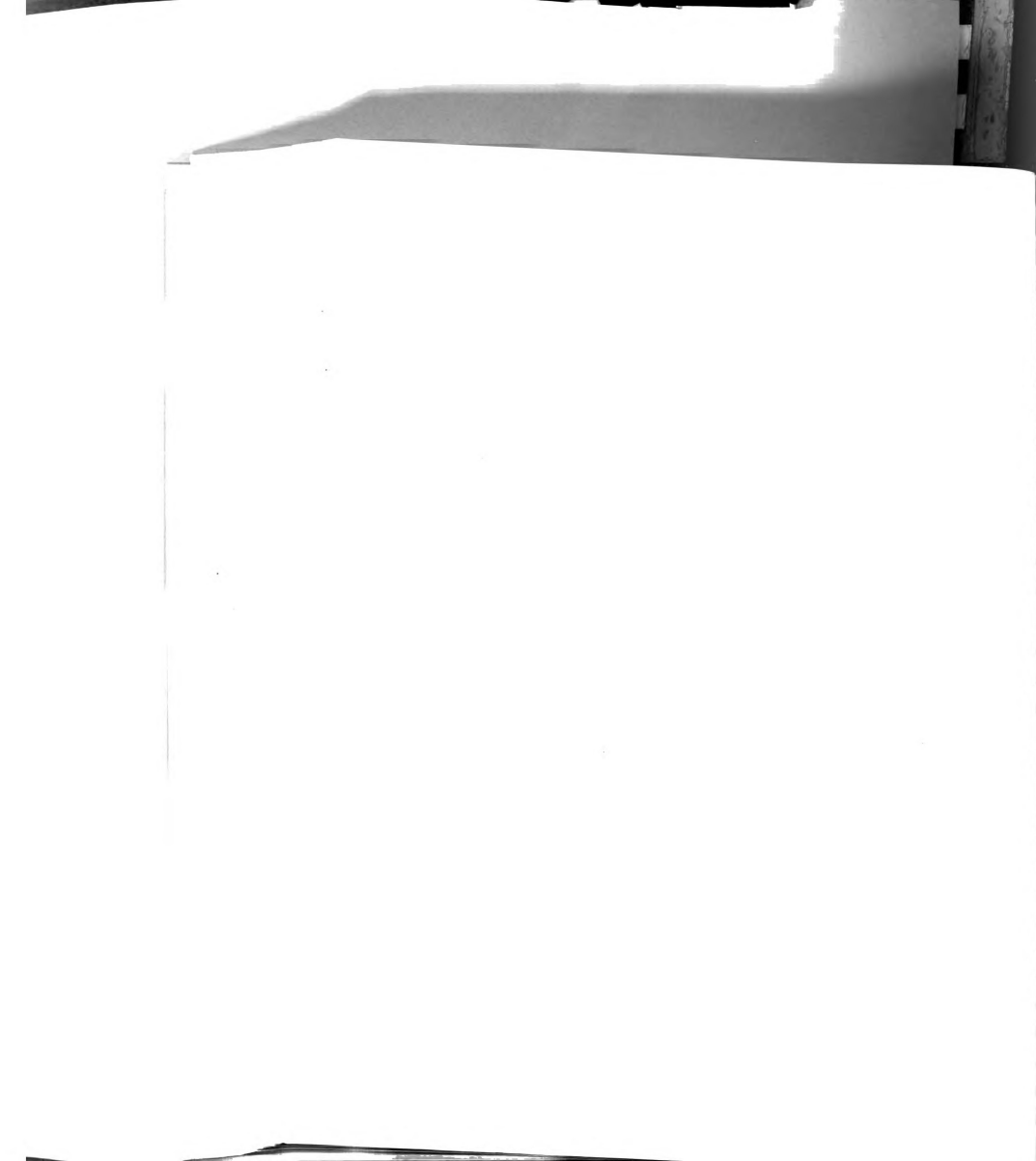


2. To provide teachers opportunities for professional growth.
  - a. Develop increased professional competencies, skills, and abilities.
  - b. Develop awareness of and skill in the effective use of new devices.
  - c. Encourage creativity, initiative, and resourcefulness.
  - d. Develop greater understanding of the vocational agriculture program.
  - e. Develop alertness in keeping abreast with new developments in education, science, technology and the social sciences.
  - f. Develop sensitivity and receptivity to change and innovations.
  - g. Develop scientific attitude and critical thinking.
  - h. Provide library facilities for the professional and cultural reading of teachers.
  - i. Prepare teachers for greater responsibilities.
3. To promote the personal welfare of teachers.
  - a. Provide good working conditions (adequate facilities).
  - b. Create favorable climate for growth (incentives and opportunities).
  - c. Promote good working relationships, effective cooperation, collaboration, and coordination of functions or services.
  - d. Improvement of school services.
  - e. Work for the improvement of the economic status of teachers.
  - f. Provide leisure time activities for teachers.
4. To provide for the continuous improvement of instruction.
  - a. Effective supervision of instruction.
  - b. Better allocation and optimum use of facilities.
  - c. Effective coordination and/or integration of instructional activities in the different areas of subject matter.
  - d. Acquisition of more and better facilities.
  - e. Adoption of new techniques and procedures.
  - f. Encourage action research and experimentation.
  - g. Provide for continuous evaluation and improvement of the curriculum.



- h. Effective use of community resources.
  - i. Develop effective guidance programs for students.
5. To promote better public and community relations.
- a. Promote better public understanding of the vocational agriculture program.
  - b. Involvement of citizen groups or PTA's in school activities.
  - c. Use of community resources through and with community cooperation.
  - d. Participation of school in community activities.
  - e. Develop program of extension education for adults (particularly farmers) of the community.
6. To promote more effective administration and supervision of agricultural schools.
- a. Develop strong teacher-leadership.
  - b. Better personnel relations.
  - c. Democratization of administrative practices.
  - d. Sharing of responsibilities and authority.
  - e. Participation of teachers in program planning, policy formulation and decision-making.
  - f. Better personnel services.
  - g. Development of records and filing systems.
7. To establish good relations with and secure the cooperation of related government agencies and private institutions in providing in-service education programs for teachers.
- a. Secure the technical and professional services of personnel from other government agencies.
  - b. Secure printed information or publications concerning subjects relevant to education or agriculture.
  - c. Involve teacher-training institutions in planning in-service education programs for teachers.
  - d. Encourage and provide or offer the use of school facilities for off-campus college courses to teacher-training institutions.
  - e. Cooperate in teacher-pre-service training by arranging internship training or practice teaching of teacher-trainees at some or all agricultural schools conveniently located.





8. To provide for a systematic and continuous program of evaluation.

The implementation of the above proposal could be carried out by the same body suggested in Proposal 3 which follows.

Proposal 3. The in-service education of teachers should be regarded as a major aspect and function of the supervisory program for agricultural schools.

The program, to achieve greatest efficiency and effectiveness, should be organized at three levels: national, regional and local. All should be coordinated and synchronized, and all operating and functioning interdependently. Local organizations should be strengthened. A schematic diagram showing the relationship of the three level programs is shown in Figure 3.

The over-all supervision should be assumed by the Central Office. The administration and supervision of regional programs should be delegated jointly to regional supervisors and school administrators concerned. The administration and supervision of local programs should be performed by a local committee headed by the administrator of the school and two or more teachers elected by the faculty and other members of the professional staff.

An over-all long-range plan should be drawn by a central planning and coordinating body composed of regional supervisors, local school administrators, and representatives



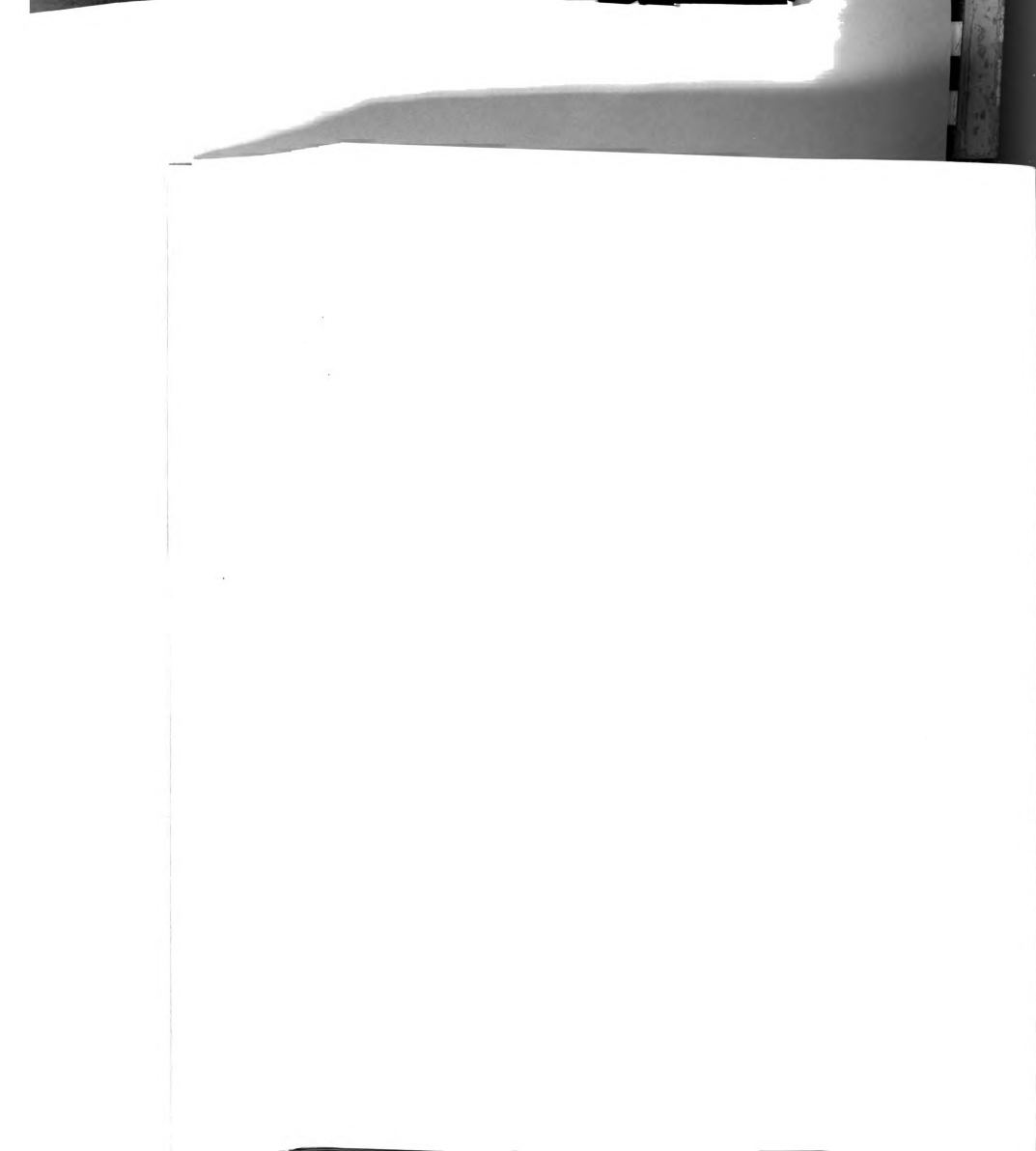


of teacher-groups. This body should convene regularly once a year to (1) evaluate the accomplishments of the program at the various levels, and the strengths and weaknesses, and (2) plan the program for the coming school year in reference to the long-range program, and incorporating changes suggested by the result of the evaluation. The activities to be included in the over-all plan should be designed for the three levels such that each succeeding lower level continues and implements the activities at the higher level, or complements them.

Only those activities which require the services of professional and technical personnel from the bureau or other agencies who cannot be conveniently brought to regional centers or local schools should be carried out on a national basis. Stress should be given by the over-all program to the development of regional and local leadership in carrying out the regional or local programs.

The over-all plan should embody the objectives set forth earlier and outline the program of activities calculated to achieve these objectives. Subjects to be taken up should be chosen carefully on a cooperative basis based on priority of needs.

The names and addresses of persons and institutions available as sources of information and professional and



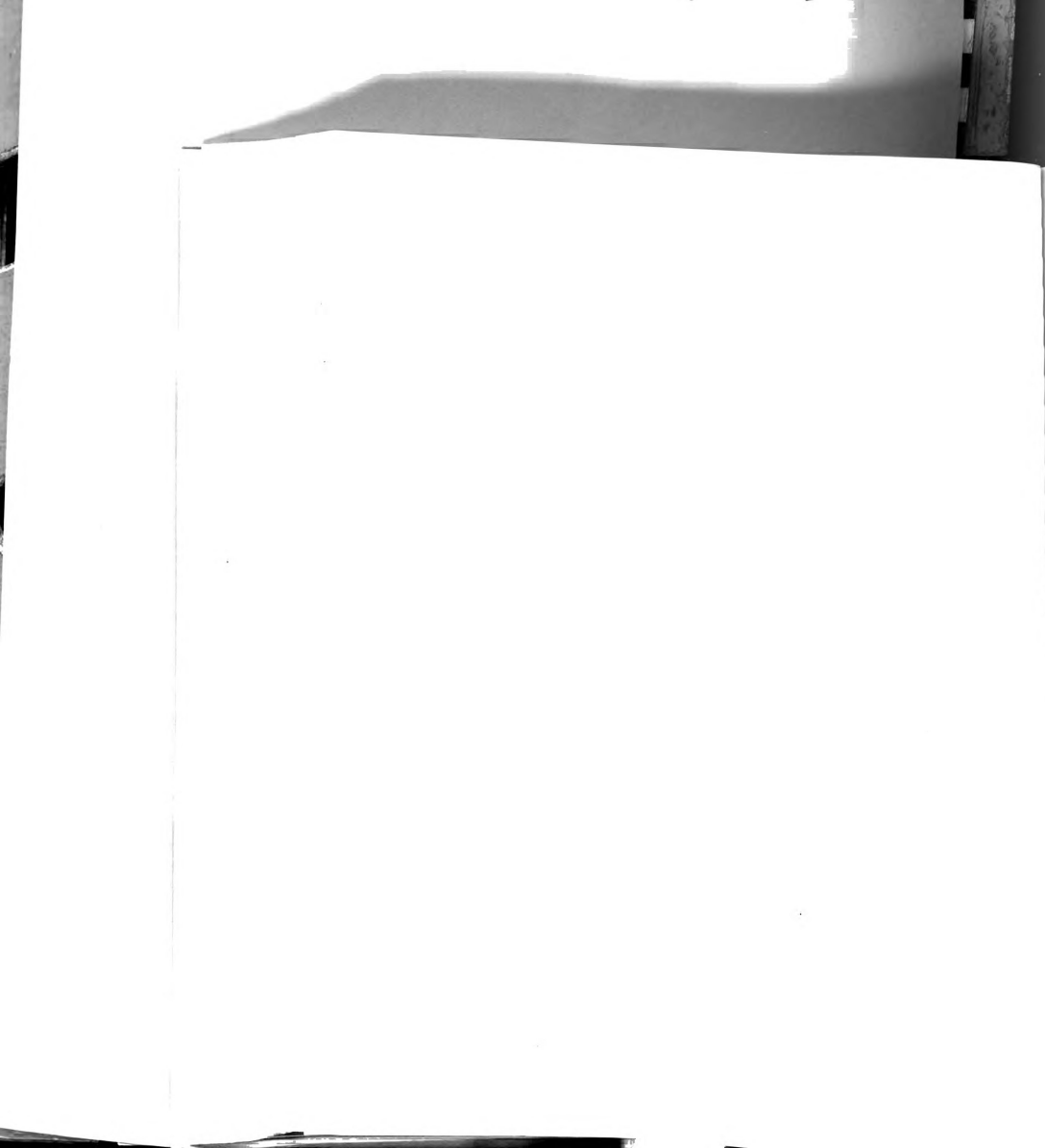
technical help, or as resource persons and consultants, should be included in the over-all plan. The type of information or technical assistance which the persons or institutions are able to provide should also be specified.

A schedule or program of activities indicating the subject, type of activity, date or dates when the activities are to take place, and where they will be held should be evolved by the central planning and coordinating body with suggestions from the regional and local organizations.

Supervisory visits to the individual schools by regional supervisors of the General Office should be timed or synchronized with the over-all in-service training schedule and with the regional or local in-service training programs.

Regional supervisors and local school administrators should be held jointly responsible for the successful implementation of nationally held programs at the local level. In other words, the supervisor and local school administrator should see to it that teachers who participate in national or regional in-service training activities lead in local programs designed to disseminate the information, skills, and abilities which they gain to the other members of the school staff. The supervisor and administrator may act as resource persons or consultants.

Proceedings or summaries of highlights of in-service



activities such as workshops, conferences, conventions, educational trips, seminars, etc., should be mimeographed and distributed to all schools and made available to all school personnel.

Within the framework of the over-all plan a regional program should also be evolved by a regional planning and coordinating body composed of the regional supervisor, administrator of the respective schools in the region, and representatives of teachers.

The regional program should be a continuation or carry-over of the activities provided by the national program, but should include activities designed to supplement the latter.

Regional programs should be geared to both the local and national programs, and the schedule of activities synchronized with the schedule of visits by the regional supervisors or supervisors at-large from the General Office. Maximum use should be made of personnel resources easily available within the region. The activities planned for the national program, whenever feasible and practical, should be held on a regional basis instead.

Local programs, like regional programs, should operate within the framework of the national and regional programs, but include subjects and activities of local import. Activities at the local level may be divided into two parts: (1) follow-through or implementation of national and regional programs;





and (2) activities dealing on local problems and objectives.

Types of Program Activities and Procedures

The following are suggested procedures to be followed:

At the national level:

- (1) Conventions and conferences of administrators and/or teachers.
- (2) Summer school programs.
- (3) Workshops for highly specialized service personnel such as guidance counselors.
- (4) Internship training for prospective principals and farm managers.
- (5) Supervisory visits and conferences with teachers by General Office supervisors.
- (6) Seminars for supervisors on new developments, educational issues and trends.
- (7) Dissemination of information through bulletins, memorandums, circulars, abstracts of professional articles, etc.

At the regional level:

- (1) Conferences of administrators and teachers with or without the regional supervisors.
- (2) Workshops and seminars.
- (3) Inter-school visitation.
- (4) Demonstration (classroom, laboratory or field).
- (5) Cooperative action research (educational).
- (6) Cooperative technological or agricultural research.
- (7) Exchange of teachers.



- (8) Refresher professional courses or graduate courses arranged with teacher-training institutions and authorized by the Central Office.
- (9) Exchange of professional and technical information or results of researches and experiments.
- (10) Educational trips.
- (11) FFP and FHP conventions and agricultural fairs.
- (12) Supervisory visits by regional or at-large supervisors.

At the local level:

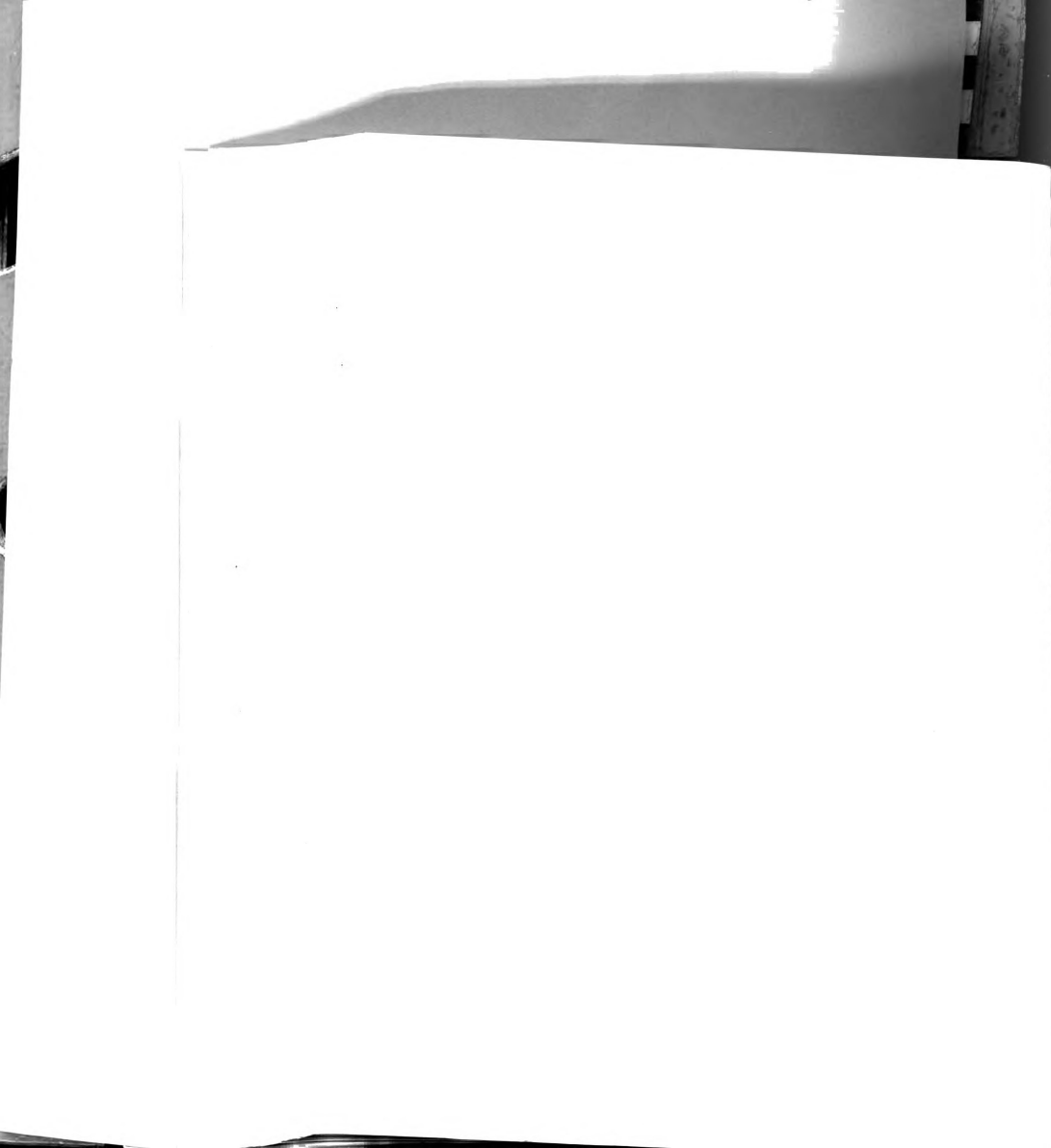
- (1) Professional meetings or conferences.
- (2) Seminars.
- (3) Workshops.
- (4) Demonstrations (classroom, laboratory, field).
- (5) Field trips and educational trips.
- (6) Individual conferences of teachers with head of school or with professional and technical people from outside, and with guidance counselors.
- (7) Professional and cultural reading.
- (8) Community and/or PTA meetings and assemblies.
- (9) Action research and agricultural experiments.
- (10) Resource surveys and follow-up studies.
- (11) Symposiums or panel discussions.
- (12) Agricultural fairs and exhibitors.
- (13) Extension service.
- (14) Leisure-time activities.
- (15) Summer school attendance.



- (16) Classroom visits and observations by head of school or heads of departments followed by conferences with teachers.
- (17) Orientation programs for beginning teachers.
- (18) Follow-up visits by teacher-training institutions.

Scope of Program and Extent of Participation:

- (1) For economic reasons nationally held programs cannot be too many. Only subject areas which regional or local programs cannot handle well should be included. Necessarily the number of participants will also be limited. But the program should make provisions for the representatives of each region or individual schools to conduct and lead in similar in-service activities in their individual schools.
- (2) National programs should put stress on supervisory visits and providing professional and technical help to local schools and individual teachers in conjunction with regional or local programs.
- (3) National programs should see to it that opportunity is provided to as many teachers as possible to attend summer school annually for advanced graduate credits.
- (4) At the regional level a wider field of subjects could be taken up and different techniques used. Emphasis should be placed, however, on problems common to the region and to projects being conducted on a cooperative basis. As many of the teachers from schools in the region as can be financed by local funds should be allowed to participate in regional programs.
- (5) The local programs should receive the most attention from supervisors and administrators. It is the program with the greatest potential; it is probably the only program that will enable all the teachers and other members of the school staff to participate together every time. Within limits of the capabilities of personnel and the time available as many subjects as are needed or desired by the teacher to meet their needs can be taken up, and as many of the devices and

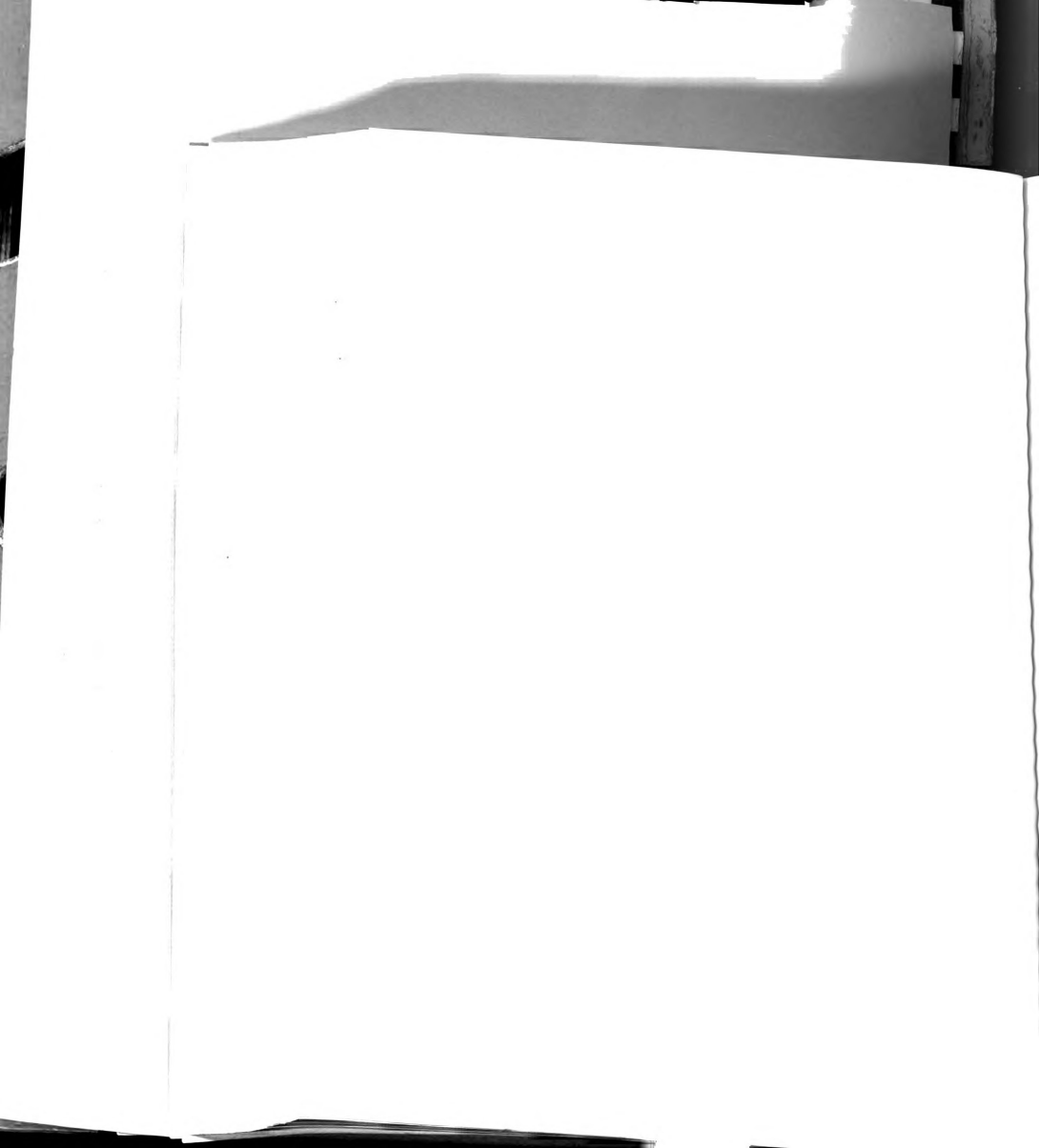


techniques listed earlier as are appropriate may be used. The development of competent leadership should be given prior attention by the Central Office. More frequent visits by area or regional supervisors should be made and timed with local in-service activities. Hence, the necessity for synchronizing the schedules of supervisors with the schedule of in-service activities of individual schools.

Implementation of the proposal: Leadership in evolving the over-all program plan should be assumed by the Central Office. It may be done as follows:

- (1) Preliminary conferences of supervisors to:
  - a. Survey resources (from reports of supervisors).
  - b. Formulate tentative general principles, objectives, and procedures.
  - c. Communicate proposals and plans to different school administrators and teachers.
- (2) Convene administrators to:
  - a. Appraise them of the problem and proposed program.
  - b. Present and discuss the tentative principles, objectives and procedures.
  - c. Decide on guiding principles, objectives and procedures.
  - d. Develop the general framework of the program.
  - e. Define the scope, content and types of programs to be held at the various levels.
  - f. Define the roles and functions of the General Office, regional and local personnel.
  - g. Formulate the tentative schedule of activities at the various levels.
  - h. Prepare list of persons or institutions from whom help may be obtained.
  - i. Form a central coordinating body.
  - j. Plan and decide on the involvement of teacher-training institutions.
- (3) Organizing regional coordinating bodies:
  - a. Regional conference to form coordinating body.





- b. Decide on types of programs to be held at the regional level.
  - c. Decide on content of programs based on needs or problems of teachers, individual schools, and the community with reference to national goals.
  - d. List resources and make preliminary contacts with probable resource persons.
  - e. Evolve tentative schedule of activities in relation to national schedule.
  - f. Define areas of cooperation and responsibilities.
- (4) Organizing local programs and creating planning and coordinating bodies:
- a. Presentation of problem to teachers.
  - b. Discussion of various proposals or suggestions.
  - c. Reaching agreement on general procedures, types, and scope of programs.
  - d. Election of members of the planning and coordinating body or bodies.
  - e. Determining needs of teachers and the school.
  - f. Deciding on content of program in reference to regional and national programs.
  - g. Evolving the schedule of activities (to be synchronized with the regional and national schedules).
  - h. Creating and defining roles of local committees.
  - i. Listing resource persons and consultants.
- (5) Finalizing the over-all program (by the planning and coordinating body).
- (6) Getting the program underway.

It is essential to remember that in all the steps involved optimum participation of local school administrators and teachers be secured. The success of the program depends to a large degree on the interest, support, and cooperation of these teachers and administrators.

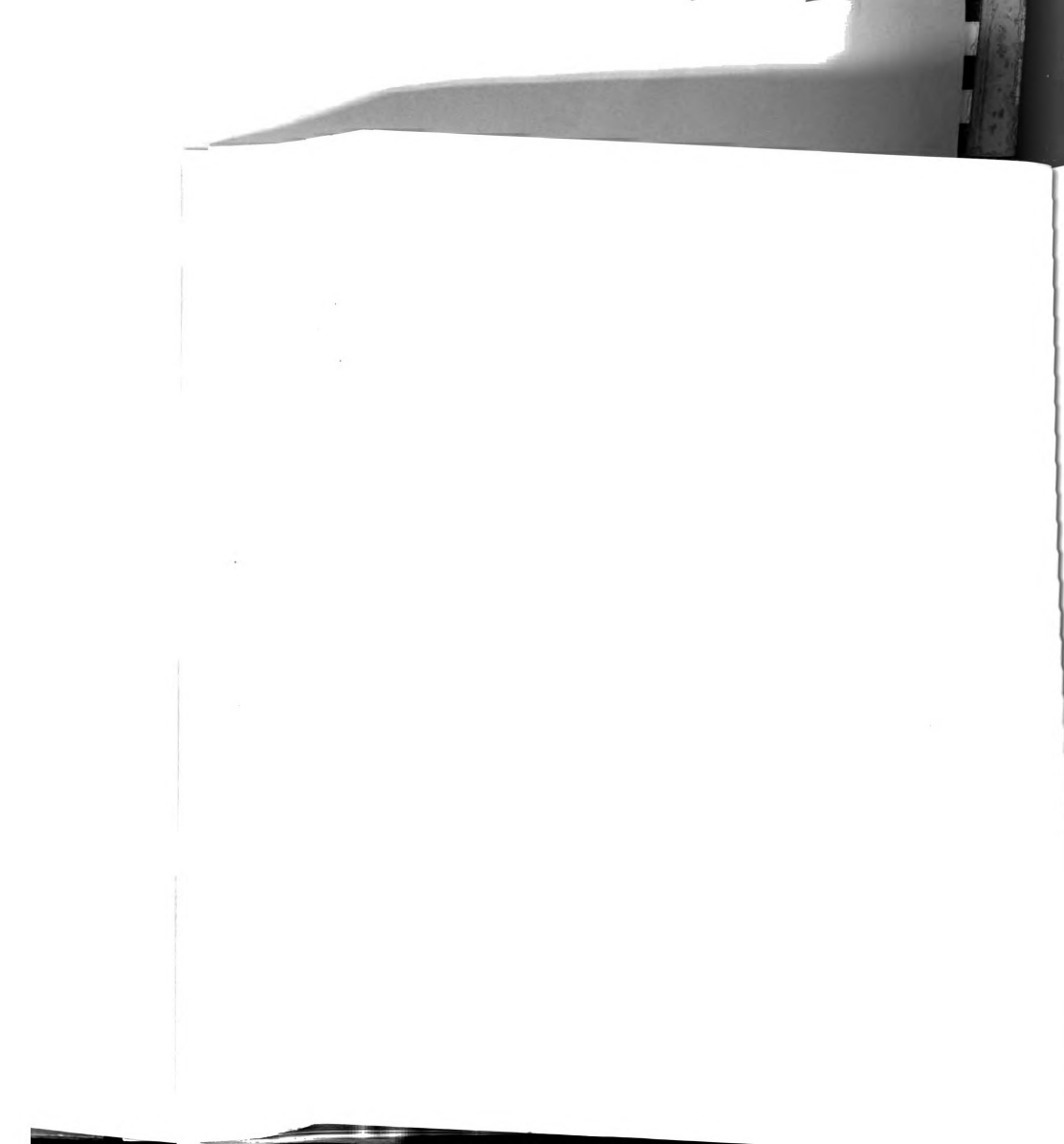
In determining the content of the in-service training activities at the various levels the areas of needs indicated



by teachers and administrators as critical or urgent should be considered. Decision should be based on priorities.

Proposal 4. The involvement of teacher-training institutions in providing in-service training programs for teachers of agricultural schools should immediately be considered. Based on the responses of the seven institutions who returned the questionnaires sent them these colleges and universities (University of the Philippines, Far Eastern University, Central Luzon Agricultural College, University of Nueva Caceres, Siliman University, Xavier University, and Mindanao Agricultural College) are willing and in a position to do the following:

- (1) Cooperate with the B. P. S. in providing and conducting in-service training programs for teachers.
- (2) Offer refresher or advance courses specially for teachers who express the need for these courses.
- (3) Initiate a follow-up program consisting of on-job visits and conferences for their graduates.
- (4) Organize off-campus classes on specific courses on the campuses of some agricultural schools during summer, if requested.
- (5) Arrange and make possible for teachers visiting these institutions to confer with members of the faculty, listen to lectures, or observe the latest techniques and procedures used in the teacher-training program.
- (6) Make available to teachers publications of the college or university pertaining to teaching and other aspects of education for their professional information.



- (7) Cooperate with the B. P. S. in organizing an employment service to help new graduates obtain jobs and enable the bureau to recruit the best trained graduates.
- (8) Provide the Director of Public Schools and superintendents of schools with a ranked list of graduates every year.
- (9) Seek the suggestions or recommendations of the Bureau of Public Schools officials and school administrators regarding teacher education curriculums.
- (10) Participate in conferences, conventions or workshops on the various problems of education in the country.
- (11) Sponsor workshops, seminars, and conferences for teachers.

In addition six of the responding institutions are willing to be hosts to participant teachers at workshops, and conferences, for the duration of these activities. Five will provide funds for the traveling expenses of members of their education faculty who may be invited by the Bureau of Public Schools to serve in workshops, seminars, or conferences of public school teachers. Four will offer summer school scholarship consisting of free tuition to a limited number of outstanding teachers. Three are willing to arrange for off-campus classes to be handled and taught by qualified agricultural school administrators either on Saturdays or in summer.

Other institutions should also be contacted for similar arrangements of cooperation with the Bureau of Public Schools.



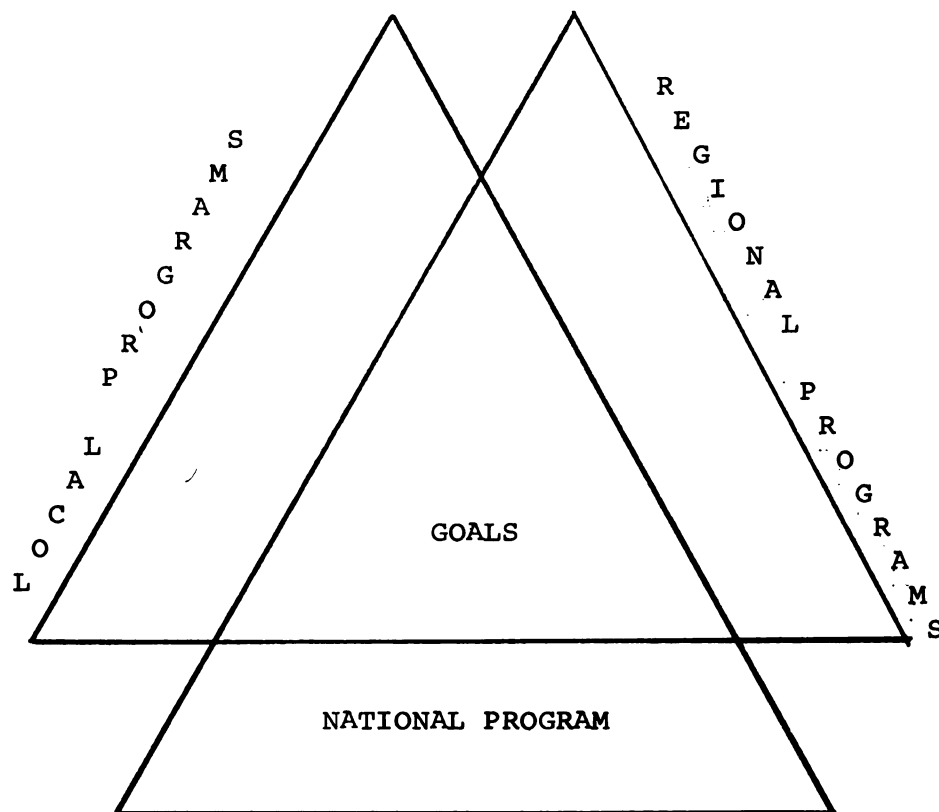
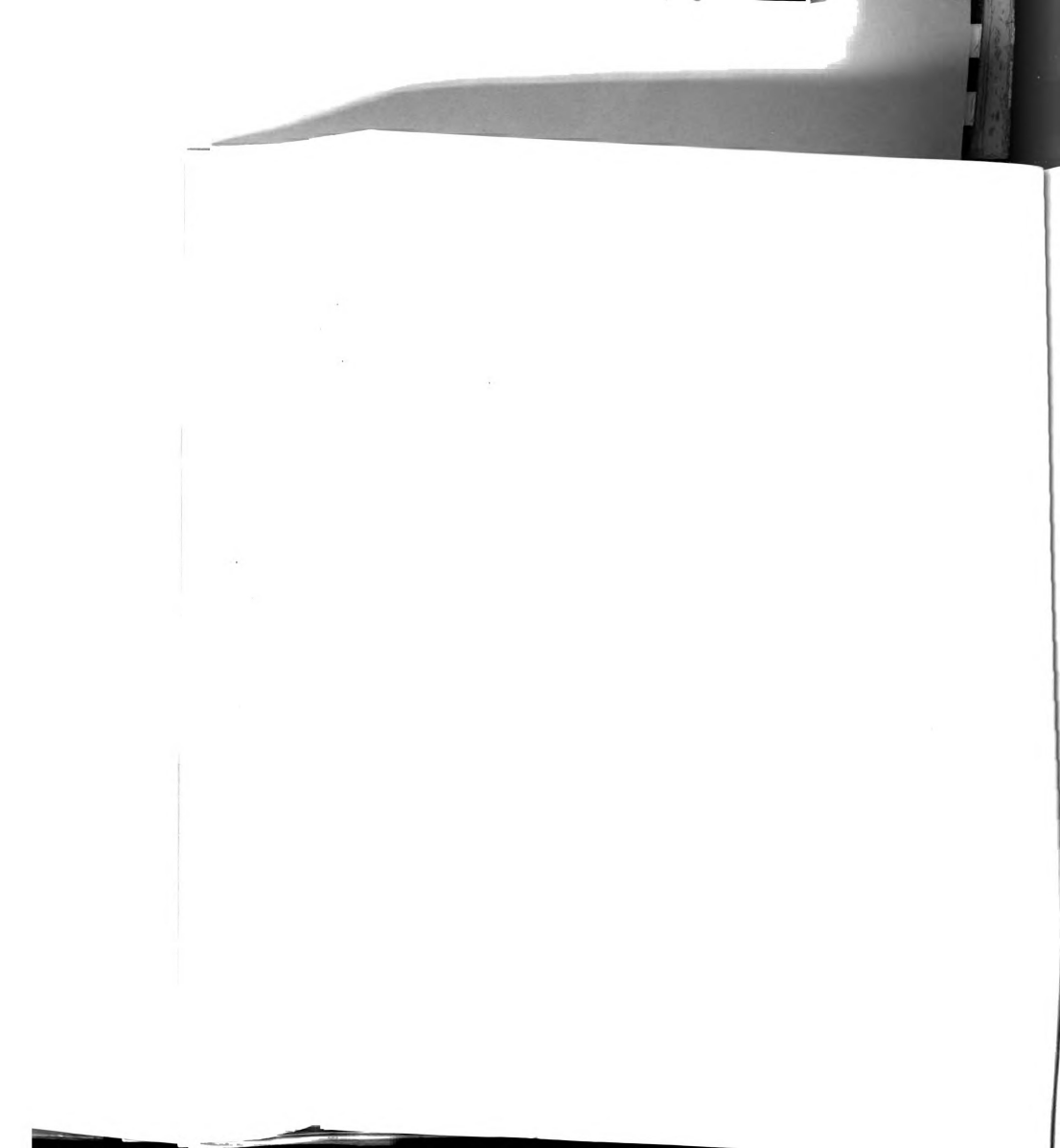


Figure 3. Schematic drawing showing the relationships of local, regional and national programs of in-service education for teachers of agricultural schools.





## CHAPTER VI

## CONCLUSIONS AND RECOMMENDATIONS

## SUMMARY OF STUDY

Purposes and Problem of This Study

The purposes of this study were to determine: (1) the in-service training needs of teachers and administrators of agricultural schools of the Philippines, (2) the type and scope of in-service training programs provided, (3) the extent of participation by teachers and administrators in these programs, (4) the factors which prevent or tend to limit the opportunities of teachers to participate in in-service training activities, (5) ways of improving the in-service training programs and maximizing the opportunities of teachers to participate in these programs, (6) possible assistance which may be obtained from teacher-training institutions in improving in-service training programs, and (7) which level of in-service program should be given increased emphasis. It was believed that if enough information could be obtained relative to the purposes summarized above, it would be possible to formulate a program of in-service education designed to maximize the participation and increase the opportunities of teachers for in-service education and professional growth.



The problem was to determine which areas of need are considered most urgent or critical, what types of in-service training activities should be provided, and how to maximize the opportunities of teachers to participate in these programs.

#### Sources and Procedures of the Study

The sources for the data used in the main part of this study were: 248 teachers and 32 administrators of 25 and 32 agricultural schools of the Philippines, respectively. Additional information was obtained from the Director of Public Schools, the ICA Mission in Manila, and seven teacher-training institutions of the Philippines. Information about in-service training practices in the United States was obtained from seven land grant colleges and universities through personal interviews with the head teacher-trainers of these institutions.

The data from teachers and administrators of agricultural schools were secured by means of two sets of pre-tested questionnaires. The 32 schools were selected on a geographical basis and according to year of establishment, i.e., only schools five years or older were chosen. Teachers were sampled from 25 of the selected schools by listing all the names of the teachers in these schools alphabetically and eliminating those with less than five years service with the Bureau of Public Schools. The names remaining in the list were then regrouped



according to major teaching assignment, and the number of respondent teachers picked out from each group in accordance with a predetermined sampling ratio devised for this purpose.

#### Summary of Results and Findings

The typical agricultural school had 27 teachers. Of these 7 taught agriculture, 3 farm mechanics, 3 homemaking, 4 language, 2 social science, 3 applied science, 2 mathematics, 2 health and physical education, and 1 unclassified teacher.

Of the 248 respondent teachers 76 taught agriculture, 37 farm mechanics, 26 homemaking, 57 language, 26 social science, 14 applied science, and 12 mathematics. Sixty-seven percent of the teachers had from 5-10 years of service. The average length of service was 11.5 years; the median was 8.7 years. As a group agriculture teachers were youngest, and social science teachers the oldest, in point of service.

Four teachers possessed Master's degrees, 62 had more than Bachelor's degrees, 155 had Bachelor's degrees, and 27 had no degrees. Most of the teachers without degrees were farm mechanics teachers. Approximately 28 percent of the teachers earned from 3-36 college credits during the period covered by the study.

One hundred and seventeen teachers taught subjects only in their major fields of specialization; 79 in both their major and minor fields; 17 in only their minor fields; and 35



in neither their major nor minor fields.

With the exception of social science teachers the most urgent in-service training need of all the teachers was in the area of their fields of specialization. Administrators considered all the areas of need listed in the questionnaire as critical but ranked methods of teaching as the most urgent. The teachers ranked 20 areas out of 27 as critical. The ranking by the administrators and teachers correlated only + 0.27.

Language teachers had the greatest number of critical needs (24 out of 27); social science teachers had the least with 15. The major areas of need in the order of importance were: research and experiments, subject matter content, methods of teaching, co-curricular activities, general education, and administration and supervision. However, if "minor fields of specialization" and "other fields" are removed from the area of subject matter content for purposes of priority ranking of the groups of needs, then the area of "subject matter content" gets first priority and "research and experiments" second.

Administrators felt the need for additional training in all the areas listed in the questionnaire. Administration and supervision, research and evaluation, and curriculum planning and improvement were ranked the most urgent. Staff organization and management, school finance, public relations,





and management and supervision of agricultural projects were ranked next in importance. Supervised farming and FFP work, guidance and counseling, audio-visual methods of instruction, and leadership training make up the last priority group of needs. The items of teachers' needs indicated by administrators in the first three priority groupings were also among the needs expressed by the administrators.

Out of 858 teachers from the 32 schools whose administrators responded an average of 89, or 10 percent, participated each year in regional or national in-service training programs from 1956-1960. This represents an average of 2.8 teachers per school per year.

Among the 248 respondent teachers 206, or 83.6 percent, attended one or more in-service training programs from 1956 to 1960. One hundred seventy-six attended one or more regional and national programs, while 30, or 12 percent, participated in local programs only. Forty-two, or 16.9 percent did not attend or participate in any at all in five years, while 65, or 26.2 percent, participated in one or more local, regional, and national programs.

Teachers 10-15 years in the service consistently had higher percentages of participation in all the types of programs conducted. The percent participation declined steadily after 15 years of service. However, the percent of total



attendance was highest among the 5-10 year group. This dropped consistently with the increase in years of service. The amount of participation was inversely related to the length of service.

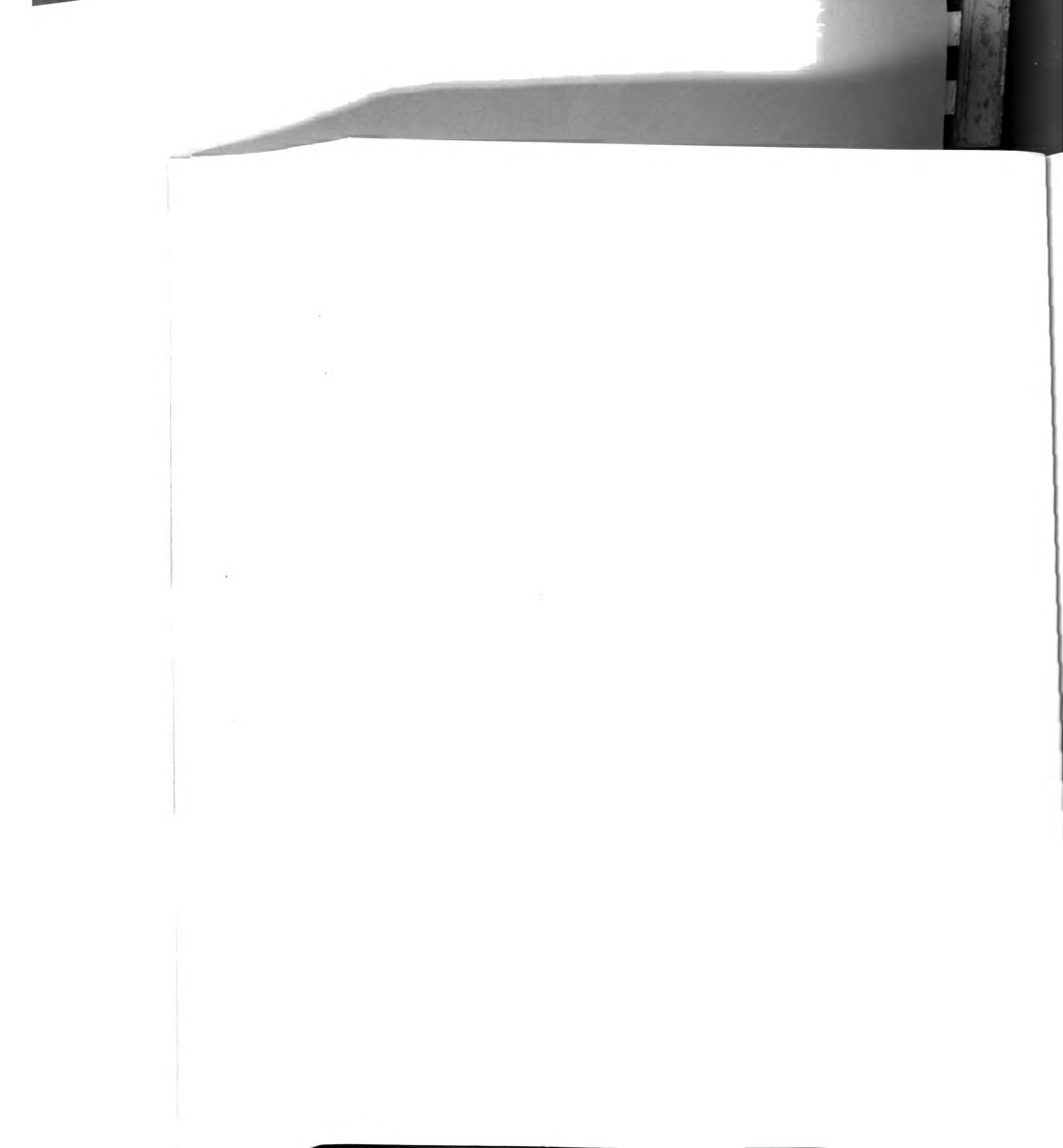
As a group vocational teachers participated in more in-service training programs than academic teachers. This was because of the emphasis placed on the vocational subjects.

Teaching assignment had little or no direct bearing on the extent of participation by teachers in in-service training activities.

The most widely used and most participated in in-service training device at the regional and national levels was the workshop. Conventions and conferences were next. Farm mechanics teachers attended the most and social science teachers the least. The five-year average participation in any or all types of programs was 2.9 times for those attending, or 1.1 times for all teachers.

The percentage attendance of all teachers from the 32 schools as reported by administrators did not vary widely from the percentage attendance of the respondent teachers. As a whole the percent participation as reported by administrators and by teachers correlated only + 0.22.

Administrators participated in in-service programs increasingly up to 20 years of service and diminished steadily



thereafter. The number of local in-service programs conducted by administrators behaved in exactly the same fashion as their participation in in-service training programs. The correlation was + 0.81. All the 32 administrators participated in one or more of seven different types of in-service activities, but only 18 conducted local programs of in-service training.

"Limited or no opportunity" was given by teachers as the chief reason for their limited or non-participation in non-credit in-service training programs. "Lack of funds" was next, followed by "subject not in interest field," and "family responsibilities." Four teachers said they did not feel the need for in-service training.

The reasons given by teachers for their limited attendance in summer school were identical to those which they gave for their limited participation in non-credit in-service activities. However, "can't afford study leave without pay" and "not allowed to use sick leave for study" were added and ranked second and third, respectively, in importance.

Administrators checked all the reasons listed in the questionnaire as important to most important, but their ranking of the reasons differed somewhat from those by the teachers, except the most important one - limited or no opportunity. The administrators, however, did not rate any of the important reasons given by teachers as unimportant. On this basis there



was agreement.

The two most important reasons given by administrators for the limited number of in-service training activities which they organized were: "too busy with administrative duties," and "teachers have little or no time."

Both the teachers and the administrators considered the in-service training programs in which they participated as generally successful and effective. However, 28 administrators said the number of programs held was insufficient and that the scope of subjects discussed was limited. A majority of the administrators recommended that workshops be held for at least two weeks. The most serious criticisms given by teachers were: "Too few programs were held," and "limited opportunities given to teachers to participate."

From 51 to 60 percent of the administrators and teachers recommended: (1) that more teachers be given opportunity to attend summer school for graduate credits on official time but personal expense; (2) that qualified school administrators be authorized to conduct graduate courses on the school campus by arrangement with teacher-training institutions; (3) that teachers be given opportunity to attend summer school once every two years, partly on official time and partly on vacation and sick leave time; and (4) that state colleges and universities be encouraged to organize and conduct off-campus classes for





graduate credits at centers accessible to teachers.

From 53 to 70 percent of the teachers and administrators recommended the following: (1) that more workshops be held regularly each year; (2) that workshops deal on subjects of which teachers have a felt need; (3) that each agricultural school earmarks adequate amounts of traveling expenses for personnel attending workshops yearly; (4) that the Central Office allocates specific funds annually to finance the holding of workshops and conventions; (5) that administrators and teachers be involved in planning workshop and convention activities; (6) that teachers attending regional and national workshops be selected on the basis of individual needs; and (7) that outstanding teachers and administrators be used as resource persons at regional and national workshops.

Other steps recommended by 64 to 70 percent of the teachers and administrators were: (1) Inter-school visitation be developed as an important in-service education device; (2) More local in-service programs be conducted; (3) Use of school vehicles for educational trips of teachers; (4) Each school allocates at least 500 pesos from its production income yearly for the purchase of professional and technical books, magazines and journals; (5) Convention or workshop schedules should provide time for relaxation and informal group discussions; and (6) Relaxation of restrictions on the travel of teachers



outside of their stations for purposes of in-service growth.

Administrators recommended that regional programs be given more emphasis and attention than the other two levels of programs; but teachers recommended that all levels (local, regional, and national) be given increased emphases. This writer agrees with the teachers. However, the amount of attention to be given to each level should be decided upon based on a realistic appraisal of the financial and personnel resources available. It seems to the writer that the long-range program should give more stress in developing strong local programs. Activities held at the regional and national levels should primarily be in areas which could not be effectively carried out locally.



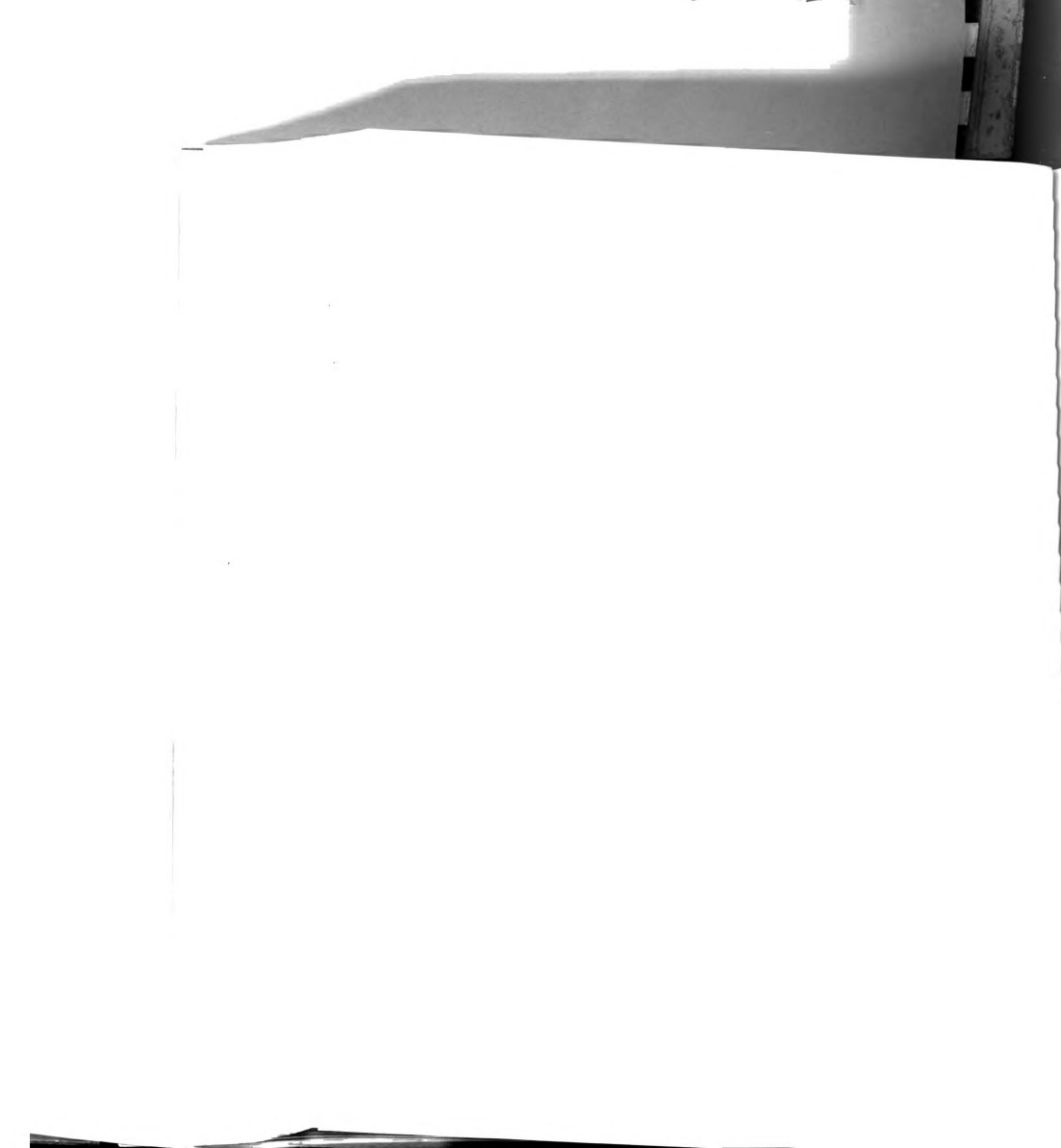
## CONCLUSIONS

Based on the findings the following conclusions relative to the purposes and problem of the study seem appropriate:

1. The disparity in the major fields of specialization and the major teaching assignment of teachers suggest a lack of coordination in the pre-service training of teachers and the employment practices of the Bureau of Public Schools. There seems to be a disproportionate production of teachers with major specialization in certain areas as compared to the actual needs of the schools. Under this condition employment practices cannot be as discriminating as it should. It is essential for teacher-training institutions to gear their training programs with the needs of public schools. It seems appropriate to suggest that teacher-training institutions train teachers for specialized fields for which public schools need qualified teachers. The supply and demand for teachers with specific majors should be balanced.

2. The high proportion of young teachers on the staffs of agricultural schools suggests that many new teachers are employed each year. If true, this calls for an intensified program of job orientation and the necessity for a follow-up program by teacher training institutions for their graduates.

3. Teachers of agricultural schools are in need of in-service training in several broad areas of educational and



professional subject matter. Because of the breadth and number of these needs it will take a comprehensive program of in-service education to fully meet and satisfy these needs. Such a program will require sizable financial outlays and the services of more qualified professional and technical personnel. It is not likely that these requirements can be adequately provided on short notice. The program to be evolved, therefore, should be planned on a long-range basis. Proposal 3 in Chapter V has been designed with this problem in mind and is offered for consideration and adoption.

4. The broad areas of educational and professional needs of teachers and administrators call for the involvement of teacher-training institutions in providing adequate in-service training programs to meet these needs. Steps should be taken in this direction as recommended under Proposal 4 in Chapter V.

5. In general, the teachers agreed with administrators as regards the former's needs for in-service training. However, the priority ranking of these needs by the administrators and by the teachers differed. This suggests that the administrator's perception of the needs of teachers does not necessarily coincide with the teachers' own perception of their needs. Hence, it is essential to reconcile these conflicting views by involving teachers in determining the content of in-service





training activities. This calls for a modification of present practices. Instead of the contents being decided upon primarily by supervisors and administrators teachers should participate, either directly, through representatives, or by correspondence.

6. The low scale points given to policy and decision making, leadership training, and school laws, coupled by the fact that less than 50 percent of the teachers indicated any degree of need for these areas, would seem to indicate that teachers think these areas to be the exclusive domain and therefore the sole responsibility of the administrator of the school. This suggests further that the teachers have had little or no participation in school policy formulation and making of decisions. Hence, the majority felt little need for learning these areas. While the data may or may not support the deductions it seems appropriate to suggest that administrators involve the teachers more and more in school administration in order to discover and utilize to the maximum the talents in the staff, thereby enhancing the effectiveness of the total program.

7. Contrary to what administrators think, teachers feel that their areas of most urgent need are in their fields of specialization. This suggests that teachers are sensitive to and feel very strongly the necessity for updating their



knowledge of subject matter. This is a healthy sign and should not be ignored. Furthermore, it emphasizes the need for providing refresher courses or regular graduate programs. It calls for the cooperation of teacher-training institutions. More in-service programs on specialized areas are needed to meet the needs of teachers for new subject matter. The Bureau of Public Schools and teacher-training institutions should work together to provide these programs.

8. Social science teachers expressed less need for in-service training in their fields of specialization than the other groups of teachers. This, however, needs further investigation. It is possible that these teachers failed to see the dynamic nature of the subject matter and the role of the social studies in community life and development. The teaching of social studies should serve an integrating function in relating school experiences to community life and living. Hence, it must be kept up-to-date with social change.

9. Language teachers expressed the greatest number of in-service training needs, but next to social science teachers they have been given the least attention. This could be a factor why students have language difficulties.

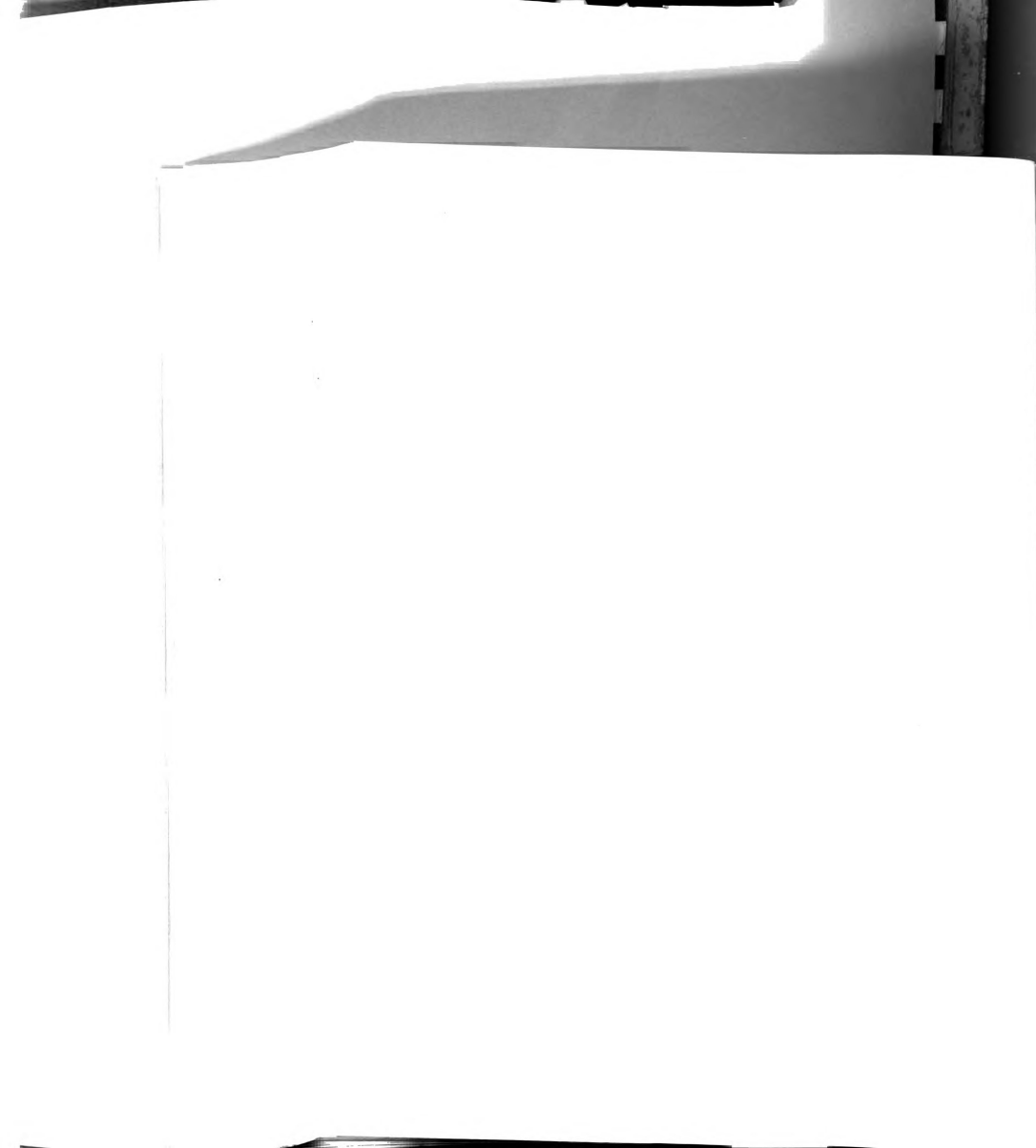
10. The study showed that vocational teachers participated in more in-service training activities than academic teachers. The conclusion is that the latter group of teachers has not been given the same chances as the former for in-service growth



through participation in regional and national in-service training activities for one reason or another. Since the success and effectiveness of the total vocational agriculture program depend upon a well-balanced instructional program it is imperative that academic teachers be given comparable opportunities for in-service education and professional growth. Certain changes in programs and practices are necessary in order to equalize the opportunities for all teacher-groups to participate in programs of in-service education. Only thus may a balanced education and professional growth among the members of the teaching staffs of the different schools be achieved.

11. Farm mechanics teachers need more opportunities to go to summer schools in order to upgrade their educational qualifications. While the study showed that they participated the most in in-service training programs during the period covered by the study, it is not inappropriate to suggest here that more of them should be encouraged to go to summer school to obtain at least a Bachelor's degree.

12. The type, number, and scope of in-service training programs held at the regional and national levels by the Central Office were all limited and insufficient to meet the needs of all teachers. Subject areas covered were devoted mostly to vocational subjects. Of the several types of



in-service training devices available only the workshop had been used to an appreciable degree. Even in this the attendance was limited because of financial and administrative difficulties, and other reasons. These facts lead to the conclusion that maximum use is not being made of the several techniques and resources available. Since programs at the regional and national levels are more expensive to conduct it would seem more realistic to give greater stress on the local programs. How this may be done has been suggested in Proposal 3 in Chapter V.

13. The extent of participation by teachers in in-service training programs at all levels was far from satisfactory. The average attendance was extremely low - only 2.9 times per year among teachers who actually participated. Too many teachers did not participate in any at all during the five years covered by the study (17 percent). The above facts suggest among other things (1) that few teachers were given the opportunity to attend, (2) that not enough in-service training programs were provided, and (3) that a number of factors prevented most teachers from attending as much as they might have wanted to. It would seem appropriate to suggest that school officials seriously consider expanding the scope and increasing the frequency of in-service programs in order to increase teacher-opportunities for in-service growth.





14. The participation of teachers in in-service training programs increased with service up to 15 years but declined steadily thereafter. The decline in participation occurs much too early. Whatever the causes are should be investigated. This suggests that not only must more programs be held but more incentives should be provided to encourage teachers to keep growing educationally and professionally.

15. Administrators indicated a desire for additional training in many areas of need. Several of these needs were the same as those of teachers. This leads to the conclusion that the limited number of local in-service programs organized and conducted by the administrators was partly due to this factor. If true, this emphasizes the necessity for planning in-service programs not only for teachers but also for administrators and supervisors. Local programs for teachers cannot be planned and carried out effectively if the professional leadership is wanting.

16. From the data in Table XX the conclusion may be made that the number and frequency of different types of in-service training activities organized at the local level by administrators are directly related to the frequency of their participation in the different types of in-service training programs held at the national and regional levels. Also, both the participation by administrators in in-service



programs and the number of local programs which they organize and conduct for their teachers are directly related to the years of service they have up to 20 years, and inversely related thereafter. If the above conclusions are valid, it would seem appropriate to suggest that not only must the directorate of public schools encourage and provide incentives and opportunities for teachers to attend in-service training programs, but also encourage and provide similar incentives and opportunities for administrators.

17. The nature of the agricultural education program, and the laws and regulations governing the operation of agricultural schools were the basic sources of the impediments tending to limit the participation of teachers in in-service training activities. These factors may be classified into four major categories: (1) time, (2) finance, (3) regulations, policies and laws, and (4) personal factors.

(1) The year-round vocational agriculture program requires the services of teachers 12 months of the year. The services of only few could be dispensed with during summer. This handicap can be minimized by emphasizing and developing strong and effective local in-service training programs.

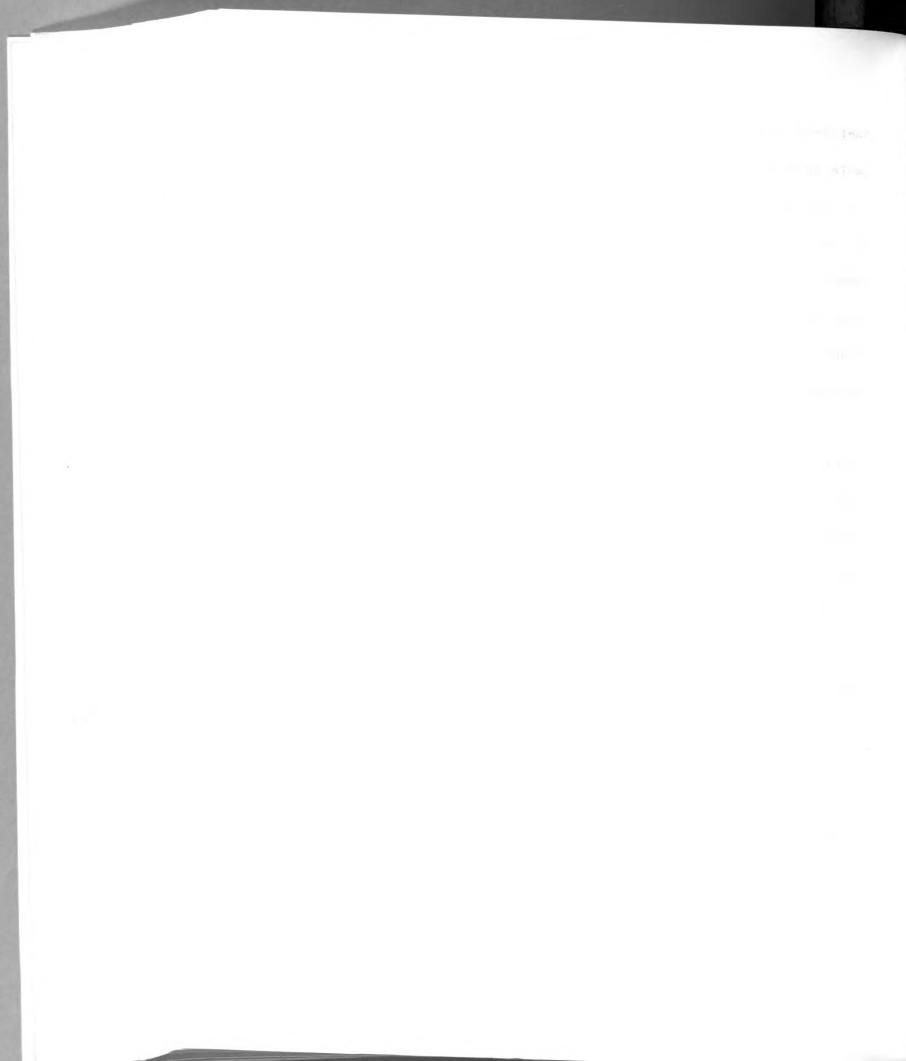
(2) The Vacation and Sick Leave Law allows only 15 days vacation and 15 days sick leave with pay for every year of service. Assuming that the duration of summer school is



from 6-10 weeks it would take a teacher approximately 3-4 years continuous service without going on vacation leave for a single day to accumulate enough vacation leave with pay and go to summer school. This suggests the necessity for amending the above law to provide at least 15 days of study leave with pay, in addition to the vacation and sick leaves already allowed. Also, provision should be made such that vacation and sick leaves may be used for study if desired.

(3) Lack of funds is a crucial problem which must be considered by educators planning the in-service education programs for teachers of agricultural schools. The low salary paid to teachers makes it practically impossible for a teacher with a family to support to save enough for purposes of financing his in-service education growth. If public funds cannot be appropriated to help teachers with traveling expenses it would seem that the best alternative would be to hold in-service training programs on a local basis.

(4) It appears that incentives were not lacking in the different schools. Only 7 teachers gave lack of it as a reason for their limited participation in in-service training activities. However, it is possible that lack of incentives is one of the reasons why the participation by teachers in in-service training programs declined much too early. It would seem proper to suggest that the relationship of the



decline in in-service training participation and incentives be investigated.

18. The administrators rated all the 8 items listed in the questionnaire as probable reasons for the limited participation of teachers in in-service programs as important to most important. The implication is that none of the reasons should be taken lightly or disregarded. The situation depicted appears to be a fair picture of the problem and indicates that all the reasons have significant bearing on the participation or non-participation by teachers in in-service training programs. All reasons should be considered in planning in-service education programs if the teachers' opportunities for educational and professional growth are to be maximized.

19. Time was the most important factor which affected the type and frequency of local in-service training activities conducted for teachers by administrators. How truly busy administrators are cannot be disputed for lack of data. It may be supposed, however, that many of the tasks of administrators could be delegated to subordinates, and that better programming and scheduling of activities would increase the efficiency of the administrators and their staffs. This would lessen the time they need to spend in attending to routine administrative matters. The time thus saved could then





be spent by the administrators in helping the teachers with their problems and in-service needs.

20. The in-service training programs held in the past were generally effective and satisfactory but very inadequate. Too few had been held, and the subjects covered were limited. Participation by teachers was also limited. Only about 10 percent of the teachers studied were able to participate every year. This suggests that more programs need to be provided to maximize the opportunities of teachers for in-service growth.

21. The development of strong local programs of in-service education appears to be the most practical first step to be taken in providing more in-service training activities which will meet the needs of all teachers and maximize their opportunities to participate in these programs.

22. The follow-through of regional or national in-service training programs to the local level has not been given enough attention as evidenced by the relatively few programs held at the local schools. It would seem necessary that the supervisory program of the Central Office be re-oriented to stress follow-through programs at the individual school level so as to spread the benefits of regional and national in-service training programs from teachers who attend to those who do not.



23. Approximately 60 percent of the teachers of agricultural schools would go to summer school at their own expense if given the opportunity on official time. This arrangement has been done in the past for a limited number of agriculture, farm mechanics, homemaking, and science teachers. Other groups of teachers should be given the same privileges. More teachers should be allowed to go to summer school each year under this arrangement. Nearly 50 percent of the teachers would go to summer school if allowed to use vacation and sick leave and given official time for the balance of the summer session not covered by the vacation and sick leave. The possibility of amending the Vacation and Sick Leave Law to provide for this should be explored.

24. In general, teacher-training institutions are willing to help and cooperate with the Bureau of Public Schools in providing adequate and comprehensive programs of in-service education for teachers. Three of the institutions which responded are willing to arrange to conduct off-campus classes for teachers of agricultural schools. Four will offer tuition scholarships to outstanding teachers from agricultural schools. (Refer to Proposal 4 in Chapter V for other activities which all the responding teacher-training institutions are willing to do or provide).

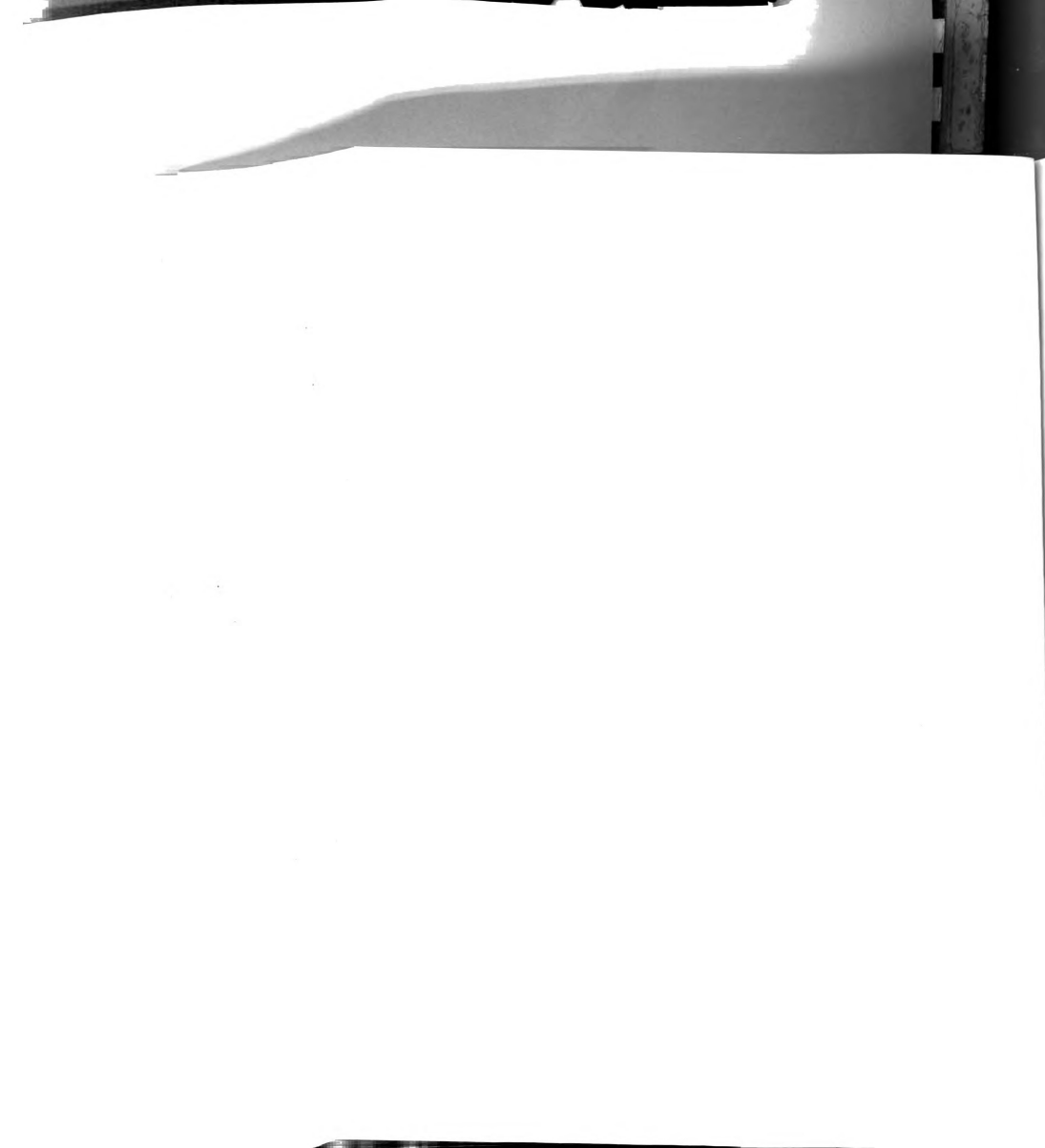
25. Teacher-training institutions expressed eagerness



to establish a cooperative working relationship with the Bureau of Public Schools as regards teacher education and in-service training of teachers. Appropriate steps should be taken by the bureau to initiate the cooperative program in order to coordinate the functions of the separate institutions with the activities of the Bureau of Public Schools, with the aim of building up stronger teacher-education and in-service training programs.

26. Many practices in the United States regarding in-service education could be applied with modifications in the Philippines. Among those which may be tried are: follow-up visits of teachers by members of teacher-education departments of the different teacher-training institutions, consultant services in cooperation with the Bureau of Agricultural Extension, Bureau of Plant Industry, Bureau of Forestry, Bureau of Animal Industry, and other agencies of the government, and creation and establishment of regional or district supervisory offices in strategic places so as to make the supervisory program of the Central Office more effective.

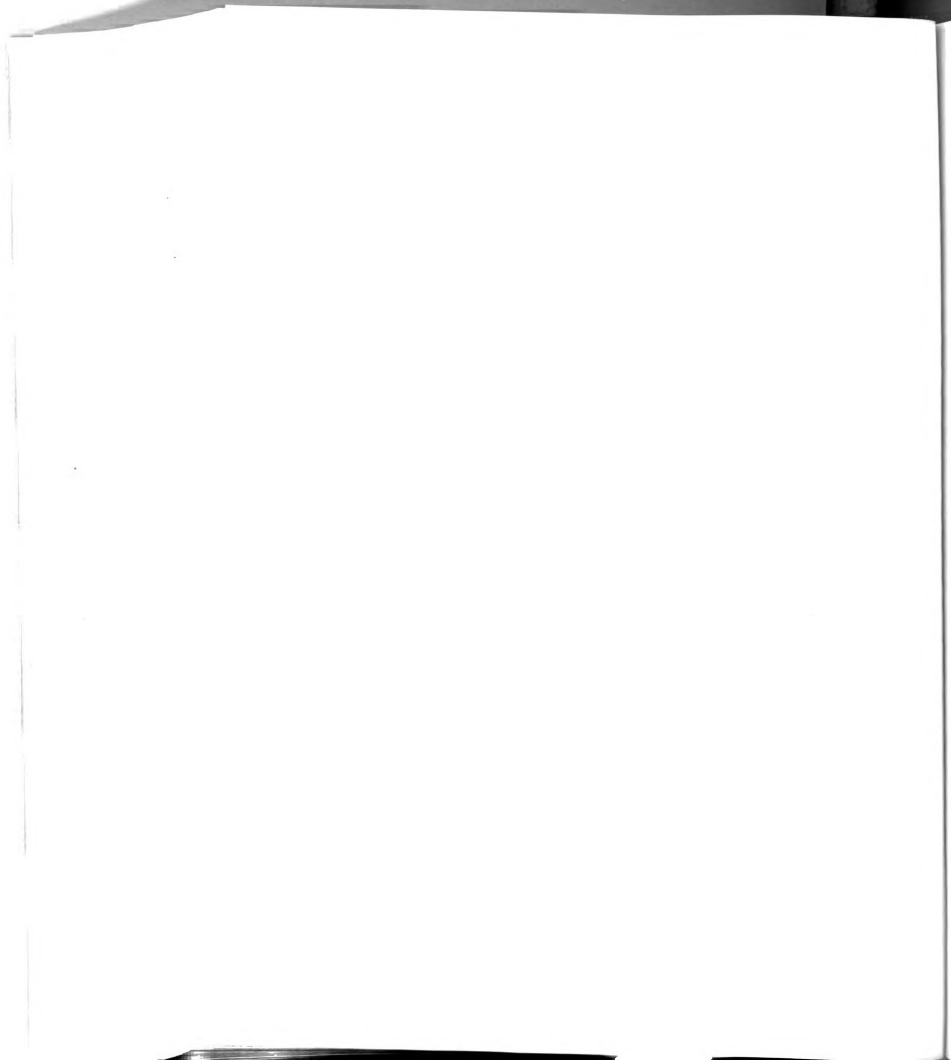
27. The in-service training activities provided for teachers can be improved and increased without substantial increases in appropriations. This can be done through better planning, organization, and coordination of activities, and by involving teacher-training institutions in providing these



programs.

28. Finally, it appears from the study that many of the difficulties tending to limit the participation of teachers in in-service training programs and their opportunities for self-improvement could be eliminated by better organization and by modifying traditional practices and regulations, both in the Central Office and in the individual schools.

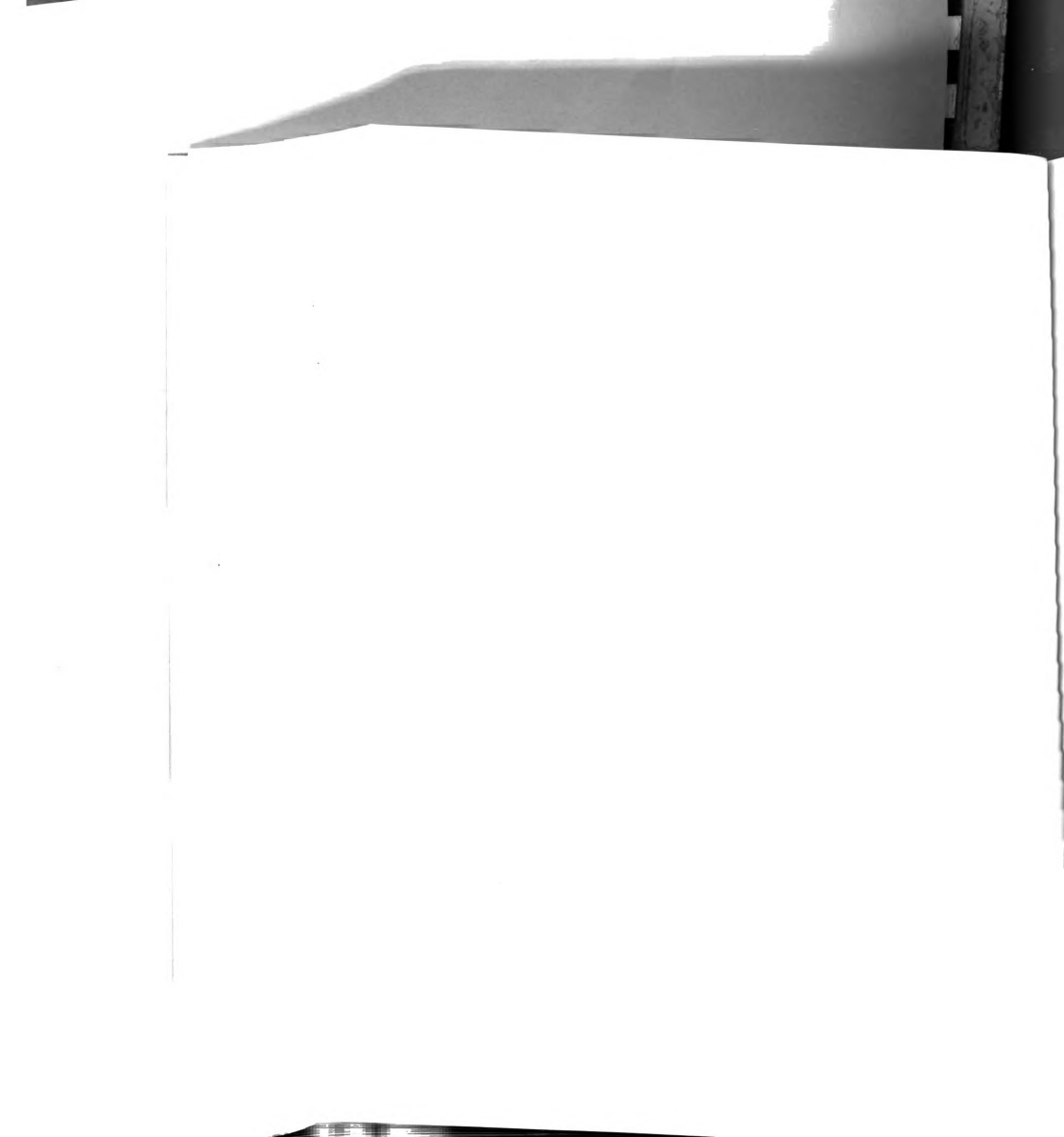




## RECOMMENDATIONS

1. A systematic and continuous evaluation program should be set up and put into operation to evaluate the various programs of the agricultural schools, including in-service training. In-service education is aimed at the improvement of instruction. In order that this program can be intelligently planned and directed toward this end the vocational agriculture program itself should be evaluated. It is essential that the weaknesses be identified so that in-service activities can be planned accordingly. It is recommended that an evaluation body be created to undertake this appraisal job continuously at specified intervals. Details of the organization, objectives and functions of this committee are outlined in Proposal 1, Chapter V.

2. The philosophy of in-service education should be modified to keep it responsive to trends in education and the new demands for in-service training in professional skills and new knowledge. Such a philosophy should be oriented to the philosophy and objectives of the vocational agriculture program as well as to education in general. The objectives should embody not only the personal and professional welfare of the entire school staff but also the purposes of the school and the objectives of agricultural education. The means should take into account trends and employ all the



available techniques and resources. A detailed description of this recommendation is given in Proposal 2, Chapter V.

3. In-service education should be regarded as a major part of the supervisory program and a co-function of the Bureau of Public Schools and teacher-training institutions. Responsibility for planning and carrying out the program should be assumed jointly by the Central Office of the bureau, local school administrators, and teacher-training institutions. The bureau should take appropriate steps to seek the cooperation of and establish a cooperative working relationship with teacher-training institutions. Details of the organization, objectives, activities, level, and procedures of a national program of in-service education based on the above principles are given under Proposal 3, Chapter V.

4. In planning for and organizing the in-service education program the principles stated on pages 127-137 should be observed and used as guidelines for action.

5. The active participation of teacher-training institutions in providing in-service training activities for teachers should be sought. Judging from the responses of the seven institutions that returned the questionnaires sent to them, involvement of these institutions will give in-service education a tremendous boost. Their support and cooperation should be enlisted immediately. Attention is invited to

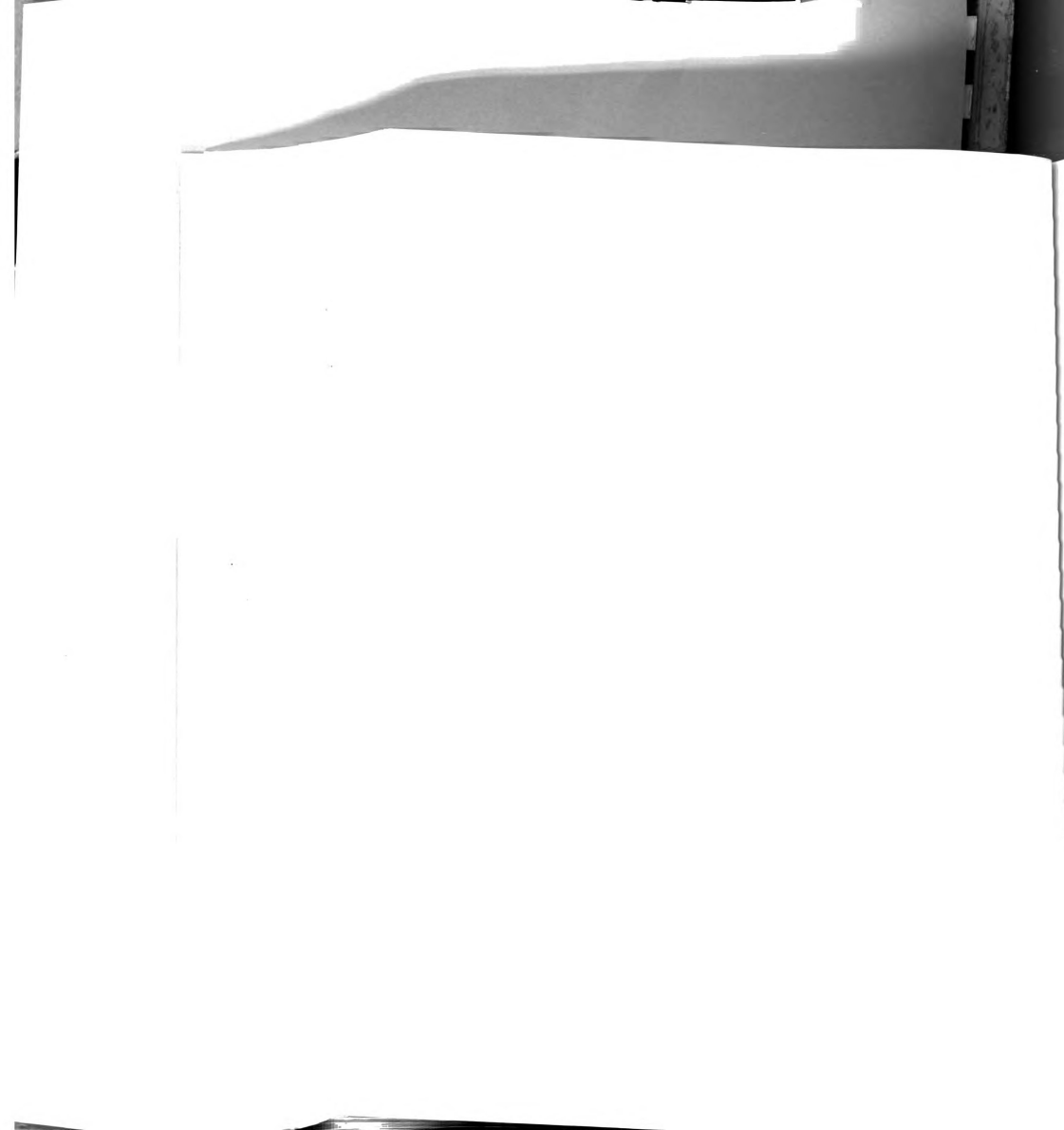
proposal 4, Chapter V, which outlines the details of this recommendation.

6. The General Office should seriously consider authorizing local schools to allocate part of the school appropriation, either from National funds or from production income, for the purchase of professional and technical books and publications such as magazines and journals for the teachers' professional reading. The conspicuous lack of these types of materials in the school library is unquestionably a very serious handicap which teachers must put up with in their search for new information.

7. To be most effective the in-service training programs at the different levels should be coordinated, synchronized, and made a part of the total supervisory program of agricultural schools. Details of how this may be done are outlined under Proposal 3, Chapter V.

8. Teachers should be encouraged to attend summer school as often as possible. Equal opportunities should be given to all teachers. More teachers should be allowed to attend summer school on official time but personal expense. The possibility of amending the Vacation and Sick Leave Law to provide for 15 days study leave with pay, and the use of sick leave for study should be considered seriously.

9. The possibility for teacher-training institutions

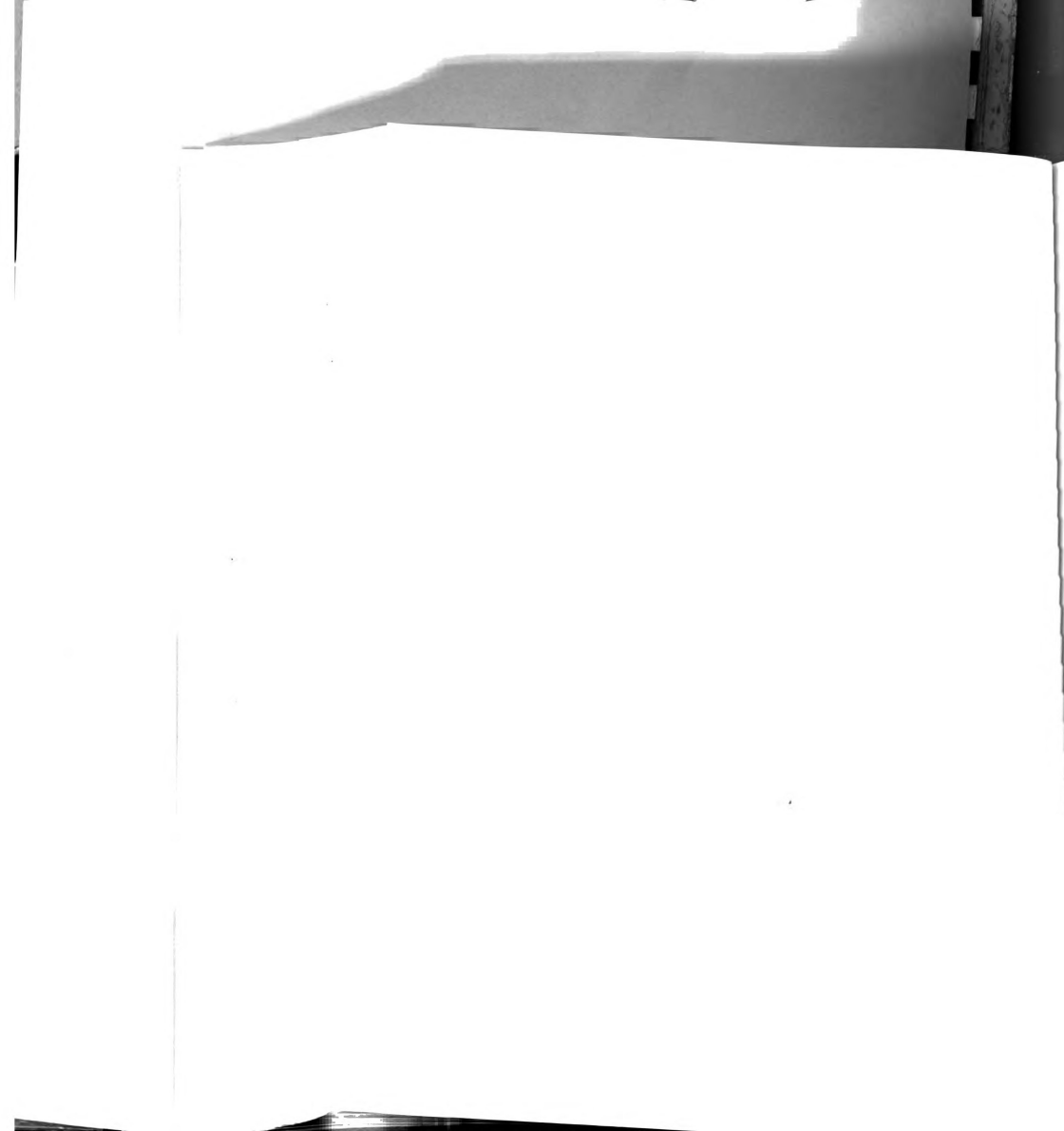


to hold summer classes on the campuses of some agricultural schools should be explored. Three institutions out of seven which responded are willing to do this (see Proposal 4).

10. Follow-up visits by teacher-training institutions of their graduates should be encouraged. Only by appraising their graduates could these institutions introduce improvements designed to close the gap between pre-service training and actual job requirements in their teacher-education programs. Teachers should be allowed to make occasional visits to teacher-training institutions to observe new techniques and procedures. Conferences of teacher-trainers, supervisors of the Bureau of Public Schools, and local school administrators should be held often for purposes of mapping out plans for the improvement of teacher education and in-service training.

11. Teachers and other members of the school staff who are involved in in-service training activities should participate in planning the content and activities of the in-service training programs. This may be done either through direct participation, representation, or through communication (survey of needs and suggestions of teachers).

12. In view of the magnitude of the task and the continuing aspect of it the in-service training program should be planned on a long-term basis. A comprehensive program





organized at the three levels (local, regional, and national) requires a sizable outlay of funds which may not be available. The program to be evolved should take this into consideration. The development of a strong local program should be the first objective. The Central Office's supervisory program should be re-oriented toward this objective.

#### Further Research Needed

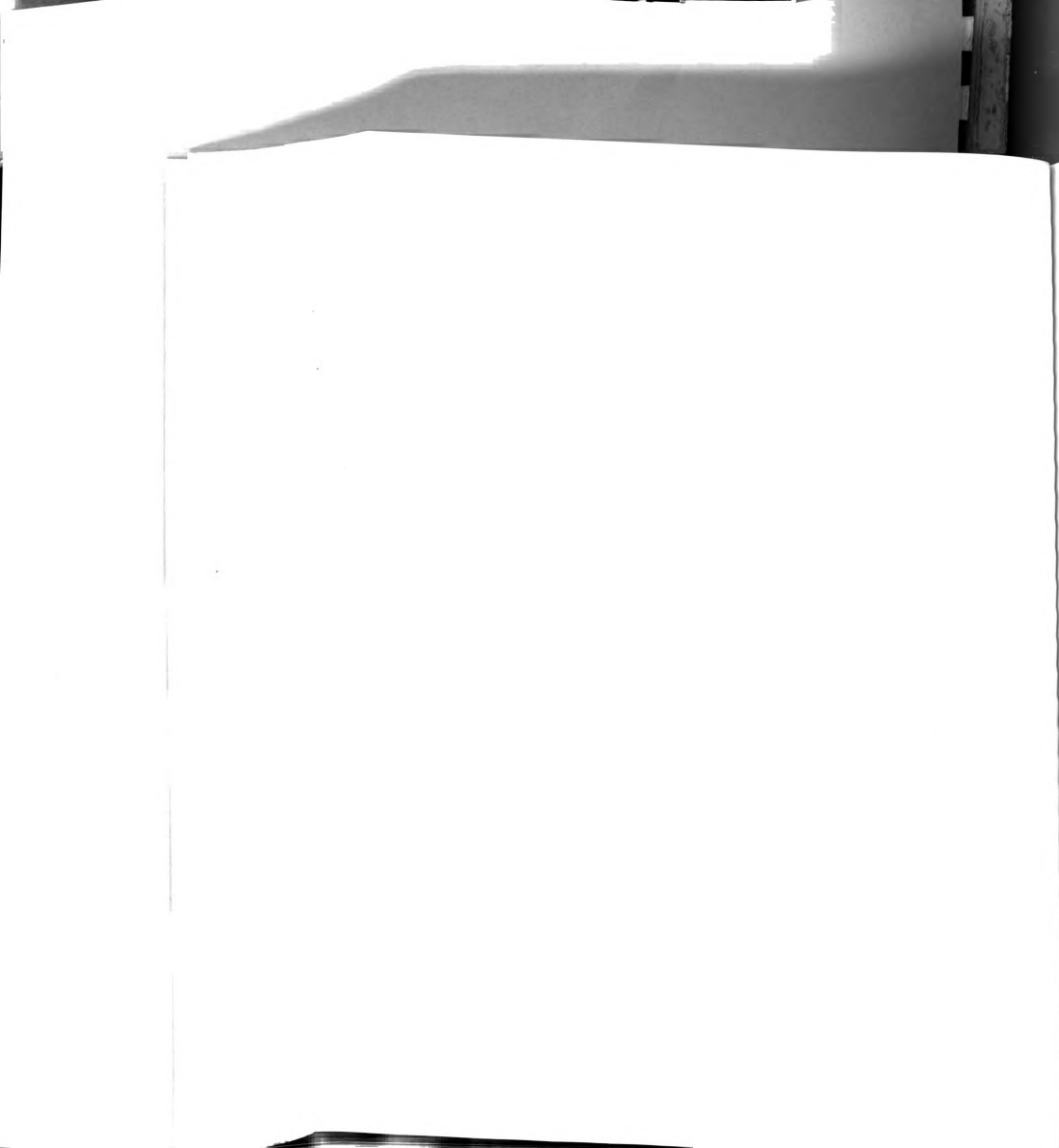
1. A study of the various laws and regulations governing or affecting the operation of agricultural schools should be made to determine which laws or what provisions of these laws are unfavorable to the interest of in-service education and the improvement of the total school program so that corresponding modifications and/or amendments could be recommended to authorities concerned.
2. A study is needed to determine how the school instructional program can best be scheduled to permit optimum participation by teachers in regional and national in-service training programs, including attendance in summer school.
3. A more critical study should be made to determine the comparative effects of local, regional, and national in-service training programs such as workshops, conferences, and other devices upon the professional competencies of teachers and upon students.



## APPENDIX A

TABLE IA. NUMBER AND CLASSIFICATION OF TEACHERS IN THE STAFFS OF 32 AGRICULTURAL SCHOOLS AS REPORTED BY THE RESPECTIVE ADMINISTRATORS OF THESE SCHOOLS.

| School Number | Classification fo Teachers |      |      |       |        |        |       |      |        | Total |
|---------------|----------------------------|------|------|-------|--------|--------|-------|------|--------|-------|
|               | Agr.                       | F.M. | H.E. | Lang. | So.Sc. | Ap.Sc. | Math. | P.E. | Others |       |
| 1             | 10                         | 4    | 3    | 5     | 2      | 4      | 2     | -    | -      | 30    |
| 2             | 12                         | 4    | 6    | 6     | 4      | 4      | 4     | 4    | -      | 44    |
| 3             | 7                          | 4    | 4    | 4     | 4      | 5      | 2     | 5    | 1      | 36    |
| 4             | 10                         | 4    | 4    | 6     | 3      | 4      | 3     | 2    | -      | 36    |
| 5             | 8                          | 3    | 3    | 6     | 3      | 3      | 2     | 2    | -      | 30    |
| 6             | 8                          | 3    | 3    | 4     | 3      | 2      | 2     | -    | 1      | 26    |
| 7             | 9                          | 5    | 3    | 6     | 4      | 4      | 2     | 2    | -      | 35    |
| 8             | 5                          | 3    | 4    | 3     | 2      | 3      | 2     | 2    | -      | 24    |
| 9             | 6                          | 2    | 2    | 3     | 2      | 2      | 1     | -    | -      | 18    |
| 10            | 5                          | 3    | 3    | 5     | -      | 6      | 3     | 1    | 3      | 29    |
| 11            | 8                          | 3    | 2    | 4     | 1      | 2      | 1     | 2    | -      | 23    |
| 12            | 5                          | 2    | 2    | 3     | 2      | 1      | 1     | 1    | 2      | 19    |
| 13            | 4                          | 3    | 2    | 2     | 1      | -      | 1     | -    | -      | 14    |
| 14            | 9                          | 5    | 6    | 10    | 2      | 5      | 5     | 5    | 2      | 49    |
| 15            | 7                          | 3    | 3    | 2     | 1      | 3      | 1     | 2    | -      | 22    |
| 16            | 6                          | 2    | 2    | 4     | 1      | 2      | 2     | 2    | -      | 21    |
| 17            | 6                          | 2    | 2    | 3     | 2      | 2      | 1     | 2    | -      | 20    |
| 18            | 10                         | 2    | 4    | 5     | 2      | 3      | 2     | 1    | -      | 29    |
| 19            | 7                          | 3    | 4    | 5     | 3      | 6      | 4     | 4    | -      | 36    |
| 20            | 8                          | 3    | 2    | 5     | 2      | 3      | 2     | 1    | 4      | 30    |
| 21            | 6                          | 2    | 3    | 2     | 1      | 2      | 1     | 1    | -      | 18    |
| 22            | 5                          | 4    | 2    | 5     | 1      | 2      | 2     | -    | 5      | 26    |
| 23            | 5                          | 2    | 2    | 3     | 2      | 1      | 1     | 1    | -      | 17    |
| 24            | 3                          | 2    | 2    | 2     | 1      | 1      | -     | 1    | -      | 12    |
| 25            | 15                         | 5    | 4    | 8     | 4      | 6      | 3     | 2    | -      | 47    |
| 26            | 4                          | 2    | 2    | 3     | 2      | 1      | 2     | 2    | 4      | 22    |
| 27            | 4                          | 2    | 2    | 3     | 2      | 1      | 2     | 2    | 4      | 22    |
| 28            | 9                          | 3    | 3    | 4     | 2      | 4      | 2     | -    | 3      | 30    |
| 29            | 5                          | 3    | 3    | 5     | 1      | 2      | 1     | 1    | 2      | 23    |
| 30            | 6                          | 2    | 2    | 2     | 1      | 3      | 1     | 1    | -      | 18    |
| 31            | 7                          | 3    | 4    | 5     | 2      | 3      | 2     | -    | 3      | 29    |
| 32            | 6                          | 1    | 2    | 4     | 2      | 2      | 2     | 2    | 2      | 23    |
| Total         | 225                        | 94   | 95   | 137   | 65     | 92     | 62    | 52   | 36     | 858   |
| Average       | 7                          | 3    | 3    | 4     | 2      | 3      | 2     | 2    | 1      | 27    |
| Percent       | 26                         | 11   | 11   | 16    | 8      | 11     | 7     | 6    | 4      | 100   |



## APPENDIX B

TABLE VA. IN-SERVICE TRAINING NEEDS OF TEACHERS OF AGRICULTURAL SCHOOLS OF THE PHILIPPINES AS INDICATED BY RESPONDENT TEACHERS.

| Area of Need              | *Ranked Needs of Teachers Grouped by Subjects Taught |           |           |            |              |             |            | Ave. Scale Rank of Need | Total Ranking Need | Per Cent |
|---------------------------|------------------------------------------------------|-----------|-----------|------------|--------------|-------------|------------|-------------------------|--------------------|----------|
|                           | Agr. (176)                                           | F.M. (37) | H.E. (26) | Lang. (57) | Soc.Sc. (26) | Ap.Sc. (14) | Math. (12) |                         |                    |          |
| <b>Subject matter:</b>    |                                                      |           |           |            |              |             |            | <b>3.5</b>              |                    |          |
| Field of                  |                                                      |           |           |            |              |             |            |                         |                    |          |
| major                     | 4.4                                                  | 4.1       | 4.3       | 4.3        | 2.2          | 4.2         | 4.8        | 4.3                     | 201                | 81.1     |
| Minor field               | 3.3                                                  | 3.1       | 2.4       | 3.4        | 4.2          | 2.5         | 3.5        | 3.2                     | 112                | 45.2     |
| Others                    | 2.0                                                  | 2.3       | 2.6       | 2.4        | 2.0          | 2.5         | 2.0        | 2.3                     | 77                 | 31.1     |
| <b>General education:</b> |                                                      |           |           |            |              |             |            | <b>3.4</b>              |                    |          |
| Philosophy                | 3.7                                                  | 3.4       | 3.4       | 3.6        | 2.6          | 3.4         | 3.5        | 3.9                     | 151                | 60.9     |
| Psychology                | 3.5                                                  | 3.8       | 3.8       | 4.0        | 3.1          | 3.4         | 4.0        | 3.7                     | 137                | 55.2     |
| Sociology                 | 3.0                                                  | 2.4       | 3.2       | 4.0        | 3.4          | 2.4         | 3.3        | 3.4                     | 120                | 48.4     |
| Pol.Science               | 2.2                                                  | 2.9       | 1.8       | 2.8        | 3.0          | 2.0         | 2.6        | 2.5                     | 113                | 45.6     |
| <b>Methods:</b>           |                                                      |           |           |            |              |             |            | <b>3.5</b>              |                    |          |
| A-V Instr.                | 3.5                                                  | 4.2       | 3.9       | 3.8        | 3.9          | 3.9         | 4.4        | 4.0                     | 203                | 81.9     |
| Test Const.               | 2.9                                                  | 2.9       | 2.7       | 3.4        | 3.0          | 3.1         | 3.0        | 3.0                     | 138                | 55.7     |
| Evaluation                | 3.4                                                  | 3.1       | 4.0       | 3.9        | 2.5          | 3.0         | 2.7        | 3.3                     | 156                | 62.9     |
| Remedial Teaching         | 3.2                                                  | 3.2       | 3.9       | 3.7        | 3.5          | 3.2         | 3.4        | 3.4                     | 164                | 66.1     |
| <b>Adm. &amp; Supr.</b>   |                                                      |           |           |            |              |             |            | <b>3.3</b>              |                    |          |
| Prog. Pl'ng               | 3.8                                                  | 4.0       | 4.1       | 3.7        | 3.7          | 3.6         | 3.6        | 3.9                     | 156                | 62.9     |
| Supr. Instr.              | 3.8                                                  | 3.9       | 3.4       | 3.8        | 3.1          | 3.6         | 4.4        | 3.7                     | 139                | 56.1     |
| Cur. Imprv.               | 3.4                                                  | 3.5       | 3.6       | 3.7        | 3.6          | 3.5         | 4.0        | 3.6                     | 132                | 53.2     |
| Prof. ethics              | 2.7                                                  | 2.7       | 3.2       | 3.6        | 2.1          | 2.8         | 2.5        | 2.8                     | 117                | 47.2     |
| School laws               | 2.9                                                  | 3.1       | 3.2       | 3.6        | 1.5          | 2.4         | 2.0        | 2.7                     | 102                | 41.1     |
| Sch.phil.obj              | 3.3                                                  | 3.3       | 3.3       | 3.1        | 2.4          | 4.0         | 3.3        | 3.3                     | 105                | 42.3     |
| Policy making             | 3.0                                                  | 3.3       | 3.0       | 3.2        | 2.5          | 3.4         | 2.5        | 3.0                     | 89                 | 35.7     |
| Leadership                | 3.2                                                  | 3.2       | 3.7       | 3.8        | 2.7          | 3.6         | -          | 2.9                     | 111                | 44.8     |
| Report writ               | 2.8                                                  | 2.7       | 3.2       | 3.6        | 2.3          | 3.2         | 2.0        | 2.8                     | 80                 | 32.3     |
| Pub.Rel.                  | 3.6                                                  | 3.7       | 3.6       | 2.7        | 2.4          | 3.4         | 2.3        | 3.1                     | 137                | 55.2     |
| <b>Res. &amp; Expt.:</b>  |                                                      |           |           |            |              |             |            | <b>3.9</b>              |                    |          |
| <b>Methods educ.</b>      |                                                      |           |           |            |              |             |            |                         |                    |          |
| research                  | 3.6                                                  | 4.1       | 3.9       | 4.0        | 4.4          | 4.3         | 3.9        | 4.0                     | 155                | 63.5     |
| Agr. res.                 | 4.3                                                  | 4.0       | 4.2       | 4.1        | 4.4          | 4.3         | 4.6        | 4.3                     | 146                | 58.9     |
| Resource survey           | 3.1                                                  | 2.8       | 3.2       | 3.2        | 3.8          | 3.3         | 3.5        | 3.3                     | 124                | 50.0     |



## APPENDIX B (Continued)

| Area of Need          | *Ranked Needs of Teachers Grouped by<br>Subjects Taught |      |      |       |         |        |       | Ave. Scale<br>Rank<br>of<br>Need | Total<br>Rank-<br>ing<br>Need | Per<br>Cent |
|-----------------------|---------------------------------------------------------|------|------|-------|---------|--------|-------|----------------------------------|-------------------------------|-------------|
|                       | Agr.                                                    | F.M. | H.E. | Lang. | Soc.Sc. | Ap.Sc. | Math. |                                  |                               |             |
|                       | (176)                                                   | (37) | (26) | (57)  | (26)    | (14)   | (12)  |                                  |                               |             |
| <u>Co-curricular:</u> |                                                         |      |      |       |         |        |       | <u>3.5</u>                       |                               |             |
| Youth Org.            | 3.6                                                     | 2.9  | 3.7  | 4.0   | 3.8     | 3.7    | 4.2   | 3.8                              | 160                           | 64.5        |
| Publications          | 3.0                                                     | 2.9  | 3.5  | 3.8   | 2.3     | 4.2    | 2.5   | 3.2                              | 128                           | 51.6        |
| Ext. educ.            | 3.6                                                     | 3.0  | 3.8  | 3.6   | 3.4     | 4.1    | 3.3   | 3.5                              | 153                           | 61.7        |

\*Ranking was based on a five-point scale: 5 - Most important;  
4 - More important; 3 - Important; 2 - Less important; and  
1 - Least important.





## APPENDIX C

TABLE XV. AVERAGE ATTENDANCE AT LOCAL, REGIONAL AND NATIONAL IN-SERVICE TRAINING PROGRAMS BY 248 TEACHERS FROM 1956 TO 1960.

| Type of in-service Program               | Scope or Level | Number Attending |       | Average Attendance in 5 years for those attending* | Average attendance all teachers in 5 years | Attendance per year all teachers |
|------------------------------------------|----------------|------------------|-------|----------------------------------------------------|--------------------------------------------|----------------------------------|
|                                          |                | N                | %     |                                                    |                                            |                                  |
| Workshop                                 | Local          | 86               | 34.7  | 2.49                                               | 0.86                                       | 0.17                             |
|                                          | Regional       | 86               | 34.7  | 1.53                                               | 0.53                                       | 0.11                             |
|                                          | National       | 61               | 24.6  | 1.33                                               | 0.32                                       | 0.06                             |
|                                          | Total          | 144              | 58.1  | 2.96                                               | 1.72                                       | 0.34                             |
| Conventions and Conferences              | Local          | 79               | 31.9  | 3.20                                               | 1.02                                       | 0.20                             |
|                                          | Regional       | 20               | 8.1   | 1.65                                               | 0.13                                       | 0.03                             |
|                                          | National       | 12               | 4.8   | 1.92                                               | 0.09                                       | 0.02                             |
|                                          | Total          | 92               | 37.1  | 3.36                                               | 1.24                                       | 0.25                             |
| Educational trips<br>Inter-school visits | Local          | 96               | 38.7  | 2.42                                               | 0.94                                       | 0.19                             |
|                                          | Regional       | 30               | 12.1  | 1.77                                               | 0.21                                       | 0.04                             |
|                                          | National       | 10               | 4.0   | 1.30                                               | 0.05                                       | 0.01                             |
|                                          | Total          | 109              | 43.95 | 2.97                                               | 1.30                                       | 0.26                             |
| Demonstration teaching                   | Local          | 115              | 46.4  | 2.97                                               | 1.38                                       | 0.28                             |
|                                          | Regional       | 18               | 7.3   | 2.11                                               | 0.15                                       | 0.03                             |
|                                          | National       | 3                | 1.2   | 1.33                                               | 0.02                                       | 0.01                             |
|                                          | Total          | 118              | 47.6  | 3.25                                               | 1.53                                       | 0.31                             |
| Professional and Refresher Courses       | Local          | 21               | 8.5   | 1.71                                               | 0.15                                       | 0.03                             |
|                                          | Regional       | 6                | 2.4   | 1.33                                               | 0.03                                       | 0.01                             |
|                                          | National       | 15               | 6.1   | 1.73                                               | 0.10                                       | 0.02                             |
|                                          | Total          | 38               | 15.3  | 1.84                                               | 0.28                                       | 0.06                             |
| Regular Summer School Classes            | Local          | 25               | 10.9  | 1.88                                               | 0.19                                       | 0.04                             |
|                                          | Regional       | 6                | 2.4   | 1.50                                               | 0.04                                       | 0.01                             |
|                                          | National       | 22               | 8.9   | 1.59                                               | 0.14                                       | 0.03                             |
|                                          | Total          | 51               | 20.6  | 1.78                                               | 0.37                                       | 0.07                             |
| Grand Total in 5 years                   |                | 206              | 83.6  | 2.91                                               | 1.08                                       | 0.22                             |
| Total attending per year                 |                | 41               | 16.6  |                                                    |                                            |                                  |

\*Number of times attended.

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## APPENDIX D

TABLE XVI. PARTICIPATION AT ONE OR MORE LOCAL, REGIONAL OR NATIONAL IN-SERVICE TRAINING PROGRAMS OF 248 AGRICULTURAL SCHOOL TEACHERS GROUPED ACCORDING TO MAJOR SUBJECT TAUGHT.

| Type of In-service Training Activity      | Scope of Program* | Major Subject Taught** |    |    |    |    |    |    | Total | Pct. |
|-------------------------------------------|-------------------|------------------------|----|----|----|----|----|----|-------|------|
|                                           |                   | AG                     | FM | HE | LG | SS | AS | MA |       |      |
|                                           |                   | 76                     | 36 | 26 | 57 | 26 | 14 | 12 | 248   |      |
| Workshop                                  | L                 | 29                     | 8  | 13 | 20 | 5  | 8  | 3  | 86    | 35   |
|                                           | R                 | 25                     | 20 | 14 | 14 | 4  | 8  | 1  | 86    | 35   |
|                                           | N                 | 16                     | 18 | 8  | 12 | 4  | 2  | 1  | 61    | 25   |
|                                           | Total all levels  | 45                     | 32 | 18 | 23 | 13 | 10 | 3  | 144   | 58   |
|                                           | Percent           | 59                     | 87 | 69 | 40 | 50 | 71 | 25 | 58    |      |
| Conventions and Conferences               | L                 | 21                     | 4  | 11 | 25 | 9  | 6  | 3  | 79    | 32   |
|                                           | R                 | 9                      | 2  | 2  | 6  | -  | -  | 1  | 20    | 8    |
|                                           | N                 | 4                      | 1  | 2  | 1  | -  | 3  | 1  | 12    | 5    |
|                                           | Total all levels  | 26                     | 13 | 11 | 22 | 9  | 6  | 5  | 92    | 37   |
|                                           | Percent           | 34                     | 35 | 42 | 39 | 35 | 43 | 42 | 37    |      |
| Educational Trips and Inter-school Visits | L                 | 35                     | 13 | 7  | 23 | 3  | 12 | 3  | 96    | 39   |
|                                           | R                 | 10                     | 4  | 1  | 6  | 2  | 6  | 1  | 30    | 12   |
|                                           | N                 | 4                      | -  | -  | 4  | -  | 2  | -  | 10    | 4    |
|                                           | Total all levels  | 38                     | 15 | 8  | 27 | 5  | 12 | 4  | 109   | 44   |
|                                           | Percent           | 50                     | 41 | 31 | 47 | 19 | 86 | 33 | 44    |      |
| Demonstration Teaching                    | L                 | 32                     | 17 | 11 | 34 | 9  | 9  | 3  | 115   | 46   |
|                                           | R                 | 8                      | 2  | -  | 4  | 1  | 3  | -  | 18    | 7    |
|                                           | N                 | 1                      | -  | -  | 2  | -  | -  | -  | 3     | 1    |
|                                           | Total all levels  | 34                     | 18 | 11 | 34 | 9  | 9  | 3  | 118   | 48   |
|                                           | Percent           | 45                     | 49 | 42 | 60 | 35 | 64 | 25 | 48    |      |
| Professional or Refresher Classes         | L                 | 10                     | 4  | 1  | 5  | -  | 1  | -  | 21    | 9    |
|                                           | R                 | 2                      | -  | 1  | 1  | 1  | 1  | -  | 6     | 2    |
|                                           | N                 | 3                      | 4  | 3  | 2  | -  | 3  | -  | 15    | 6    |
|                                           | Total all levels  | 15                     | 6  | 5  | 6  | 1  | 4  | -  | 38    | 15   |
|                                           | Percent           | 20                     | 16 | 19 | 11 | 4  | 29 | -  | 15    |      |
| Regular Summer School Classes             | L                 | 9                      | 5  | 5  | 3  | 1  | 2  | -  | 25    | 10   |
|                                           | R                 | 1                      | 1  | 1  | 2  | 1  | 1  | -  | 6     | 2    |
|                                           | N                 | 7                      | 2  | 4  | 5  | 2  | 2  | -  | 22    | 9    |
|                                           | Total all levels  | 16                     | 8  | 11 | 10 | 3  | 3  | -  | 51    | 21   |
|                                           | Percent           | 21                     | 21 | 42 | 18 | 12 | 21 | -  | 21    |      |



## APPENDIX D (Continued)

| Type of In-service Training Activity | Scope of Program* | Major Subject Taught** |     |     |     |     |     |     | Total | Pct. |
|--------------------------------------|-------------------|------------------------|-----|-----|-----|-----|-----|-----|-------|------|
|                                      |                   | AG                     | FM  | HE  | LG  | SS  | AS  | MA  |       |      |
|                                      |                   | 76                     | 36  | 26  | 57  | 26  | 14  | 12  | 248   |      |
| Total all types all level            |                   | 71                     | 35  | 23  | 37  | 15  | 14  | 11  | 206   |      |
|                                      | Percent           | 93                     | 95  | 88  | 65  | 58  | 100 | 92  | 83    |      |
| Total regional & national            |                   | 55                     | 33  | 19  | 33  | 11  | 14  | 11  | 176   |      |
|                                      | Percent           | 72                     | 89  | 74  | 58  | 42  | 100 | 92  | 71    |      |
| Average per year (R & N)             |                   | 11                     | 6.6 | 3.8 | 6.6 | 2.2 | 2.8 | 2.2 | 35.2  |      |

\* AG - Agriculture, FM-Farm Mechanics, HE-Homemaking, LG-Language, SS-Social Science, AS-Applied Science, MA-Mathematics.

\* L - Local, R - Regional, N - National.



## APPENDIX E - 1

LIST OF AGRICULTURAL SCHOOLS OF THE PHILLIPPINES  
TO WHICH QUESTIONNAIRES WERE SENT

| <u>Name and Location of School</u>                                               | <u>Questionnaires for</u> |                       |
|----------------------------------------------------------------------------------|---------------------------|-----------------------|
|                                                                                  | <u>Teachers</u>           | <u>Administrators</u> |
| Cagayan Valley Regional Agri. School<br>Lallo, Cagayan                           | x                         | x                     |
| Mountain National Agricultural School<br>La Trinidad, Benguet, Mountain Province | x                         | x                     |
| Tarlac National Agricultural School<br>Camiling, Tarlac                          |                           | x                     |
| Pampanga National Agricultural School<br>Magalang, Pampanga                      | x                         | x                     |
| Bulacan National Agricultural School<br>San Ildefonso, Bulacan                   | x                         | x                     |
| Camarines Sur Regional Nat. Agri. Sch.<br>Pili, Camarines Sur                    | x                         | x                     |
| Roxas Memorial Agricultural School<br>Guinobatan, Albay                          | x                         | x                     |
| Mindoro National Agricultural School<br>Agricultural School, Oriental Mindoro    | x                         | x                     |
| Masbate National Agricultural School<br>Mandaon, Masbate                         |                           | x                     |
| Romblon National Agricultural School<br>Odiongan, Romblon                        |                           | x                     |
| Iloilo National Agricultural School<br>Lambanao, Iloilo                          | x                         | x                     |
| Capiz Agricultural & Fishery School<br>Pontevedra, Capiz                         |                           | x                     |
| Negros Occidental Nat. Agric. School<br>Kabankalan, Neg. Occidental              | x                         | x                     |
| Baybay National Agricultural School<br>Baybay, Leyte                             | x                         | x                     |
| Batac Rural High School<br>Batac, Ilocos Norte                                   | x                         | x                     |





## APPENDIX E - 2

| <u>Name and Location of School</u>                                 | <u>Questionnaires for</u> |                       |
|--------------------------------------------------------------------|---------------------------|-----------------------|
|                                                                    | <u>Teachers</u>           | <u>Administrators</u> |
| Lagangilang National Agricultural School<br>Lagangilang, Abra      | x                         | x                     |
| Echague Rural High School<br>Slipperyville, Echague, Isabela       | x                         | x                     |
| Nueva Vizcaya National Agric. School<br>Bayombong, Nueva Vizcaya   | x                         | x                     |
| San Carlos Rural High School<br>San Carlos, Pangasinan             | x                         | x                     |
| Zambales Rural High School<br>San Marcelino, Zambales              |                           | x                     |
| Sta. Maria Agricultural High School<br>Sta. Maria, Ilocos Sur      |                           | x                     |
| Indang Rural High School<br>Indang, Cavite                         | x                         | x                     |
| Aborlan Agricultural High School<br>Aborlan, Palawan               |                           | x                     |
| Cantanduanes Agric. & Industrial School<br>Panganiban, Catanduanes |                           | x                     |
| Samar National Agricultural School<br>Gandara, Samar               | x                         | x                     |
| Bilar Rural High School<br>Bilar, Bohol                            | x                         | x                     |
| Sudlon Agricultural High School<br>Cebu City                       | x                         | x                     |
| Negros Oriental Rural High School<br>Bayawan, Negros Oriental      |                           | x                     |
| Antique National Agricultural School<br>San Remegio, Antique       |                           | x                     |
| Banga Rural High School<br>Banga, Aklan                            | x                         | x                     |
| Surigao National Agricultural School<br>Tago, Surigao              |                           | x                     |
| Agusan Agricultural High School<br>Ampayon, Butuan City, Agusan    | x                         | x                     |



## APPENDIX E - 3

| <u>Name and Location of School</u>                                 | <u>Questionnaires for</u> |                       |
|--------------------------------------------------------------------|---------------------------|-----------------------|
|                                                                    | <u>Teachers</u>           | <u>Administrators</u> |
| Bunawan National Agricultural H. School<br>Bunawan, Agusan         |                           | x                     |
| Lanao National Agricultural School<br>Caromatan, Lanao             | x                         | x                     |
| Zamboanga Sur Nat. Agric. School<br>Dapiwak, Molave, Zamboanga Sur | x                         | x                     |
| Upi Agricultural High School<br>Upi, Cotabato                      | x                         | x                     |
| Davao National Agricultural School<br>Moncayo, Davao               |                           | x                     |
| Mampising National Agricultural School<br>Mampising, Davao         | x                         | x                     |
| Lapak Agricultural High School<br>Siasi, Sulu                      |                           | x                     |
| Cagayan National Agricultural School<br>Piat, Cagayan              |                           | x                     |
|                                                                    | <hr/>                     | <hr/>                 |
|                                                                    | 25                        | 40                    |



## APPENDIX F

LIST OF LAND GRANT INSTITUTIONS VISITED, NAMES OF PERSONS  
INTERVIEWED AND DATES OF VISITS

| <u>Institution</u>                                     | <u>Persons Interviewed</u>                                                                                                                                                                                                                          | <u>Date of Visit</u> |
|--------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| University of Connecticut, Storrs, Conn.               | Dr. W. Howard Martin<br>Head Teacher Trainer                                                                                                                                                                                                        | Aug. 4-5, 1960       |
| Pennsylvania State University, Univ. Park, Penna,      | Mr. Philip Edgecomb<br>Instructor, Ag. Ed.<br><br>Dr. D. R. McClay<br>Head, Agric. Educ.<br><br>Dr. G. Z. Stevens<br>Prof., Agric. Educ.<br><br>Dr. N. K. Hoover<br>Asst. Professor, Ag. Ed.<br><br>Dr. Paul Bixby, Asst.<br>Dean, College of Educ. | Aug. 10-12 "         |
| Virginia Polytechnic Institute<br>Blacksburg, Virginia | Dr. T. J. Horne, Head<br>Agric. Education<br><br>Dr. B. C. Bass, Assoc.<br>Professor, Agric. Edu.                                                                                                                                                   | Aug. 15-16 "         |
| University of Georgia<br>Athens, Georgia               | Dr. R. H. Tolbert, Head<br>Agricultural Education                                                                                                                                                                                                   | Aug. 18-19, "        |
| Auburn University<br>Auburn, Alabama                   | Dr. R. W. Montgomery<br>Head, Agric. Educ.<br><br>Dr. T. W. Gandy<br>Assoc. Professor<br>Agricultural Education                                                                                                                                     | Aug. 22-23, "        |
| Mississippi State University                           | Dr. O. L. Snowden, Head<br>Teacher Trainer<br><br>Mr. L. P. Jacks<br>Asst. Professor<br>Agric. Education                                                                                                                                            | Aug. 29-30 "         |
| University of Kentucky<br>Lexington, Kentucky          | Dr. Carsie Hammonds, Head<br>Agricultural Education<br><br>Mr. L. Bingham<br>Asst. Professor<br>Agricultural Education                                                                                                                              | Sept. 1-2 "          |



## APPENDIX G-1

MICHIGAN STATE UNIVERSITY  
East Lansing, Michigan  
U. S. A.

September 12, 1960

The Superintendent/Principal

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Dear Fellow School Administrator:

Please help me with the inclosed questionnaires.

I am conducting a study of the inservice programs which have and are being provided for teachers of agricultural schools during the last five years to determine how adequate these have been and how much opportunity teachers have for participating in these programs for inservice growth. The object is to find ways of improving these programs and maximizing the teachers' opportunities for educational and professional advancement.

You will agree, I am sure, that the continuous upgrading of our teaching staffs through inservice training is essential to the improvement of our total school program. But while we recognize this fact we somehow have not yet found a satisfactory arrangement whereby we could provide adequate inservice training programs and maximize the opportunities of teachers to grow educationally and professionally in the service.

The above problem is vital to the future of our agricultural schools, and a satisfactory solution to it is what I am hoping to be able to evolve in this research study. I cannot hope to accomplish this, however, without your help.

I am, therefore, addressing this appeal to you knowing that you are interested and concerned about the problem as much as I. Please give me a generous share of your time and help me in this study by accomplishing the attached "SURVEY QUESTIONNAIRE AND CHECK LIST FOR PRINCIPALS AND SUPERINTENDENTS," and by requesting 15 of your teachers to accomplish the rest, titled: "SURVEY QUESTIONNAIRE AND CHECK LIST FOR TEACHERS." Instructions on how to select the teachers who will respond are given on the following sheet.

You will find inclosed a stamped, self-addressed envelop for your convenience in returning the completed questionnaires to me.

Thanks a lot. I shall highly appreciate your cooperation and remain eternally grateful for whatever help you will give me in this matter.

Very sincerely yours,

BRUNO M. SANTOS

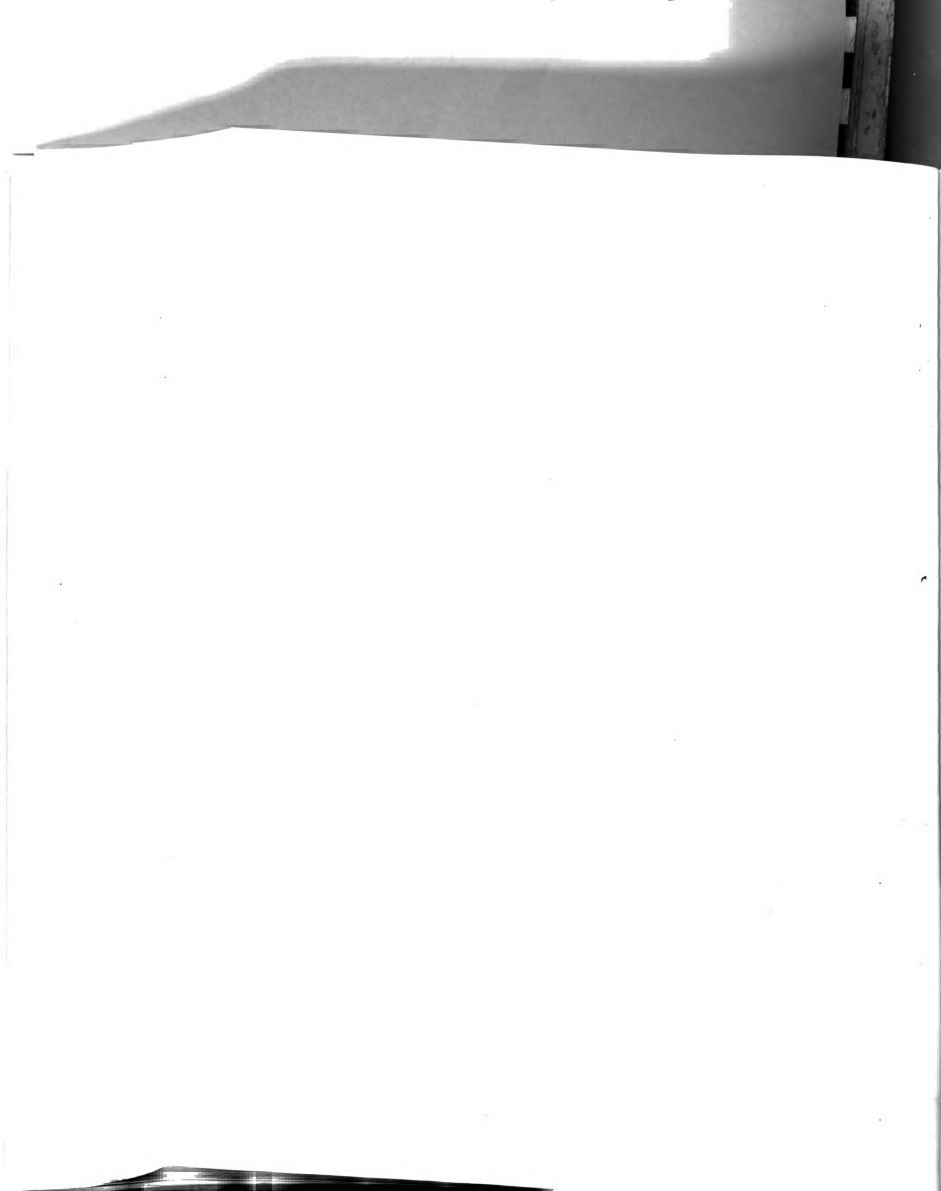




## APPENDIX G-2

## INSTRUCTIONS ON HOW TO SAMPLE TEACHERS

1. List the teachers alphabetically by groups:
  - a) Agriculture teachers
  - b) Farm mechanics teachers
  - c) Homemaking teachers
  - d) English teachers
  - e) Filipino Language teachers
  - f) Mathematics teachers
  - g) Science teachers
  - h) History and Social science teachers
2. Delete the names of those who have less than five years of total service in the BPS.
3. From the names remaining under each group pick out in alphabetical order the first:
  - 3 agriculture teachers
  - 2 farm mechanics teachers
  - 2 homemaking teachers
  - 2 English teachers
  - 1 Filipino language teacher
  - 1 Mathematics teacher
  - 2 science teachers (Gen., Physics, or Chemistry)
  - 2 history and/or social science teachers.
4. Distribute the questionnaire for teachers to the selected teachers. If there are less teachers than indicated in No. 3 disregard the extra questionnaires.
5. Please return the questionnaires as soon as they are completed, to me through Dr. James Woodhull, using the return envelop inclosed.
6. Thank you.



## APPENDIX G-3

## SURVEY QUESTIONNAIRE AND CHECK LIST FOR TEACHERS

INSTRUCTION: Answer only the questions or check only the items of information which apply to you. Do not write your name on any sheet.

1. Educational and Personal Information

1.1 Sex:     \_\_\_ male;     \_\_\_ female.

2.2 Education:

\_\_\_\_\_ Degree held.  
 \_\_\_\_\_ Major subject in college.  
 \_\_\_\_\_ Minor subject in college.  
 \_\_\_\_\_ Credits earned beyond B. S. degree.

2. Job Information

2.1 Years of experience as teacher:

\_\_\_\_\_ total in BPS.  
 \_\_\_\_\_ total in present school.

2.2 Subjects taught during the last school year (1959-1960):

\_\_\_\_\_ in major area;     \_\_\_\_\_ periods daily.  
 \_\_\_\_\_ in minor area;     \_\_\_\_\_ periods daily.

Other assignments: (indicate):

\_\_\_\_\_  
 \_\_\_\_\_

3. Participation in Inservice Training Programs

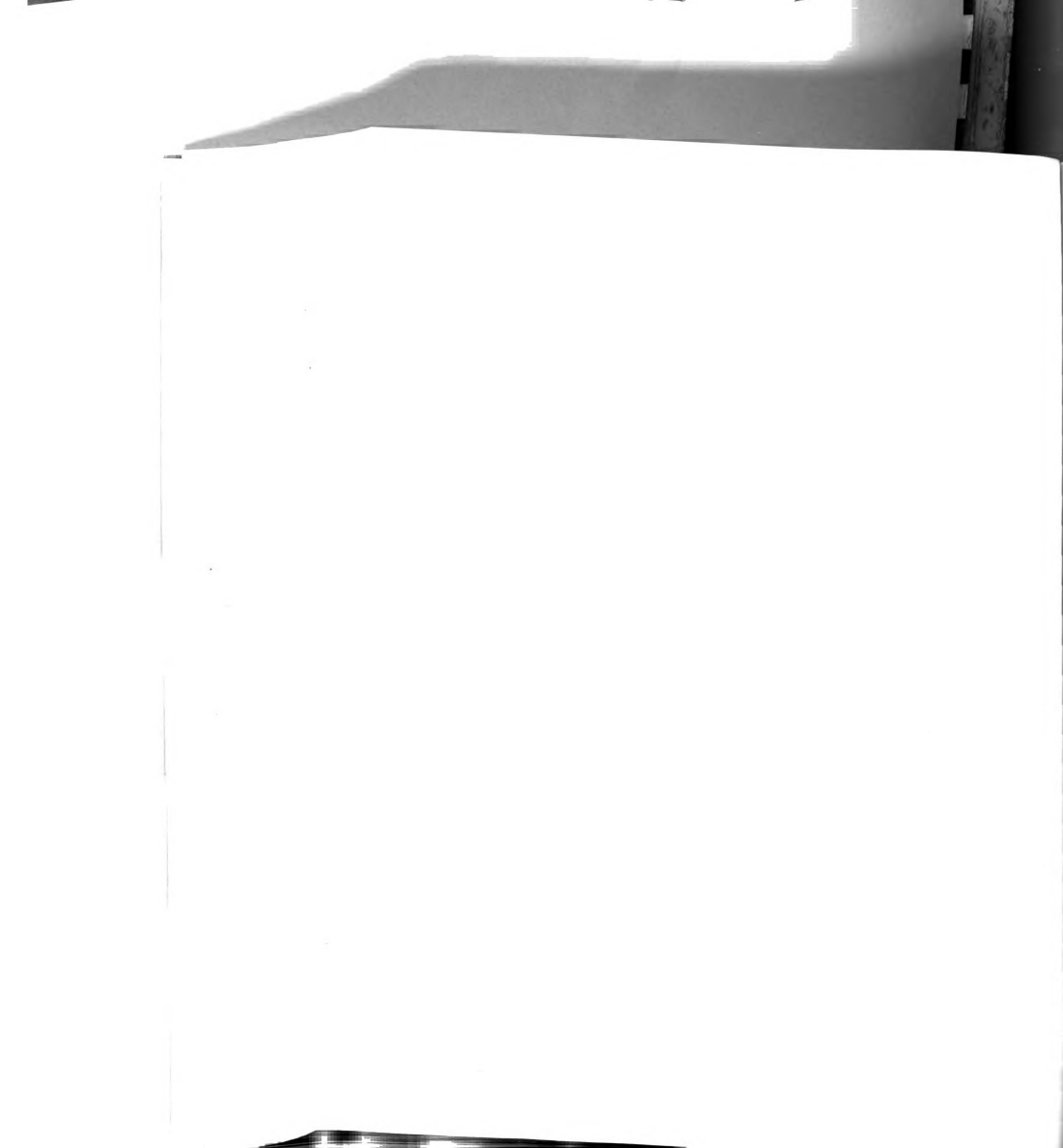
3.1 If you have taken courses at the graduate level in any of the colleges or universities in the Philippines indicate the following:

\_\_\_\_\_ field of study.  
 \_\_\_\_\_ number of credits earned to date.  
 \_\_\_\_\_ degree you expect to finish.

3.2 If you have been granted any of the following indicate by a check (✓) mark which one:

\_\_\_\_\_ Travel and/or study grant in P. I.  
 \_\_\_\_\_ Travel and/or study grant to U. S.  
 \_\_\_\_\_ Travel and/or study grant to Europe and other countries.

3.3 If you have attended or participated in inservice training programs held within the last five years circle the number under columns (1), (2), or (3) which tells the number of times you participated. For example, suppose you attended one national, two regional and three local workshops.



## APPENDIX G-4

You will circle 1 under national, 2 under regional and 3 under local:

| (1)          |   |   |   |   | (2)             |   |   |   |   | (3)             |   |   |   |   | <u>Type of inservice activity</u>  |
|--------------|---|---|---|---|-----------------|---|---|---|---|-----------------|---|---|---|---|------------------------------------|
| <u>Local</u> |   |   |   |   | <u>Regional</u> |   |   |   |   | <u>National</u> |   |   |   |   |                                    |
| 1            | 2 | 3 | 4 | 5 | 1               | 2 | 3 | 4 | 5 | 1               | 2 | 3 | 4 | 5 | Workshop                           |
| 1            | 2 | 3 | 4 | 5 | 1               | 2 | 3 | 4 | 5 | 1               | 2 | 3 | 4 | 5 | Teachers' convention or conference |
| 1            | 2 | 3 | 4 | 5 | 1               | 2 | 3 | 4 | 5 | 1               | 2 | 3 | 4 | 5 | FFP or other students' convention  |
| 1            | 2 | 3 | 4 | 5 | 1               | 2 | 3 | 4 | 5 | 1               | 2 | 3 | 4 | 5 | Organized educational trips        |
| 1            | 2 | 3 | 4 | 5 | 1               | 2 | 3 | 4 | 5 | 1               | 2 | 3 | 4 | 5 | Demonstration teaching             |
| 1            | 2 | 3 | 4 | 5 | 1               | 2 | 3 | 4 | 5 | 1               | 2 | 3 | 4 | 5 | Inter-school visitation            |
| 1            | 2 | 3 | 4 | 5 | 1               | 2 | 3 | 4 | 5 | 1               | 2 | 3 | 4 | 5 | Professional summer class          |
| 1            | 2 | 3 | 4 | 5 | 1               | 2 | 3 | 4 | 5 | 1               | 2 | 3 | 4 | 5 | Regular summer school              |

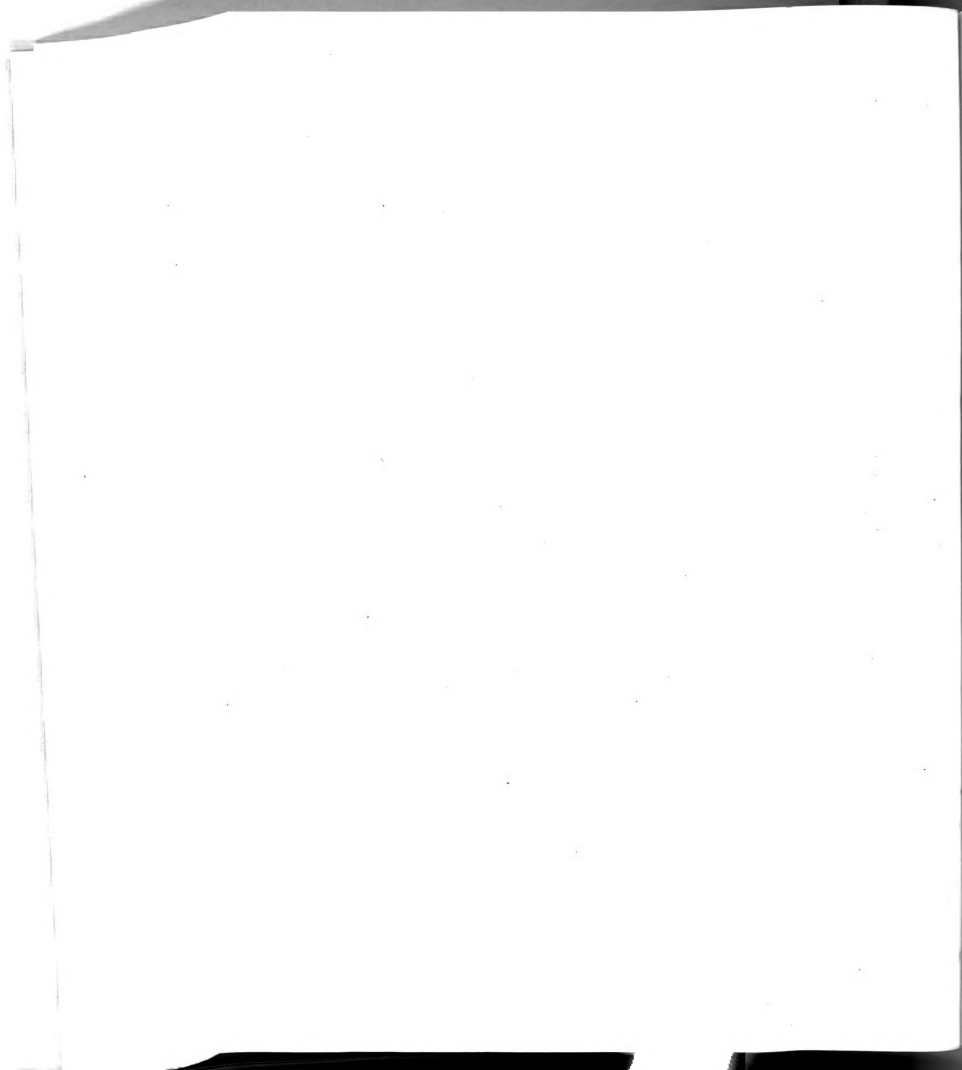
4. Reasons for limited or non-participation in inservice training programs during the last five years

- 4.1 Check the reason or reasons for your non-participation or limited attendance at regional or national workshops and professional classes:

☐ Do not feel the need.  
☐ Subjects discussed not in my field of interest.  
☐ Lack of private funds.  
☐ Family responsibilities.  
☐ Was given limited or no opportunity.  
☐ Others: \_\_\_\_\_

- 4.2 If you had not enrolled in regular summer school for graduate work during the last five years, (or attended only once) indicate the reasons why by checking the appropriate item below:

☐ lack of funds.  
☐ lack of incentives.  
☐ service required throughout year.  
☐ can't afford a study leave without pay.  
☐ not allowed to use accumulated sick leave for study.  
☐ do not feel the need.



## APPENDIX G-5

5. Inservice Training Needs

Listed below are curricular and other aspects of the school program. Check and rank those in which you feel a need using a five-point scale (1, 2, 3, 4, 5): i.e., Areas in which you have a great need are marked 5; those in which you have the least need are marked 1; those in between by 2, 3, or 4 according to your need for them:

| <u>Check</u> | <u>Rank</u> | <u>Curricular or Problem Area</u>                  |
|--------------|-------------|----------------------------------------------------|
|              |             | 5.1 Subject matter content in:                     |
| _____        | _____       | a. field of specialization                         |
| _____        | _____       | b. cognate or minor field                          |
| _____        | _____       | c. other fields                                    |
|              |             | 5.2 General education:                             |
| _____        | _____       | a. philosophy of education                         |
| _____        | _____       | b. psychology                                      |
| _____        | _____       | c. sociology                                       |
| _____        | _____       | d. political science and government                |
|              |             | 5.3 Methods of teaching:                           |
| _____        | _____       | a. preparation and use of audio-visual materials   |
| _____        | _____       | b. test construction and testing                   |
| _____        | _____       | c. evaluation of instruction                       |
| _____        | _____       | d. remedial teaching                               |
| _____        | _____       | e. Others: _____                                   |
|              |             | 5.4 Administration and supervision:                |
| _____        | _____       | a. program planning                                |
| _____        | _____       | b. supervision of instruction                      |
| _____        | _____       | c. curriculum improvement                          |
| _____        | _____       | d. professional ethics                             |
| _____        | _____       | e. school laws and regulations                     |
| _____        | _____       | f. formulation of school philosophy and objectives |
| _____        | _____       | g. policy and decision-making process              |
| _____        | _____       | h. leadership and group dynamics                   |
| _____        | _____       | i. report writing                                  |
| _____        | _____       | j. community and public relations                  |
|              |             | 5.5 Research and experiments:                      |
| _____        | _____       | a. Methods of educational research                 |
|              |             | b. Agricultural research and experiments           |
|              |             | c. Resource and occupational surveys               |
|              |             | 5.6 Co-curricular activities:                      |
| _____        | _____       | a. youth organizations and activities              |
| _____        | _____       | b. school and student publications                 |
| _____        | _____       | c. extension service (education)                   |
| _____        | _____       | d. others: _____                                   |





## APPENDIX G-6

6. Evaluation of Inservice Training Programs Held in the Past Five Years (1956 to 1960)

If you have participated in any inservice training program conducted by the General Office during the last five years respond to the following statements by putting two check (✓✓) marks on those which are entirely or generally true; one check (✓) mark on those that are half or less than half true; and an (x) on those that are not true. (If you have not participated in any inservice training program OMIT this section of the questionnaire.):

- ☐ The inservice training programs I attended were well-planned.
- ☐ I helped in planning and scheduling activities.
- ☐ My principal or superintendent helped in planning the activities.
- ☐ I had a felt need for all or most of the items discussed.
- ☐ I learned much new insight, information and skill.
- ☐ I immediately applied what I learned.
- ☐ I have improved very much in my teaching as a result.
- ☐ I passed on to other teachers what I learned by leading in local inservice programs and informal group discussions.
- ☐ Many topics or problems of which I have great need were not included or taken up.
- ☐ All topics in the agenda were thoroughly discussed.
- ☐ Activities were well organized and carried out satisfactorily.
- ☐ Leaders encouraged participation and accepted ideas from teachers.
- ☐ Resource persons used were helpful and fully utilized.
- ☐ I am satisfied with the opportunity I have had for inservice growth.
- ☐ As a general rule the opportunity which teachers of agricultural schools for inservice growth is nil.
- ☐ There were too few inservice training programs held to give a majority of us teachers the opportunity to participate.
- ☐ The total school program has been significantly improved as a result of inservice training programs held in the past.

7. How to Improve Inservice Training Programs

7.1 Which level of inservice training should be emphasized?

☐ local      ☐ regional      ☐ national      ☐ all.



## APPENDIX G-6

7.2 Which of the following do you think are feasible and should be done to improve the training programs now in use?

a. Summer classes:

- \_\_\_ More teachers should be given opportunity to attend on official time but personal expense.
- \_\_\_ Use of accumulated vacation and sick leave for study be allowed.
- \_\_\_ Teachers with 25 or more days of accumulated vacation leave should be allowed to go to summer school on official time for the period not covered by the accumulated vacation leave.
- \_\_\_ Half of the teaching staff could be dispensed with during the summer and should be encouraged to go to summer school.
- \_\_\_ Qualified school administrators should be authorized to organize and conduct credit courses on the graduate level during summer or regular school year on the campuses of agricultural schools.
- \_\_\_ Teachers should be given the opportunity to attend summer school once every two years partly on official time and partly on vacation and sick leave time.

b. Workshops and conventions:

- \_\_\_ More workshops dealing on various aspects of the school program should be held regularly each year to enable most if not all teachers the chance to participate.
- \_\_\_ should be held for longer periods.
- \_\_\_ should be held for shorter periods.
- \_\_\_ should deal with subjects of which school and teachers have a felt need.
- \_\_\_ Teachers and school administrators should be involved in planning activities.
- \_\_\_ should utilize outstanding teachers and administrators as leaders or resource persons.
- \_\_\_ Specific funds from national appropriations should be allocated each year by G. O. to finance workshops, etc.
- \_\_\_ Each agricultural school should earmark adequate amounts out of its yearly allotment for traveling expenses of teachers attending regional or national inservice training programs.
- \_\_\_ Teachers attending regional or national workshops should be selected on the basis of individual needs.



## APPENDIX G-7

c. Other inservice training devices which should and should be developed:

- \_\_\_ Inter-school visitation by teachers and administrators.
- \_\_\_ Exchange of teachers between neighboring schools for periods of one to four weeks or more.
- \_\_\_ Weekend educational trips.
- \_\_\_ Refresher courses on campus.
- \_\_\_ Local workshops, seminars, community assemblies, demonstrations, surveys, etc., should be held more often.
- \_\_\_ Follow-up visits by teacher-training schools of their graduates.

d. Other steps which may be taken:

- \_\_\_ Relaxation of restrictions imposed by G. O. on travel of teachers outside of province for purposes of inservice growth.
- \_\_\_ Use of school vehicles for educational trips by teachers.
- \_\_\_ Each school should earmark at least ₦ 500 from production income yearly for purchase of professional and technical books and subscription to professional and technical journals and magazines.
- \_\_\_ Fewer guest speakers should be used at conventions and conferences.
- \_\_\_ Convention or workshop schedules should provide enough time for relaxation and informal group discussion.

e. Your recommendations, if any:

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## APPENDIX H-1

SURVEY QUESTIONNAIRE AND CHECK LIST FOR  
PRINCIPALS AND SUPERINTENDENTS

INSTRUCTION: Answer only the questions or check only the items of information which apply to you. Do not write your name on any sheet.

1. Job Information

## 1.1 Experiences in BPS:

\_\_\_\_\_ Present position.  
 \_\_\_\_\_ Years in present position.  
 \_\_\_\_\_ Total years in BPS.

2. Participation in Inservice Training Programs

## 2.1 Check the type of inservice training program on the regional or national level in which you participated during the last five years:

|                                   |                               |                            |
|-----------------------------------|-------------------------------|----------------------------|
| _____ workshop                    | _____ seminar                 | _____ symposium            |
| _____ administrators' convention  | _____ teachers' convention    | _____ farmers' convention  |
| _____ organized educational trips | _____ inter-school visitation | _____ professional classes |

## 2.2 Check which of the following you organized and/or conducted for the inservice training of your teachers within the last five years:

|                         |                              |                                                  |
|-------------------------|------------------------------|--------------------------------------------------|
| _____ workshop          | _____ seminar                | _____ professional meetings (not administrative) |
| _____ educational trips | _____ demonstration teaching |                                                  |

## 2.3 If you have taken any courses at the graduate level in any Philippine college or university supply the information desired:

\_\_\_\_\_ Field of study  
 \_\_\_\_\_ Calendar year or years you attended.  
 \_\_\_\_\_ No. credits earned to date.  
 \_\_\_\_\_ Degree you expect to finish.





## APPENDIX H-2

- 2.4 If you have been granted any of the following indicate the duration and purpose of field of study:

| <u>No. months</u> | <u>Field of study</u> | <u>Grant</u>                               |
|-------------------|-----------------------|--------------------------------------------|
| _____             | _____                 | Travel and/or study in P.I.                |
| _____             | _____                 | Travel and/or study in U.S.                |
| _____             | _____                 | Travel and/or study in<br>other countries. |

- 2.5 Below are some possible reasons or difficulties which may have limited or prevented you from providing and organizing inservice training programs for your teachers. Indicate the degree of importance or seriousness of those which you actually met by writing 0, 1, 2, 3, or 4 before each item. (0-not important or least important and 4 for the most important):

\_\_\_\_\_ Too busy with routine and administrative matters.  
 \_\_\_\_\_ Teachers do not feel the need.  
 \_\_\_\_\_ Teachers have little or no time.  
 \_\_\_\_\_ Teacher-leadership lacking.  
 \_\_\_\_\_ Lack of incentives.  
 \_\_\_\_\_ Others \_\_\_\_\_

- 2.6 Factors limiting the attendance or participation of teachers at regional or national inservice training programs or summer school classes. Indicate the importance of each factor by writing 0, 1, 2, 3, or 4 before each. (0-for the least important and 4 for the most important):

\_\_\_\_\_ Service required throughout year.  
 \_\_\_\_\_ Limited paid vacation leave.  
 \_\_\_\_\_ Service of most teachers could not be dispensed with.  
 \_\_\_\_\_ Limited school funds for travel.  
 \_\_\_\_\_ G. O. limits number of teachers.  
 \_\_\_\_\_ Few workshops held.  
 \_\_\_\_\_ Workshops held for specified areas only.  
 \_\_\_\_\_ Teachers lack funds for travel and school fees.  
 \_\_\_\_\_ Other factors: \_\_\_\_\_



## APPENDIX H-3

3. Inservice Education Needs

- 3.1. If you feel the need for refresher or additional training in any of the areas listed below indicate the priority of your needs by checking the item under the appropriate column:

| <u>Priority of needs</u> |            |            | <u>Subject area</u>                            |
|--------------------------|------------|------------|------------------------------------------------|
| <u>1st</u>               | <u>2nd</u> | <u>3rd</u> |                                                |
| —                        | —          | —          | Administration and supervision of instruction. |
| —                        | —          | —          | Curriculum, program, and course planning.      |
| —                        | —          | —          | Supervised farming & FFP activities.           |
| —                        | —          | —          | Guidance and counseling.                       |
| —                        | —          | —          | Management & supervision of agric. projects.   |
| —                        | —          | —          | School finance and budgeting.                  |
| —                        | —          | —          | Staff organization and office management.      |
| —                        | —          | —          | School development programs.                   |
| —                        | —          | —          | Leadership training.                           |
| —                        | —          | —          | Audio-visual methods of instruction.           |
| —                        | —          | —          | Research and evaluation.                       |
| —                        | —          | —          | Test construction and testing.                 |
| —                        | —          | —          | Public relations.                              |
| —                        | —          | —          | Others: _____                                  |

- 3.2 Indicate the teachers' need for the following by checking the number on the scale opposite the curricular or problem area:

| <u>Few need</u> |          | <u>to</u> |          | <u>All need</u> | <u>Curricular or problem areas</u> |
|-----------------|----------|-----------|----------|-----------------|------------------------------------|
| <u>1</u>        | <u>2</u> | <u>3</u>  | <u>4</u> | <u>5</u>        | <u>Subject matter content:</u>     |
| —               | —        | —         | —        | —               | English                            |
| —               | —        | —         | —        | —               | Pilipino                           |
| —               | —        | —         | —        | —               | History and social science         |
| —               | —        | —         | —        | —               | Mathematics                        |
| —               | —        | —         | —        | —               | Natural and applied science        |
| —               | —        | —         | —        | —               | Agriculture and farm mechanics     |
| —               | —        | —         | —        | —               | Homemaking                         |
|                 |          |           |          |                 | <u>Methods of teaching:</u>        |
| —               | —        | —         | —        | —               | Audio-visual instruction           |
| —               | —        | —         | —        | —               | Test construction and testing      |
| —               | —        | —         | —        | —               | Evaluation of instruction          |
| —               | —        | —         | —        | —               | Remedial teaching                  |



## APPENDIX H-4

## 3.2 (Continued):

| <u>Few need</u> <u>to</u> <u>All need</u> |   |   |   |   | <u>Curricular or problem areas</u>       |
|-------------------------------------------|---|---|---|---|------------------------------------------|
| 1                                         | 2 | 3 | 4 | 5 | <u>Student services:</u>                 |
| —                                         | — | — | — | — | Educ., voc. and occupational information |
| —                                         | — | — | — | — | Guidance and counseling                  |
| —                                         | — | — | — | — | Placement and follow-up                  |
|                                           |   |   |   |   | <u>Research and experiments:</u>         |
| —                                         | — | — | — | — | Educational research                     |
| —                                         | — | — | — | — | Agricultural research and experiments    |
| —                                         | — | — | — | — | Resource surveys                         |
|                                           |   |   |   |   | <u>Administration and supervision:</u>   |
| —                                         | — | — | — | — | Curriculum development                   |
| —                                         | — | — | — | — | School laws and regulations              |
| —                                         | — | — | — | — | Community and public relations           |
| —                                         | — | — | — | — | Policy formulation and decision-making   |
| —                                         | — | — | — | — | Professional ethics                      |
| —                                         | — | — | — | — | Supervision of student activities        |
|                                           |   |   |   |   | <u>Cocurricular activities:</u>          |
| —                                         | — | — | — | — | Youth organizations                      |
| —                                         | — | — | — | — | Publications (school)                    |
| —                                         | — | — | — | — | Extension activities                     |
| —                                         | — | — | — | — | Coaching (athletics, dramatics, etc.)    |

4. Evaluation of Regional or National  
Inservice Training Programs

4.1 Number of teachers who attended regional or national workshops, professional vacation classes, regular summer school, and conventions or conferences. from 1959 to 1960:

| Classification No. on<br>of teachers staff<br>(by subjects) | <u>Number attending</u> |                |                             |                               | Total No.<br>attending<br>inservice<br>programs |
|-------------------------------------------------------------|-------------------------|----------------|-----------------------------|-------------------------------|-------------------------------------------------|
|                                                             | Work-<br>shops          | Prof.<br>class | Regular<br>summer<br>school | Conventions<br>or conferences |                                                 |
| <u>Languages</u>                                            |                         |                |                             |                               |                                                 |
| <u>Soc. sci. &amp; hist.</u>                                |                         |                |                             |                               |                                                 |
| <u>Nat. &amp; applied sci.</u>                              |                         |                |                             |                               |                                                 |
| <u>Mathematics</u>                                          |                         |                |                             |                               |                                                 |
| <u>Agriculture</u>                                          |                         |                |                             |                               |                                                 |
| <u>Farm Mechanics</u>                                       |                         |                |                             |                               |                                                 |
| <u>Homemaking</u>                                           |                         |                |                             |                               |                                                 |
| <u>Health &amp; P.E.</u>                                    |                         |                |                             |                               |                                                 |
| <u>Others:</u>                                              |                         |                |                             |                               |                                                 |
| <u>Total</u>                                                |                         |                |                             |                               |                                                 |



## APPENDIX H-5

- 4.2 Have teachers who participated in inservice programs benefited and improved their teaching efficiency and effectiveness? (Check):
- ☐ very much  
☐ quite significantly  
☐ very little  
☐ no
- 4.3 Have those who did not participate been influenced to improve?
- ☐ All were.  
☐ More than half were.  
☐ Less than half were.  
☐ Very few were.  
☐ None were.
- 4.4 Were the inservice training programs held during the last five years of sufficient number and scope to provide opportunity for a majority of the teachers to attend?
- ☐ number sufficient      ☐ scope sufficiently broad  
☐ number insufficient      ☐ scope too limited
- 4.5 How long would you like workshops, conventions, or seminars to be?
- ☐ Less than one week.      ☐ One week.  
☐ Two weeks.      ☐ Three weeks or more.
- 4.6 Did you or your teachers who participated have a share in planning the inservice activities?
- ☐ Yes.  
☐ No.
- 4.7 Were the knowledges learned, information gained, or decisions made immediately implemented in your school?
- ☐ All were.      ☐ Few were.  
☐ Most were.      ☐ None were.
- 4.8 Were the subjects or problems discussed in inservice programs important and practical?
- ☐ All were.      ☐ Few were.  
☐ Most were.      ☐ None were.





## APPENDIX H-6

5. How to Improve Inservice Training Programs

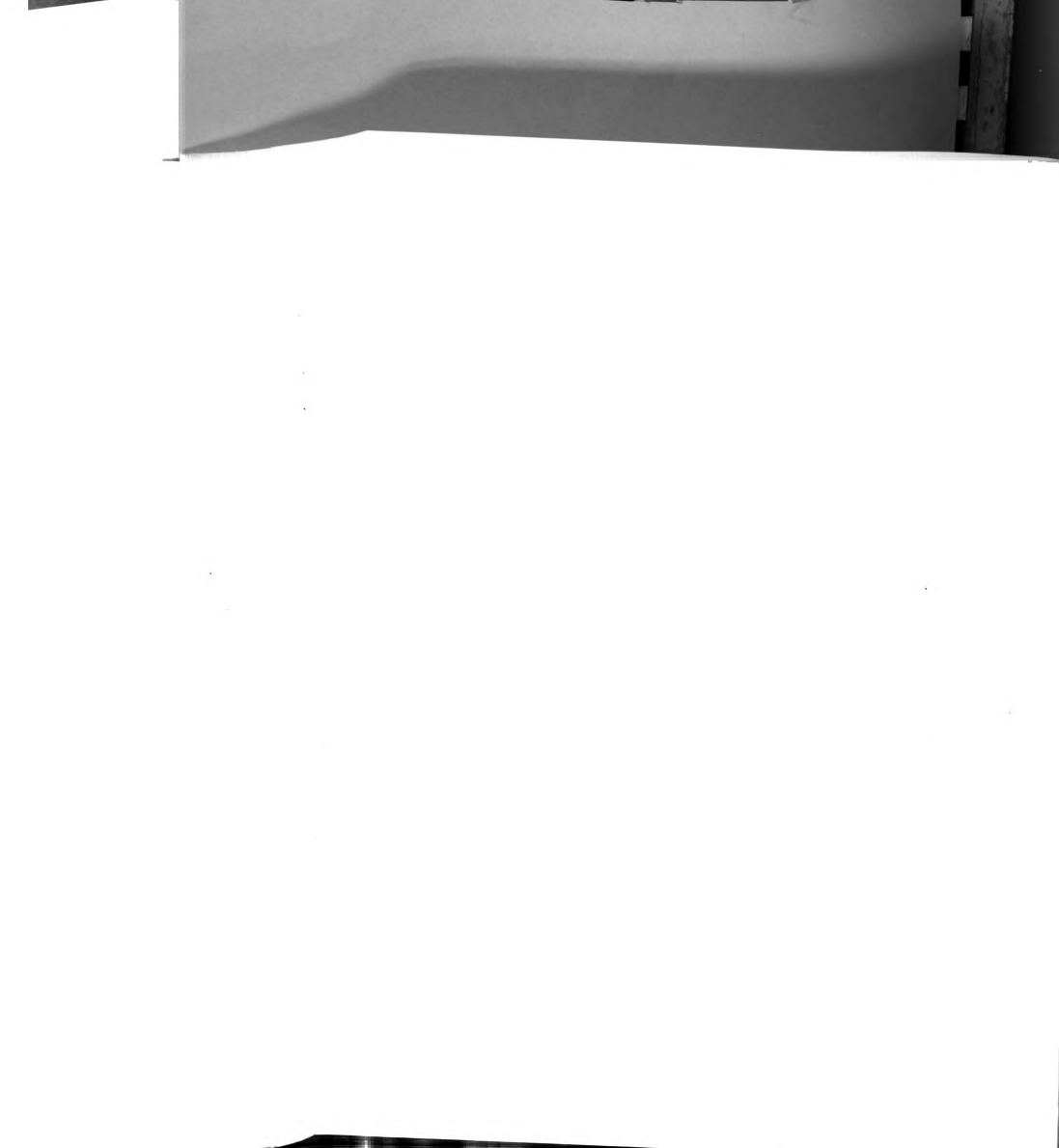
- 5.1 Which level of inservice training should be emphasized?  
\_\_\_ local \_\_\_ regional \_\_\_ national \_\_\_ all.
- 5.2 Which of the following do you think are feasible and should be done to improve the training programs now in use?

a. Summer classes:

- \_\_\_ More teachers should be given opportunity to attend on official time but personal expense.
- \_\_\_ Use of accumulated vacation and sick leave for study be allowed.
- \_\_\_ Teachers with 25 or more days of accumulated vacation leave should be allowed to go to summer school on official time for the period not covered by the accumulated vacation leave.
- \_\_\_ Half of the teaching staff could be dispensed with during the summer and should be encouraged to go to summer school.
- \_\_\_ Qualified school administrators should be authorized to organize and conduct credit courses on the graduate level during summer by special arrangements with teacher-training institutions.
- \_\_\_ State colleges and universities should be encouraged to organize and conduct regular off-campus courses during summer, or regular school year, on the campuses of agricultural schools.
- \_\_\_ Teachers should be given the opportunity to attend summer school once every two years partly on official time and partly on vacation and sick leave time.

b. Workshops and conventions:

- \_\_\_ More workshops dealing on various aspects of the school program should be held regularly each year to enable most if not all teachers the chance to participate.
- \_\_\_ should be held for longer periods.
- \_\_\_ should be held for shorter periods.
- \_\_\_ should deal with subjects of which school and teachers have a felt need.
- \_\_\_ Teachers and school administrators should be involved in planning activities.
- \_\_\_ should utilize outstanding teachers and administrators as leaders or resource persons.
- \_\_\_ Specific funds from national appropriations should be allocated each year by G. O. to finance workshops, etc.



## APPENDIX H-7

b. Workshops and conventions (Continued):

- \_\_\_\_\_ Each agricultural school should earmark adequate amounts out of its yearly allotment for traveling expenses of teachers attending regional or national inservice training programs.
- \_\_\_\_\_ Teachers attending regional or national workshops should be selected on the basis of individual needs.

c. Other inservice training devices which could and should be developed:

- \_\_\_\_\_ Inter-school visitation by teachers and administrators.
- \_\_\_\_\_ Exchange of teachers between neighboring schools for periods of one to four weeks or more.
- \_\_\_\_\_ Weekend educational trips.
- \_\_\_\_\_ Refresher courses on-campus.
- \_\_\_\_\_ Local workshops, seminars, community assemblies, demonstrations, surveys, etc.
- \_\_\_\_\_ Follow-up visits by teacher-training schools of their graduates.

d. Other steps which may be taken:

- \_\_\_\_\_ Relaxation of restrictions imposed by G. O. on travel of teachers outside of province for purposes of inservice growth.
- \_\_\_\_\_ Use of school vehicles for educational trips by teachers.
- \_\_\_\_\_ Each school should earmark at least ₦ 500 from production income yearly for purchase of professional and technical books and subscription to professional and technical journals and magazines.
- \_\_\_\_\_ Fewer guest speakers should be used at conventions.
- \_\_\_\_\_ Convention or workshop schedules should provide enough time for relaxation and informal group discussions.

e. Your recommendations, if any:

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## APPENDIX I-1

QUESTIONNAIRE FOR HEADS OF TEACHER-TRAINING  
INSTITUTIONS

Instruction: Please respond to the question below by writing  
YES or NO on the spaces provided before each  
item:

QUESTION: Would your college or university be in a position  
and willing to:

- \_\_\_\_\_ 1. Cooperate with the Bureau of Public Schools in providing and conducting inservice training programs for teachers?
- \_\_\_\_\_ 2. Provide funds for the traveling expenses of members of your education faculty who may be invited by the Bureau of Public Schools and authorized by your college to serve in workshops, seminars, or conferences of public school teachers?
- \_\_\_\_\_ 3. Offer refresher or advance courses specially for teachers who express the need for these courses?
- \_\_\_\_\_ 4. Initiate a follow-up program consisting of on-job visits and conferences of teacher-graduates of your college in order to help them adjust to and become effective in their teaching jobs?
- \_\_\_\_\_ 5. Organize off-campus classes on specific courses on the campuses of some agricultural schools during summer, if requested?
- \_\_\_\_\_ 6. Arrange for off-campus classes to be handled and taught by qualified agricultural school administrators on their respective school campuses either on Saturdays or in Summer?
- \_\_\_\_\_ 7. Arrange and make possible for teachers visiting your college to confer with members of your faculty, listen to lectures, or observe the latest techniques and procedures used by your college in its teacher training program?
- \_\_\_\_\_ 8. Make available to teachers publications of that college pertaining to teaching and other aspects of education for their professional information?
- \_\_\_\_\_ 9. Cooperate with the Bureau of Public Schools in organizing an employment service to help new graduates obtain jobs and enable the Bureau of Public Schools to recruit to its service the best trained graduates?



## APPENDIX I-2

- \_\_\_\_\_ 10. Provide the Director of Public Schools and superintendents of schools with a ranked list of graduates of your college every year?
- \_\_\_\_\_ 11. Seek the suggestions or recommendations of Bureau of Public Schools officials and school administrators regarding teacher education curriculums?
- \_\_\_\_\_ 12. Participate in conferences, conventions or workshops on the various problems of education in the country?
- \_\_\_\_\_ 13. Offer summer school scholarship consisting of free tuition to a limited number of outstanding teachers?
- \_\_\_\_\_ 14. Sponsor workshops, seminars, and conferences for teachers?
- \_\_\_\_\_ 15. Be host to participant teachers at workshops, etc. for the duration of these workshops?





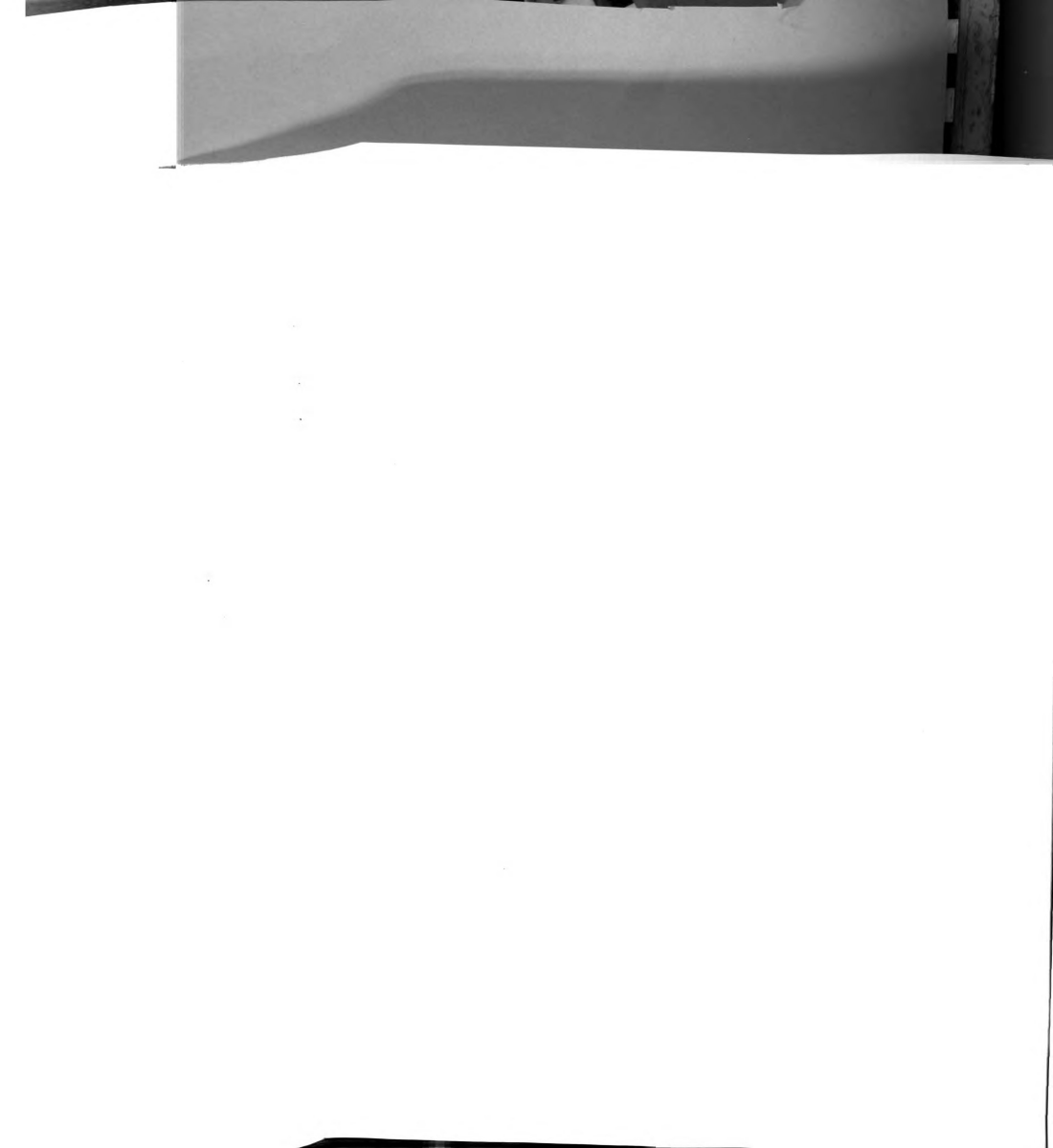
## BIBLIOGRAPHY

## BOOKS

- General Education Policies: A report of the Board of National Education for 1955-1957, Manila. Phoenix Press, Inc., Quezon City, Philippines, 1958, 514 p.
- Guiang, Pedro G. (ed.) Vocational Education in the Philippines. Bureau of Public Schools, Manila, 1955, 329 p.
- Henry, Nelson B., (ed.) In-Service Education. The Fifty-Sixth Yearbook of the National Society for the Study of Education. The University of Chicago Press, Chicago, Illinois, 1957, 376 p.
- Trout, David M., (ed.) The Education of Teachers. The Michigan Cooperative Teacher Education Study, Lansing, Michigan, 1943, 200 p.

## BULLETINS AND PAMPHLETS

- Sledge, George W., George P. Deyoe, and Harold M. Byram. Principles and Practices for Planning In-Service Educational Programs for Teachers of Vocational Agriculture in the Central Region. Department of Agricultural and Extension Education, College of Agriculture, University of Wisconsin, Madison, 1959, 16 p. (Mimeographed).
- Summaries of Studies in Agricultural Education in the Philippines. Prepared by the College of Agriculture, University of the Philippines, College, Laguna, P. I., 1959, 60 p.
- Summaries of Studies in Agricultural Education. U. S. Department of Health, Education, and Welfare, Office of Education, Washington 25, D. C. 1956-1960.



## REPORTS

Annual Report of the Director of Public Schools, Manila  
Philippines, 1955-1959. Bureau of Public Schools.

Byram, Harold M. "Do We Have Standards for In-Service Education of Teachers in Vocational Agriculture?"  
Presentation: Teachers Breakfast Meetings, 1934-1956.  
American Vocational Association, 1956, p. 25.

Cushman, Harold, et al. The Agricultural Subject-Matter Needs of Teachers of Agriculture in the Philippines.  
Research Report. 1959. University of the Philippines, College, Laguna, 110 p.

Deyoe, George P. A Study of In-Service Education Provided for Teachers of Vocational Agriculture by Departments of Agricultural Education in the Central Region.  
Division of Agricultural Education, University of Illinois, 1955, 30 p. (Summaries of Studies in Agricultural Education, Supplement No. 10, Vocational Division Bull. No. 265, Agriculture Series No. 69.  
U. S. D. HEW, 1957, p. 29.

Horne, T. J. (ed.) Presentations: Teacher Trainers Breakfast Meetings, 1934-1956. Teacher-Trainers Section, Agricultural Education Division, American Vocational Association, 1956, 119 p.

Myers, Noel T. (Education Division Chief). The 6th Milestone - ICA and Education in the Philippines. Annual Report, USOM, ICA, Manila, Philippines, 1958, 344 p.

Reports of the Agricultural Education Division, Bureau of Public Schools, Manila, Philippines, from 1955 to 1960, concerning in-service education for Teachers of Agricultural Schools.

## UNPUBLISHED MATERIALS

Deems, Howard W. An Evaluation of the In-Service Program Provided by the University of Nebraska for Teachers of Vocational Agriculture. Ed. D. thesis, 1956. University of Missouri, 260 p. University of Missouri, Columbia.



- Diggs, Kermit Hunter. In-Service Education of Teachers of Vocational Agriculture in Virginia. Ed.D. Thesis, 1957, 290 p. Cornell University, Ithaca. Summaries of Studies in Agricultural Education. Voc. Div. Bull. No. 275, Supplement No. 12, Agriculture Series No. 72. U. S. D. HEW, 1959, pp. 17-18.
- Essman, Rolland L. A Study of the Summer Activities of Nebraska Teachers of Vocational Agriculture. M.S. Thesis, 1956. The University of Nebraska, 94 p. Summaries of Studies in Agricultural Education, Voc. Div. Bull. No. 272, Supplement No. 11, Agriculture Series No. 71, p. 24, U. S. D. HEW, 1958.
- Habito, Celestino P. Development of an Adult Farmer Education Program for the Philippines. Ph.D. Thesis, 1958. University of Minnesota, 380 p. Library, University of Minnesota, Minneapolis.
- Horner, James T. An Evaluation of the In-Service Education Program Provided for Teachers of Vocational Agriculture by North Carolina State College. Ed.D. Dissertation, 1959. University of Missouri, 209 p. University of Missouri, Columbia. Summaries of Studies in Agricultural Education, Voc. Div. Bull. No. 282, Supplement No. 13, Agriculture Series No. 75, pp. 48-49. U. S. D. HEW, 1960.
- Juan, Virginio C. The Educational Attainment, Service Status, and In-Service Training Needs of Agriculture Teachers in the Philippines. M. S. Thesis, 1955. Pennsylvania State University, University Park, Pennsylvania.
- Juliano, Jorge P. The Technical Training of Teachers of Vocational Agriculture in the Philippines. M.S. Thesis, 1954, 69 p. Pennsylvania State University, University Park, Pennsylvania.
- Santiago, Alicia A. A Study of the In-Service Education of Public Secondary School Teachers in Manila, Philippines. Ed.D. Thesis, 1957, 379 p. Indiana University. Dissertation Abstracts, University of Michigan, Ann Arbor, Michigan, 1958. V. 18, No. 2, Feb., 1958.



Sudershanam, Ratna. A Study of In-Service Teacher Education of Secondary School Teachers in Andra Pradesh State, India. Ed.D. Thesis, 1958. Indiana University. Dissertation Abstracts, V. 19, No. 12, June, 1959, University of Michigan, Ann Arbor.

#### ARTICLES

Cedillo, Valentin G. Qualification of Agricultural Teachers in General, Agricultural and Rural High Schools. The Philippine Agriculturist, V. 39 (4), 1955.

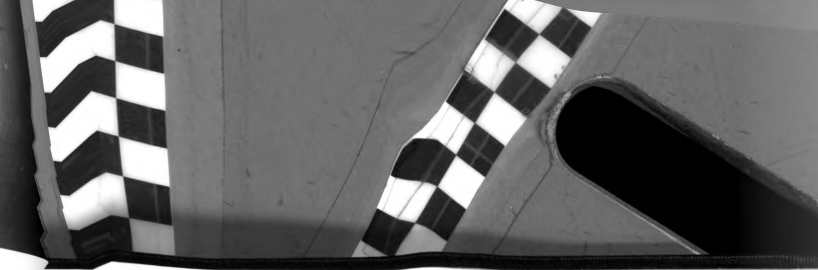
Habito, Celestino P. An Adult Farmer Education Program. The Agricultural Education Magazine, V. 31, No. 4, October, 1958.

#### MISCELLANEOUS MATERIALS

Guidebook of Procedures and Suggestions for Apprentice and First-Year Teachers of Vocational Agriculture. University of Georgia, Athens, Georgia, 1953.











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