

T H E S I S

on

THE EXTENT OF VOCATIONAL EDUCATION  
IN THE PHILIPPINE ISLANDS WITH  
SUGGESTIONS FOR IMPROVING  
THE WORK

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Submitted to the  
OREGON STATE AGRICULTURAL COLLEGE

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the requirements for the  
Degree of

MASTER OF SCIENCE

by

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## INTRODUCTION

When the Americans came to the Philippines in 1898 they brought with them the institutions of the Anglo-Saxon race, which the Filipinos readily accepted. The second to the greatest of the institutions which were carried over was popular education, never before known in the orient. Rich and poor, young and old have equal opportunities in obtaining an education.

Academic learning was mostly emphasized, and one's training was measured by what he academically knew. As a result the Philippines have well developed academic high schools and liberal arts colleges. Until recently, vocational education was practically neglected. Little progress had been made in that line of training because the people were indifferent to manual labor. The parents who had a Spanish form of education did not want to have their children's hands become soiled. For example, a few years ago one Spanish educated legislator attempted to introduce a bill in the Philippine Legislature which provided for the complete eradication of vocational courses in the Philippine public schools. This idea was haughtily denounced by the younger set of Filipinos and some of his co-legislators who have traveled abroad especially those who have come to the United States for their education. Greatest of all of those who opposed that bill is Dr. Camilo Osias, a graduate of an American university, at one time an assistant director of education of the Philippines, formerly the president of the National University, a legislator, and now one of the two resident commissioners at Washington, D. C.

The changing attitude of the Filipinos towards vocational education is manifested by their many activities which support the movement. The Philippine Legislature passed the Vocational Act in 1927; the different provinces have yearly agricultural fairs; and recently, a vocational education office was created in the general office of education at Manila.

In 1925 the Philippine Legislature appropriated a lump sum of money to employ American educators to make a survey of the schools. The Survey Commission included such outstanding educators such as Dr. Paul Monroe, Dr. Carter Alexander, Dr. Frederick P. Bonser, Dr. George S. Counts, Dr. Stephen Duggan, Mary E. Pennel, Dr. Harold Rugg, Dr. Jesse F. Williams, and Dr. Lester M. Wilson. The above named persons were assisted by Filipino educators, such as Dr. Nemesio L. Agunod, English instructor in the Philippine School of Arts and Trades, Dr. Manuel Carreon, head of the office of measurements and research at the general office of education, Manila, Dr. Isidoro Panlasigui, professor of psychology, University of the Philippines, and many others.

Part of the survey report included vocational education. The field was fairly covered. The merits and demerits of the vocational schools were shown. The rate of improvement in terms of money and enrollment was laid before the eyes of the Philippine public. But the report has outstanding defects. It tried to measure the achievement of the schools by American standard. Consequently the members of the commission made recommendations which are unfit for Philippine conditions. They expected our schools to achieve in a fortnight that which is achieved by American schools after a period of many years of experi-

mentation. The writer is of the opinion that the Philippine schools were far from being accurately measured during the survey. He was a sophomore at the Laoag Normal School when the survey was made, and witnessed how the commission worked. When they visited the schools they did not stay long enough to gather adequate data and facts. In one of the classes they visited there they stayed for less than five minutes. This was doubtless true throughout the survey. Moreover, the classes which they witnessed were model-classes, and with such kind the actual conditions were misrepresented.

A purely vocational survey in the Philippines was made in 1930 by Dr. Charles Prosser. His report is more adequate and more comprehensive about the work than any other report made previously. His datas and facts seem to be more representative of the actual conditions. But the school authorities say that it is too long for them to read, and that it cannot be easily condensed. For this reason, little use is made of it.

Every year Dr. Luther B. Bewley, Director of Education in the Philippines, makes an annual report of the improvement of vocational education in the public schools. Being the head of the school system his knowledge in the field cannot be refuted. However, there is this one thing. He overemphasizes the achievements made every year, and one who reads his annual report tends to forget that there are shortcomings of the schools.

In the preparation of this report the writer has been aided by several factors. First, there is his desire to see his country become materially great like those nations in which he has traveled, particularly Japan and the United States. It is only through the schools that

a wise utilization of the idle resources of the Philippines that it can be expected in the future. Second, there is the constant growth of evils which are brought about by the graduates of academic high schools and liberal arts colleges. Because of a large number of unemployed among this group, social parasitism will be constantly growing from among them unless it be checked.

With all of these a practical study suggested itself in which to base recommendations to improve conditions. It is the purpose of the writer to show the extent of vocational education in the Philippines and to suggest ways of improving the work. It should be made clear that this work is confined largely to the schools below the university, particularly the secondary schools, where the greatest shortcomings in the field of vocational education are found.

There was considerable difficulty in obtaining material for this thesis. The library at Oregon State College lacks adequate material concerning the subject. Hence, the reports are all imported from the Philippines, except a few that could be found in different periodicals. Much credit is due to Dr. Luther B. Bewley and the Honorable Secretary of Public Instruction, who took the trouble of sending the materials. Special mention is made of the gratitude of the writer to Professor Carl Salser for his guidance in preparing this thesis, and to Dr. W. F. Parr from whom knowledge about curriculum construction has been obtained.

It should not be expected that this report is complete, but it is the desire of the author that it will be of practical value to those who are intending to work in vocational education in the Philippines.

## TABLE OF CONTENTS

Page

## Chapter I

GENERAL FACTS ABOUT THE PHILIPPINES. ....	10
---	----

Geography and climate. The people and their culture.

History. Government. Agricultural products, forest resources, minerals, and industries.

## Chapter II

THE PHILIPPINE SCHOOL SYSTEM IN GENERAL. ....	24
---	----

Conditions which led to the present educational system.

The organization of the administration. Aim of the educational system. Educational program and enrollment in the elementary and secondary schools.

## Chapter III

VOCATIONAL EDUCATION IN GENERAL. ....	59
---------------------------------------	----

The number and classification of schools. The vocational education act. Recommendations.

## Chapter IV

AGRICULTURAL EDUCATION. ....	70
------------------------------	----

Agricultural schools. Rural high schools. Settlement farm schools. Agricultural clubs. A proposed course of study in agriculture for the general high schools.

## Chapter V

TRADE AND INDUSTRIAL EDUCATION. ....	94
--------------------------------------	----

Provincial trade schools. Provincial shops. Municipal trade schools. A suggested course of study in trade education for the general high schools.

## Chapter VI

HOME ECONOMICS EDUCATION. ....	112
--------------------------------	-----

Present conditions of home economics education. Recommendations. A proposed course of study in home economics for the general high schools.

## Chapter VII

VOCATIONAL GUIDANCE AND PLACEMENT ACTIVITIES. ....	120
--	-----

Present conditions and practices in guidance. The extent of placement. Recommendations. A proposed course of study in occupational information for the secondary schools.

BIBLIOGRAPHY. ....	138
--------------------	-----

APPENDIX. ....	140
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THESIS OUTLINE FOR M. S. DEGREE

School of Education

THE EXTENT OF VOCATIONAL EDUCATION IN THE PHILIPPINE ISLANDS WITH  
SUGGESTIONS FOR IMPROVING THE WORK

Chapter I. General Facts about the Philippines.

1. Geography and Climate.
2. People and their Culture.
3. History.
4. Government.
5. Agricultural Products, Forest Resources, Minerals, and  
Other Industries.

Chapter II. The Philippine School System in General.

1. Conditions which led to the Present Educational System.
2. Organization and Administration.
3. Aim of the Educational System.
4. Educational Program and Enrollment.
5. The Curriculum of the Schools.

Chapter III. Vocational Education in General.

1. The Number and Classification of Schools.
2. The Vocational Education Act of the Legislature.
3. Recommendations.

Chapter IV. Agricultural Education.

1. Kinds of Agricultural Schools.
  - a. Number.
  - b. Enrollment.

c. Area of Land Cultivated.

d. Value of Production.

2. Agricultural Clubs.

a. Number of Members.

b. Value of Production.

3. Handicaps and Shortcomings.

4. Recommendations.

5. Course of Study for Agriculture in the General High Schools.

Chapter V. Trade and Industrial Education.

1. Kinds of Trade and Industrial Schools.

a. Number.

b. Enrollment.

c. Value of Production.

2. Handicaps and Shortcomings.

3. Recommendations.

4. Suggested Course of Study for Trade Education in the General High Schools.

Chapter VI. Home Economics Education. (Arrangement of the chapter same as Chapter V.)

Chapter VII. Vocational Guidance and Placement Activities.

1. Present Conditions and Practices in Guidance.

2. The Extent of Placement Activities.

3. Recommendations.

4. A Proposed Course of Study for Occupational Information in the Secondary Schools.

## CHAPTER I

### GENERAL FACTS ABOUT THE PHILIPPINES

A brief description of the Philippine Islands is very necessary before we can fully understand the real subject of this study. Without it a full and complete knowledge of the subject is impossible. We need to know the geography and climate of the country, her resources and industries, her people and their culture, her history, her government, and the national aspiration of the people. The treatment of these topics, though necessarily limited, will aid every reader to get a full understanding of the discussion.

#### 1. Geography and Climate

The Philippine Islands comprise a group of tropical islands between 5° and 22° North Latitude, and 117° and 127° East Longitude. The total number of islands is 7,083, of which 462 have an area of one hundred square miles or more, and only 2,441 are of sufficient importance to have names. The two largest are Luzon (about 41,000 square miles) and Mindanao (about 37,000 square miles). The total area of all the islands is approximately 115,000 square miles. This is about equal to the British Isles, or the islands constituting the Japanese Empire before the war with China.

Being entirely within the tropics, the Philippines have but two seasons, wet and dry. In most parts of the islands the dry season lasts from November to May and the wet season from June to October. In the southern islands the seasons are less marked, the rainfall being more equally distributed. The coolest months are December, January, and February; the hottest, April and May. Even in the hot season, the

temperature rarely reaches 100° F., and the heat is tempered by the monsoons which blow six months from the northeast and six months from the southwest. The weather in the lowlands is continuously warm, but not oppressively hot. The hot season, like that of all other tropical countries, is enervating but statistics show that the climate does not exert a particularly lethal influence on the health of the inhabitants.

## 2. The People and their Culture

The total population of the Philippine Islands, according to the last census, was 12,094,106. Of this number 11,000,166 are Christians and 1,093,940 are non-Christians.

The estimated population by religions follows:

Catholics	9,135,310
Independent Filipino (Catholic) Church	1,662,037
Protestants	146,071
Mohammedans	519,486
Pagans	596,357
Buddhists	28,450
All others	6,395
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Total	12,094,106

Of the total population 93 per cent are of the Malay race.

The foreign population of the Philippines follows:

Americans	6,405
Spanish	4,015
English	1,063
German	312
French	218

Swiss	451
Chinese	45,156
Japanese	6,684
All others	1,111
	<hr/>
Total	65,415

Erroneous as is the picture most Americans have of the culture prevailing in the Philippines before the establishment of American sovereignty in 1898, even more erroneous is the belief that the Filipinos possessed no civilization at the time of the Spanish conquest in 1521.

Among the evidences that the Filipinos had long been forging ahead in civilization are these:

1. Many could read and write their own language before the Spaniards came.
2. Irrigation was known and practiced.
3. There were expert navigators and skilled builders of sailing boats.
4. Cotton was raised, spun, and woven into cloth.
5. People lived in houses which were grouped in settlements, and they engaged in agriculture, boat building, and fishing.
6. Gold was mined, manufactured into jewelry, and used in exchange.
7. Trade was carried on with China, Japan, India, Borneo, and other oriental countries.

Between the discovery of the Philippines and American occupation the Islanders were nearly four centuries subject to Spain and they

absorbed much of Spanish civilization and culture, together with the Christian religion, to which they were converted by the efforts of the Roman Catholic priests, who sacrificed health and life in their noble and zealous work.

### 3. History

Long before the Philippine Islands were discovered by Ferdinand Magellan they were already known in the Orient. A Chinese geographer, as early as the thirteenth century made mention of the Islands and described their trade relations with the Chinese. Commercial intercourse also existed between the Philippines and Japan, India, Siam, Cambodia, the Malay Peninsula, Java, Sumatra, Borneo, and the Moluccas.

Before the arrival of the Spaniards, the Filipinos had already attained a considerable degree of culture, which, though bearing unmistakable impress of Hindu influence, was uniformly Malayan. The Islanders then had a system of writing which closely followed the Phoenecian alphabetical arrangements. They had calendars and a system of weights and measures. They tilled the lands and maintained village governments. The laws were mostly based on traditions and customs handed down from generation to generation, although occasionally codes of laws also existed, such as the penal code of Calantiao, written about eighty-eight years before the coming of Magellan.

On March 16, 1521, the Philippines were "discovered" by Magellan in his attempt to reach the Moluccas by a western route. This date is important because it marks the beginning of the Christianization of the archipelago and the introduction into the Islands of western culture.

The history of the P<sup>h</sup>ilippines from the beginning of the Spanish

rule to the middle of the nineteenth century was a long tale of cruel wars and uprisings. The Portugese disputed Spain's right to the Islands, and between 1566 and 1570 made three attempts to dislodge the Spaniards. The Dutch during the first half of the seventeenth century repeatedly appeared in Philippine waters and made attacks on the Spaniards. The British unexpectedly swooped down on Manila in 1762, and the Archbishop, who was acting as governor speedily capitulated, the City of Manila falling into the British hands until the treaty of Paris in 1763 when it was again restored to Spain. The Chinese residents added to all these difficulties by revolting from time to time.

But the most persistent trouble-makers were the Filipinos themselves who repeatedly revolted because of alleged injustices committed upon them. Between the years 1645 and 1665 alone there occurred five uprisings against the Spanish government. Several other revolts also took place in the eighteenth and nineteenth century. There were in all about a hundred uprisings, big and little, during the Spanish regime.

The dawn of the nineteenth century brought significant events that had far reaching results. During the period 1810 to 1813, 1820 to 1823, and 1830 to 1837, as a result of the liberal and nationalistic struggles which Spain was going through, the Cortez was revived and representatives from different parts of the monarchy, the colonies included, were given seats therein. This naturally ushered in a period of constitutional and representative government for the Philippines. Moreover, by 1830, the Spanish commercial policy of trade exclusiveness for the colonies may be said to have come to an end in the Philippine Islands. A few years later, Manila was thrown open to foreign trade and a freer

and more liberal economic system adopted. In this way the foundation for later political and economic growth and progress was laid.

The last decades of Spanish sovereignty were marked by several reforms, but these reforms were altogether too conservative and came too late. Consequently there was much discontent and the Filipinos, in August 1896, following the teachings of the Katipunan (a secret organization that upset the Spanish rule in the Philippines) rose in revolt and sought to declare themselves independent of Spain. The revolution extended throughout the archipelago. It was halted by the Pact of Biac-na-Bato in December, 1897, only to be resumed early in the following year, under the very eyes and with the help of the Americans, who appeared on the scene on May 1, 1898. The Filipinos succeeded in wresting from Spain every foot of Philippine territory except Manila which was surrendered to the Americans on August 13, after simultaneous attacks by American and Filipino forces.

Soon afterwards the first republic in the Far East based on constitutional and representative government was established by the Filipinos. It had received the commendation of several foreigners among whom were the late Senator Hoar and John Barrett, ex-director of the Pan-American Union.

The downfall of the Republic came as a result of the Filipino-American war which broke out through a misunderstanding between America and the Philippines and which lasted three years. With the superior forces of the United States in was naturally a one-sided struggle, but nevertheless this showed once more the determination of the Filipino people to have an independent national existence. They wanted no less

than an untrammelled republic free from any foreign control. They asked that of the United States, which resulted in the passing of the Hawes-Cutting bill, promising independence from ten to thirteen years.

American civil government was established in the Islands in 1901 and 1902. Under this government the Philippines made remarkably rapid strides along the road of progress. But the most significant stride is perhaps the development of Philippine home rule. Today, with a few exceptions, notably those of the American Chief Executive and the American Vice-Governor, who is also Secretary of Public Instruction, the Philippine government is run by the Filipinos themselves.

#### 4. Government

The corporate governmental entities through which the functions of government are exercised throughout the Philippine Islands are the Insular Government, the Provincial Government, the Municipal Government, and the Chartered Cities.

INSULAR GOVERNMENT. The Insular Government, as in the case of the Federal Government of the United States, is divided into executive, legislative, and judiciary branches. At the head of the executive branch is the Governor-General of the Philippines, who is appointed by the President of the United States, by and with the consent of the United States Senate. He is assisted in the performance of his duties by the department secretaries. All the department secretaries, with the exception of the Secretary of Public Instruction (who is also Vice-Governor-General and who is appointed by the President of the United States) are Filipinos and are appointed by the Governor-General. The other officials of the Philippine government appointed by the President

of the United States are the Insular Auditor, the Deputy Insular Auditor, and the nine justices of the Supreme Court.

The six departments of the Insular Government are the following:

Department of the Interior

Department of Public Instruction

Department of Finance

Department of Justice

Department of Agriculture and Natural Resources

Department of Commerce and Communications

PROVINCIAL GOVERNMENT. The Philippine Archipelago is divided into forty-eight provinces, 37 of which are known as regularly organized provinces and the remaining 11, as specially organized provinces. The chief executive of the province is the provincial governor, who in a regularly organized province, is an elective official. He and two other members, who are elected by the people, form the provincial board, which constitutes the legislative branch of the provincial government. In some of the specially organized provinces, the provincial governors are elected and in others appointed officials.

MUNICIPAL GOVERNMENT. There are in the Philippines 892 municipalities and 297 municipal districts. The chief executive of a municipality is called the municipal president. The municipal council, which is the legislative branch of the municipal government consists of eight to eighteen councilors, depending on the size of the municipality. There is a vice president who substitutes for the president during his absence or disability and who is ex-officio member of the council. In the municipal districts the officials are appointed by the provincial

governor.

CHARTERED CITIES. There are only two chartered cities in the Philippines; namely, Manila and Baguio. Manila is the insular capital, and Baguio is the Summer Capital.

THE LEGISLATIVE BRANCH. The Philippine Legislature is made up of the Senate and the House of Representatives. Of the twenty-four senators, only two, those from the twelfth district, which is composed of the Mountain Province, the City of Baguio, and the provinces of Nueva Visaya, Agusan, Bukidnon, Cotabato, Davao, Lanao, Sulu, and Zamboanga, are appointed by the Governor-General; all the others are elected by popular votes; as also the ninety three representatives, excepting the nine of the above named provinces.

JUDICIARY. The administration of justice in the Philippines is entrusted to the Supreme Court, the courts of First Instance, the Municipal Court of the City of Manila, and the courts of the Justices of the Peace. The Supreme Court, as its name indicates, is the highest entity in the judiciary system. As such it has an appellate jurisdiction in all actions and special proceedings brought to it from the courts of first instance and from other tribunals, from whose decision the law especially permits appeal to the Supreme Court.

The Supreme Court is made up of nine justices; namely, the Chief Justice and eight associate justices. Decisions of the Supreme Court of the Philippine Islands may be appealed to the United States Supreme Court in certain cases.

INFERIOR COURTS. There is a court of first instance in every province and a justice of the peace court in nearly every municipality.

## 5. Agricultural Products, Forest Resources,

## Minerals, and other Industries

The Philippines are eminently an agricultural country. Agriculture is the Principal source of the Islands' wealth, and the bulk of the exports consists mostly of agricultural products.

An estimate of the number of hectares under cultivation shows the following:

Hectares devoted to rice	1,661,430
Hectares devoted to abaca	494,990
Hectares devoted to sugar cane	240,820
Hectares devoted to coconuts	422,684
Hectares devoted to corn	549,960
Hectares devoted to tobacco	59,870
Hectares devoted to maguey	27,670
Hectares devoted to cacao	1,155
Hectares devoted to coffee	822
	<hr/>
Total	3,459,461

This is only 10 per cent of the total area of the Philippine Islands.

The average area of farms in the Islands is 2.33 hectares. Out of the 1,955,276 farms in the Islands today 1,946,580 or 96 per cent, are owned by Filipinos, 2,678 by Americans, 949 by Europeans, 1,612 by Asiatics, and 3,457 by other nationalities.

THE PRINCIPAL CROPS. The principal crops produced by the islands are rice, abaca (Manila hemp), coconut, sugar, and tobacco. All these except rice are articles of export.

The Philippines is the only source in the world for Manila hemp. There are two other commercial fibers that grow in the Islands. These are the sisal and the maguey.

In the production of coconut, the Philippines is the third most important source in the world. It is estimated that there are some 200,000,000 trees in the islands which in 1931 produced 800,500,000 kilos of copra, valued at \$60,000,000. The Philippines is only excelled by the Dutch East Indies and the Federated Malay States.

Cane-sugar ranks first among the islands' agricultural exports. As early as 1795 the Philippines had been exporting sugar to the United States; for that year 132 long tons were imported.

There are more than thirty sugar centrals in the Islands, and several are in process of construction.

Tobacco is just as widely cultivated as sugar cane. The manufacture of cigar is one of the few manufacturing enterprises that has developed factory conditions in the Islands.

SECONDARY AND PROSPECTIVE AGRICULTURAL PRODUCTS. Corn leads in importance among the secondary food products. The other food products worth mentioning are sweet potatoes, cassava, sesame, peanuts, mangoes, bananas, citrus, and a great number of tropical fruits and vegetables.

Other tropical staple products that have prospect in the Philippines are rubber, coffee, tea, cacao, pepper, and cinchona.

FOREST RESOURCES. The forest of the Philippines covers about 18,706,093 hectares, or 72,224 square miles, which is about 63.1 per cent of the total area of the Islands. Of this number 16,609,108 hectares or 64,127 square miles, 88.6 per cent of the entire forest area are of a commer-

cial character. In addition, there are estimated to be about 2,096,108 hectares or 8,096 square miles of second growth forests which will yield large quantities of fine wood and small size timber. The whole area of the virgin and second growth forests in the Philippines cover an area about equal to the area of the State of Nebraska. More than 99 per cent of the timber belongs to the Philippine government and is under the administration of the Bureau of Forestry. Less than 1 per cent is held under the title of private ownership.

The volume of this timber resources is 192,000,000,000 board feet or 777,000,000 cubic meters.

At present there are more than fifty sawmills of all sizes and descriptions operating in the Islands. About twelve of these can be compared to the average modern sawmills in the United States. The largest sawmills are located on lumber concessions, while the others are operated under short term licenses. The total cut of the sawmills of the Islands is about 100 to 130 million board feet per year.

THE MINOR FOREST PRODUCTS. The most important minor products are alcohol, sugar, rattan, and varnish. Some of the others are dye-woods and barks; gutta percha and rubber; paper pulp; fibers used for making baskets, hats, mats, and ropes; soap barks; wax; and different kinds of medical plants.

MINERALS. The Islands are rich in mineral products, but the utilizing of these minerals is not extensive. The most important minerals are gold, silver, zinc, lead, copper, iron, coal, asbestos, petroleum, sulphur, manganese, guano, mineral waters, gas, cement, and many others of minor importance.

OTHER INDUSTRIES. Other industries that could be found in the Philippines are fishing; the manufacture of alcohol, cordage, perfumeries, furniture, hats, and shoes; embroidery; and cattle raising. Pearl fishing for jewelry and buttons is also found in the Philippines.

## CHAPTER II

### THE PHILIPPINE SCHOOL SYSTEM IN GENERAL

After the discovery by Magellan in 1521, the Philippines came under the rule of Spain. The conquistadores brought with them the institutions of Latin Europe and gradually imposed them on the native population. Among the institutions the church was dominant and became emblematic of the Spanish civilization. With great zeal, energy, and courage, the early priests carried Christianity from island to island and to the remote villages and towns. According to the custom of the time in Europe, however, there was little interest in education. The first educational institutions to be established were schools of secondary grades, designed to prepare young men of Spanish blood for the Universities in Spain. In 1611 the University of Santo Tomas, today the oldest university under the American flag, was opened. Elementary schools, designed to meet the educational need of the masses, were slow in coming and never during the Spanish times reached more than a small percentage of the population. With the passage of the years, the higher education was extended to the natives of exceptional promise or social position, and in this way bright Filipino boys were recruited for the lower ranks of the clergy and were won to the support of the Spanish administration. Until the coming of the Americans, however, the educational system remained essentially an instrument for the perpetuation of the rule of Spain and of the domination of the church.

#### 1. Conditions which Led to the Present Educational System

After peace was declared between America and the Philippine insurgents, and, in fact, even before the hostilities actually ceased,

the American military authorities, in compliance with instructions from Washington, began the establishment of free schools. It was only through the instrumentality of these early soldier teachers that resentful feelings towards the new comers gradually faded away. It was through the disinterestedness of these American pioneers that the natives became finally convinced of the altruistic motives behind the Americans sudden and unexpected appearance in the Islands. In the opening of free schools, America had found a much more effective method of pacifying the people.

Since the establishment of the civil government in 1901, large armies of teachers have been sent yearly to the Islands to assume the responsibility of training native teachers and gradually to turn the task of educating the Filipinos over to the natives. The first group that left America, six hundred in number, sailed the transport Thomas in 1901. Every year since then American teachers have been sent to the Philippines from America at Philippine government expense. The event marks the beginning of that wonderful experiment America has so wisely undertaken in the Philippines. News of the gigantic attempt to impose through a foreign language American ideals and civilization on an alien people reached all parts of the globe. The British in India, the Dutch in Java, the French in Indo China, and the Germans in the Pacific islands sneered at the idea of embarking upon what they considered a Utopian enterprise. The result of the last three decades, however, have failed to justify this pessimism. The natives have taken kindly to all innovations made; they have supported all progressive

educational measures; and, today, they feel proud of having the most widely known educational system in the Far East.

The early school authorities were confronted with two outstanding problems, namely, the training of Filipino teaching staff to carry on the instruction begun by Americans and the publication of textbooks suited to the Philippine needs. The first problem was partially met by the establishment of small training classes in the schools where the first group of American teachers were sent, and by every possible encouragement given the Filipino teachers of the old Spanish schools to continue their work. Another solution presented itself in the erection of normal schools throughout the Islands and the inclusion of normal training in the regular curriculum of several secondary schools so far established. Not only has this task of training the Filipino teachers proved successful, but the process known as Filipinization has gone on so rapidly that of the 28,469 teachers in the Philippine public schools today there are only 260 Americans. In the words of a Filipino educator, the teaching force has changed from "Americans assisted by Filipinos to Filipinos assisted by Americans".

The question of textbooks adapted to Philippine conditions was another serious problem the school authorities had to cope with in the early days. When the American system was transplanted, the American textbook went along with the school. But it was soon discovered that the Filipino child, with a different interest, owing to different surroundings did not delight much in reading Jack Frost, the squirrel, or the apple, nor did he take deep interest in Indian or Norse stories. A need for change was recognized from the outset. A gradual process of

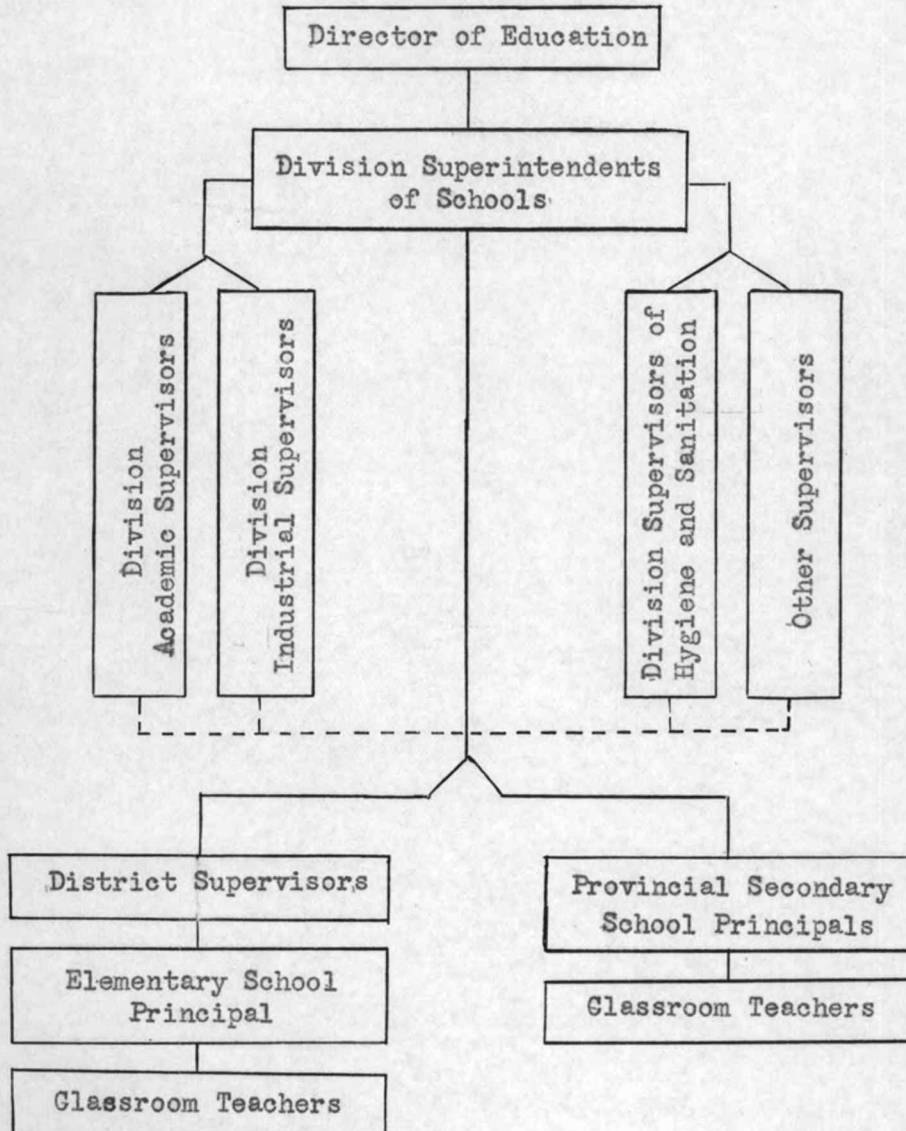
modification followed. Rain has taken the place of snow and frost, the monkey that of the squirrel, the banana and the mango that of the apple and peach. Today the Filipino child reads stories from Philippine folklore in place of Indian and Norse legends. He has become so enthusiastic in his school studies that today he no longer needs coaxing of his father or mother, but always comes to the school of his own accord.

## 2. The Organization of the Administration

The administration of the Philippine schools combines the democratic control in the American system and the centralized authority in the Prussian and the French. At the head of all of the schools is the Director of Education with his assistant. He is directly responsible to the Secretary of Public Instruction, who is at the same time the Vice-Governor of the Islands and a member of the Council of State, a body composed of the Governor General, the six department secretaries, the president of the Senate and the speaker of the House. The director is appointed by the Governor General with the advice and consent of the senate on the recommendation of the Secretary of Public Instruction and other members of the Council of State. Wielding all the authority vested in his office, the director is held responsible for the efficiency of the school system by the direct representative of the people.

The Philippines are divided into fifty school divisions and four insular schools administered by division superintendents. The bounds of the school divisions are identical with the bounds of the provinces. The offices of most of the division superintendents are located in the provincial capitals and are referred to as division offices.

SUPERVISORY ORGANIZATION IN THE PHILIPPINE PUBLIC SCHOOLS



Dotted lines indicate cooperation, not authority

Attached to most of the division offices are division supervisors of academic, industrial, and to some extent division supervisors of hygiene and sanitation. There are 172 division academic and industrial supervisors.

For each small district, into which a school division is divided, there is a district supervisor called supervising teacher. There are now on duty 497 supervising teachers, most of whom are Filipinos.

Division superintendents are appointed by the Director of Education, and to him they are held responsible. Division supervisors and district supervisors are held responsible to division superintendents and indirectly to the Director of Education, as are also principals of provincial high, normal, agricultural, trade and commercial schools. Principals of municipalities and barrio (rural districts) schools are held responsible directly to district supervisors, indirectly to division superintendents and to the Director of Education. Classroom teachers are generally held responsible directly to their principals, indirectly to supervisors and division superintendents, and through division superintendents to the Director of Education.

### 3. Aim of the Educational System

The work of the Philippine school resolves itself ultimately into four functions: academic, vocational, physical, and social. The academic phase of instruction differs but little from American theory and practice. Pupils start with the three R's, music, and drawing in the lower grades, and as they go up the scale through the intermediate grades and the high schools geography, history and civics, language and

literature, natural science, economics, and higher mathematics are added. Running parallel with this definite program of academic studies are courses in vocational education. In the primary grades weaving, basketry, and slipper making to boys; elementary housekeeping and kindred subjects to the girls. The intermediate school takes up the work from the fifth grade through the seventh grade, and offers weaving, gardening, and shopwork to boys; sewing, lacemaking, embroidery, housekeeping and household arts to the girls. To the intermediate school graduate the doors of various secondary schools are open for further training. Among these are the regular academic high school to which 70 per cent of the elementary graduates go, the normal schools for teachers, the school of commerce for secretarial typists, stenographers, and bookkeepers, the nautical school, the school of arts and trades, the farm schools, the forestry school, and the school for household industries for women. Crowning this broad educational program, the different departments and the colleges of the University offer splendid opportunities for branching off into professions to academic high school graduates, who have put off the day for specialization while they were in the high schools, but who by this time have a conception of what vocation to follow.

Just as the academic and vocational phases of Philippine public education are bound up with each other, so are the physical and social to no less degree. Physical exercises are given in the schools, not merely for the bodily development of the children but for the relaxation and social participation they afford in the work of the group. In the elementary grades, light calisthenic drills are given both to boys and girls, group games are played on the school ground, athletic contests

are held with a view to picking out the best contestants in the district and division meets, and folk dances are taught to the great delight of both parents and pupils. The secondary schools require military training for all boys enrolled; organized baseball, track and field, basketball, volley ball teams for boys; indoor baseball, newcombs, and other games for girls. Each year there is an athletic meet in every town, every district, every division, and among divisions. The process is one of elimination, by which the best athletes are sifted out for annual carnival meet at Manila and the biennial olympiad in the Far East. All sorts of students' literary and social organizations are encouraged, plans for parties and excursions are laid every year, and arbor days, parents days and other school holidays are scenes of merry making.

#### 4. Educational Program and Enrollment in the Elementary and Secondary Schools

It is thus far evident that the Philippine public school system has germinated from the American idea of universal education, carried over and transplanted on the soil of early Malayan culture and Spanish civilization. The work is provided in four fairly distinct levels, primary, intermediate, secondary, and higher education. Within these a dozen types of instructions have been evolved: General(academic) education of various kinds, industrial work, farm and shop work, normal training, schools of business, law, medicine, education, and schools for the deaf and the blind.

PRIMARY EDUCATION. Primary education in the Islands consists of the first four grades. As organized under the statutes of the Philippine

Legislature and the rulings of the Bureau of Education in 1925, the primary age period is from seven to ten, after which the child is expected to pass into the intermediate school. The minimum entering age of this school was originally six, but owing to lack of accommodations, the age was changed to seven.

At the present time every city, town, and township has a primary school, which is free to all children. Of all the total enrollment of the primary, intermediate, and secondary schools, the total enrollment of the primary schools in per cents is as follows:

Year	Enrollment in per cents
1925	78.70
1926	77.24
1927	76.27
1928	75.32
1929	76.90
1930	76.90
1931	77.45
1932	77.30
1933	76.95

The almost constant percentage is due to the fact that there are not enough rooms for accommodations of the children.

INTERMEDIATE EDUCATION. The secondary grades comprise from eighth to eleventh consecutively. The age period of the secondary schools, as set by law, is from fourteen to seventeen, after which he can go into the university where specific vocations are followed. The kind of secondary

schools found are the general high school, the secondary normal school, trade school, the Philippine school of arts and trades, agricultural school, farm school, and the Philippine school of commerce.

The percentages of enrollment of the academic and vocational high schools from 1925 to 1933 is shown below:

Year	Academic	Vocational
1925	72.26	27.74
1926	73.96	26.74
1927	74.70	25.30
1928	72.40	27.60
1929	70.36	29.74
1930	69.83	30.17
1931	68.46	31.54
1932	67.05	32.95
1933	65.02	34.98

The table above shows that while the enrollment in the academic high schools decreased from 72.26 per cent in 1925 to 65.02 per cent in 1933, the enrollment in the vocational high schools slowly increased from 25.30 in 1927 to 34.98 this school year. The reasons for such increase in the enrollment of the latter are as follows:

1. The increasing support of the people to vocational schools.
2. The so called idea that the Filipinos are becoming economically minded.
3. Free tuition in the vocational schools.
4. Lack of accommodations in other schools.

5. The Curriculum of the Schools

a. Primary School Curricula

FIRST GRADE:

1. Language, conversational English, good manners and right conduct, civics, hygiene, and sanitation.
2. Reading.
3. Phonics.
4. Number work.
5. Writing.
6. Music.
7. Physical education.

SECOND GRADE:

1. Language, conversational English, good manners and right conduct, civics, hygiene and sanitation.
2. Reading.
3. Phonics.
4. Arithmetic.
5. Spelling.
6. Drawing.
7. Writing.
8. Music.
9. Physical Education.
10. Industrial Education: handweaving, or making of native baskets, or gardening, or club work.
11. Home Economics: sewing or club work.

THIRD GRADE:

1. Language, conversational English, good manners and right conduct, civics, hygiene and sanitation.
2. Reading.
3. Phonics.
4. Arithmetic.
5. Spelling.
6. Drawing.
7. Writing.
8. Music.
9. Home Geography.
10. Physical Education.
11. Industrial Education: making of mats, handbags, hats, and native baskets; or gardening, or club work.
12. Home Making: sewing, embroidery, lace making, crocheting, hat making, club work.

FOURTH GRADE:

1. Language, conversational English, good manners and right conduct, civics, hygiene and sanitation.
2. Reading.
3. Phonics.
4. Arithmetic.
5. Spelling.
6. Drawing.
7. Writing.

8. Music.
9. Geography.
10. Physical Education.
11. Industrial Education: macrame, making of mats, handbags, hats, advanced basketry, slipper making, wood working, or making of brushes and brooms, gardening, pottery, or club work.
12. Home Economics: sewing, embroidery, lace making, tatting, crocheting, hat making, and club work.

b. Intermediate School Curricula

The intermediate school system of the Philippines is divided into three parts, namely: intermediate general, intermediate trade, and intermediate agricultural.

(1) Intermediate General

FIFTH GRADE:

1. Reading.
2. Language.
3. Spelling.
4. Conversational English.
5. Good manners and right conduct, civics, hygiene and sanitation.
6. Arithmetic.
7. Geography.
8. Writing.
9. Freehand or mechanical drawing.
10. Music.
11. Physical Education.

12. Industrial Education: making of mats, handbags, hats, baskets, slippers, woodworking, furniture making, gardening, or club work.
13. Home Economics: cooking, housekeeping, sewing, embroidery, lace making, crocheting, club work.

SIXTH GRADE:

1. Reading.
2. Language.
3. Spelling.
4. Phonics.
5. Conversational English.
6. Good manners and right conduct, civics, hygiene and sanitation.
7. Arithmetic.
8. Geography.
9. Writing.
10. Freehand drawing.
11. Music.
12. Physical Education.
13. Industrial Education: gardening or club work.
14. Home Economics: cooking, housekeeping, sewing, lace making, embroidery, and club work.

SEVENTH GRADE:

1. Reading.
2. Language.
3. Spelling.

4. Phonics.
5. Conversational English.
6. Good manners and right conduct.
7. Arithmetic.
8. Physiology, hygiene and sanitation.
9. Philippine history and government.
10. Physical Education.
11. Industrial Education: shopwork and mechanical drawing.
12. Home Economics: cooking and housekeeping, home nursing, food selection and diet, sewing, embroidery or lace making, crocheting, loom weaving, or club work.

(2) Intermediate Trade

FIFTH GRADE:

1. Reading.
2. Language.
3. Spelling.
4. Phonics.
5. Conversational English.
6. Good manners and right conduct, hygiene and sanitation, civics.
7. Arithmetic.
8. Drawing.
9. Industrial education.

SIXTH GRADE:

1. Language.
2. Spelling.

3. Phonics.
4. Conversational English.
5. Good manners and right conduct, hygiene and sanitation, civics.
6. Drawing.
7. Industrial Education: woodworking or iron work.

SEVENTH GRADE:

1. Reading.
2. Language.
3. Spelling.
4. Phonics.
5. Philippine history and government.
6. Arithmetic.
7. Drawing.
8. Estimating.
9. Industrial Education: woodworking and iron work.

(3) Intermediate Agricultural

FIFTH GRADE:

1. Reading.
2. Language.
3. Arithmetic.
4. Drawing.
5. Spelling.
6. Phonics.
7. Conversational English.
8. Good manners and right conduct, civics, hygiene and sanitation.
9. Carpentry, iron work, and repair work.

10. Farm work.

SIXTH GRADE:

1. Reading.
2. Language.
3. Spelling.
4. Phonics.
5. Conversational English, good manners and right conduct, civics, hygiene and sanitation.
6. Arithmetic.
7. Agriculture.
8. Farm work.
9. Drawing, carpentry, iron work, and repair work during rainy days, or when necessary.
10. Physical Education.

SEVENTH GRADE:

1. Reading.
2. Language.
3. Spelling.
4. Phonics.
5. Philippine history and government.
6. Arithmetic.
7. Agriculture.
8. Farm work.
9. Drawing, carpentry, iron work, and repair work on rainy days or when necessary.

10. Physical Education.

c. The Secondary School Curriculum

The secondary school system of the Philippines is divided into six parts: academic, normal, home economics, agricultural, commercial, and trade.

(1) Academic High Schools

FIRST YEAR:

1. Literature.
2. Composition.
3. United States history and government, current events.
4. Algebra.
5. Physical Education.

SECOND YEAR:

1. Literature and composition.
2. General Science.
3. General history (ancient and medieval), current events.
4. Geometry.
5. Physical Education.

THIRD YEAR:

1. Literature and Composition.
2. Biology.
3. General and oriental history, current events.
4. Advanced algebra.
5. Review arithmetic.
6. Physical Education.

FOURTH YEAR:

1. Literature and composition.
2. Economics.
3. Philippine history and government, current events.
4. Physics.
5. Physical Education.

The academic high schools which enroll 70 per cent of all the secondary school enrollments offer no kind of vocational course. It should be noticed that the courses offered are purely academic.

(2) The Normal Training Schools

FIRST YEAR:

1. Literature.
2. Composition.
3. United States history and government, current events.
4. Arithmetic.
5. Music, writing.
6. Physical Education.

SECOND YEAR:

1. Literature and composition.
2. Reading.
3. General history (ancient and medieval), current events.
4. General Science.
5. Drawing.
6. Industrial education.
7. Home economics.

8. Physical Education.

THIRD YEAR:

1. Literature and composition.
2. Biology.
3. General history (modern), current events.
4. Elementary educational psychology.
5. Principles of teaching.
6. Geography.
7. Observation and participation.
8. Physical Education.

FOURTH YEAR:

1. Literature and composition.
2. Economics.
3. Philippine history and government, current events.
4. Language.
5. Health education.
6. Practice teaching.
7. Physical Education.

(3) The Secondary Agricultural Schools

FIRST YEAR:

1. Literature, current events.
2. Composition.
3. Practical farm business, arithmetic and farm accounting.
4. Horticulture.
5. Field work.
6. Physical Education (informal athletics).

SECOND YEAR:

1. Literature and composition, current events.
2. Animal husbandry, general farm science, civic biology.
3. Field work.
4. Physical Education.
5. Optional: algebra.

THIRD YEAR:

1. Literature and composition, current events.
2. Plant diseases and pests.
3. Major farm crops of the Philippines.
4. Field work.
5. Physical Education.
6. Optional: geometry.

FOURTH YEAR:

1. Literature and composition, current events.
2. Farm economics, including farm management and cooperative farm extension.
3. Farm physics, which includes farm engineering and mechanics.
4. Field work.
5. Physical Education.
6. Optional: advanced algebra or review arithmetic.

The field work consists of the performance of practical tasks in the shop or in the field when such work is needed, rather than at fixed daily hours. A part of the students' time is reserved to be used at the discretion of the principal of the school in constructing buildings, in

planting and harvesting crops, in combating crop pests, and in handling emergencies that may arise from time to time in the management of a large productive farm.

(4) The Secondary Home Economics Schools

FIRST YEAR:

1. Literature.
2. Composition.
3. United States history and government, current events.
4. Food and health.
5. Embroidery or lace making.
6. Sewing and textiles.
7. Physical Education.
8. Music.

SECOND YEAR:

1. Literature and composition.
2. General science.
3. General history (ancient and medieval), current events.
4. Food and health, embroidery or lace making, sewing and textiles.
5. Physical Education.
6. Optional: music.

THIRD YEAR:

1. Literature and composition.
2. Biology.
3. General history (modern), Oriental history, current events.

(46)

4. Embroidery or lace making.
5. Infant care.
6. Physical Education.
7. Optional: Spanish, music.

FOURTH YEAR:

1. Literature and composition.
2. Economics.
3. Philippine history and government, current events.
4. Personal, home, and community hygiene including first aid and home care of the sick.
5. Physical Education.
6. Optional: Spanish and music.

(5) The Secondary Commercial School

FIRST YEAR:

1. Literature.
2. Composition.
3. United States history and government, current events.
4. Algebra.
5. Penmanship.
6. Physical Education.

SECOND YEAR:

1. Business English and spelling.
2. Literature and composition.
3. Stenography or bookkeeping.
4. Practical business arithmetic.

5. Typewriting.

6. Physical Education.

THIRD YEAR:

1. Literature and composition.

2. Stenography or bookkeeping.

3. Commercial geography, economics.

4. Spanish.

5. Typewriting.

6. Physical Education.

FOURTH YEAR:

1. Business English and spelling.

2. Commercial law, Philippine government.

3. Stenography or bookkeeping.

4. Spanish.

5. Typewriting (combined with office practice).

6. Physical Education.

(6) The Secondary Trade Schools

FIRST YEAR:

1. Literature, current events.

2. Composition.

3. Algebra.

4. Drawing.

5. Shop work.

SECOND YEAR:

1. Literature and composition.

2. General history (ancient, medieval, and modern), current events.
3. Plane geometry.
4. Drawing.
5. Shop work.

THIRD YEAR:

1. Literature and composition.
2. Advanced algebra, review arithmetic.
3. Mechanics.
4. Drawing.
5. Shop work.

FOURTH YEAR:

1. Literature and composition.
2. Physics.
3. Solid geometry.
4. Trigonometry.
5. Drawing.
6. Shop work.

d. Nautical Curriculum

The Philippine Nautical school was established in 1913 for the purpose of raising the standard of the marine service in the Philippine waters by preparing Filipino boys to be efficient marine officers. The cadets receive their training from nautical instructors who are licensed ship masters. The school is equipped with nautical instruments and facilities for practicing nautical astronomy and seamanship.

Entrance to this school requires the completion of second year of

the secondary curricula. The school is a two year institution.

FIRST YEAR:

1. Elementary navigation, including deviation and compass compensation, chart, lead and log, algebra and geometry, logarithms and plane trigonometry, and piloting.
2. Swimming.
3. Semaphore.
4. Elementary seamanship, including tying knots and splicing ropes.
5. Boat drill and athletics twice a week; military drill twice a week; and fire drill once a week.

SECOND YEAR:

1. Advanced navigation, including: astronomy, spherical trigonometry, latitude and longitude, rules for preventing collisions, meteorology, Sumner and St. Hilaire's method, and ship's business.
2. Swimming.
3. Advanced seamanship, including sail making.
4. Signaling-International Code.
5. Boat drill and athletics twice a week; military drill twice a week; and fire drill once a week.

e. The Philippine Normal School Curricula

(1) Two-Year General Curriculum

FIRST YEAR:

First Semester

1. English V.

(50)

2. Educational Psychology.
3. Reading.
4. Drawing I.
5. Arithmetic.
6. Physical Education.

Second Semester

1. English V.
2. Principles of teaching.
3. Reading.
4. Music I.
5. Observation and participation.
6. Physical Education.

SECOND YEAR:

First Semester

1. English VI.
2. Child study.
3. Principles of education.
4. Electives (2 should be taken).
5. Physical Education.

Second Semester

1. English VI.
2. Classroom tests.
3. Geography.
4. Elective.
5. Teaching.

(51)

6. Physical Education.

(2) Two-Year Curriculum for Provincial Normal Graduates

FIRST YEAR:

First Semester

1. English V.
2. Child study.
3. Geography III.
4. Two electives.
5. Physical Education.

Second Semester

1. English V.
2. Classroom tests.
3. Nature study.
4. Two electives.
5. Physical Education.

SECOND YEAR:

First Semester

1. English VI.
2. Sociology.
3. Teaching.
4. Two electives.
5. Physical Education.

Second Semester

1. English VI.
2. Educational sociology.
3. Principles of education.

4. Two electives.

5. Physical Education.

(3) Two-Year Home Economics Curriculum

Entrance requirement-Graduation from the secondary home economics course.

FIRST YEAR:

First Semester

1. English V.
2. Reading.
3. Educational psychology.
4. Sewing II.
5. Household science.
6. Physical Education.

Second Semester

1. English V.
2. Reading.
3. Home economics methods.
4. Sewing II.
5. Observation and participation.
6. Physical Education.

SECOND YEAR:

First Semester

1. English VI.
2. Commercial geography.
3. Cooking II.
4. Music I.

5. Industrial arithmetic.

6. Physical Education.

Second Semester

1. English VI.

2. Dietetics.

3. Cooking II.

4. Drawing I.

5. Teaching.

6. Physical Education.

(4) Two-and One-Half-Year Home Economics Curriculum

Entrance requirement-Completion of the General Secondary Course.

FIRST YEAR:

First Semester

1. English V.

2. Reading.

3. Sewing I.

4. Music I.

5. Cooking I.

6. Needlework.

7. Physical Education.

Second Semester

1. English V.

2. Reading.

3. Sewing I.

4. Drawing.

5. Cooking I.

6. Needlework.

7. Physical Education.

SECOND YEAR:

First Semester

1. English VI.

2. Cooking II.

3. Educational psychology.

4. Sewing II.

5. Household science.

6. Physical Education.

Second Semester

1. English VI.

2. Cooking II.

3. Home economics methods.

4. Sewing II.

5. Observation and participation.

6. Physical Education.

THIRD YEAR:

First Semester

1. Commercial geography.

2. Dietetics.

3. Home nursing.

4. Industrial arithmetic.

5. Teaching.

6. One elective.

7. Physical Education.

(5) Three-Year Combined Curriculum

Entrance requirement is the completion of the general secondary course. Upon completion of the curriculum the graduate is entitled to both the home-economics and the general-course diplomas.

FIRST YEAR:

First Semester

1. English V.
2. Reading.
3. Music I.
4. Cooking I.
5. Sewing I.
6. Educational psychology.
7. Physical Education.

Second Semester

1. English V.
2. Reading.
3. Drawing I.
4. Cooking I.
5. Sewing I.
6. Child study.
7. Physical Education.

SECOND YEAR:

First Semester

1. English VI.

2. Needlework.
3. Home economics methods.
4. Sewing II.
5. Geography.
6. Household science.
7. Physical Education.

Second Semester

1. English VI.
2. Needlework.
3. Principles of teaching.
4. Sewing II.
5. Commercial geography.
6. Observation and participation.
7. Physical Education.

THIRD YEAR:

First Semester

1. Language.
2. Dietetics.
3. Cooking II.
4. Principles of education.
5. Arithmetic.
6. One elective.
7. Physical Education.

Second Semester

1. Classroom tests.

2. Home nursing.
3. Cooking II.
4. Teaching.
5. Two electives.
6. Physical Education.

Elective Subjects

1. Health.
2. Supervision.
3. General sociology.
4. Music II.
5. Statistics.
6. Household science.
7. Algebra.
8. Physics.
9. Geometry.
10. English history.
11. Dietetics.
12. Commercial geography.
13. Language.
14. Administration.
15. Educational sociology.
16. Drawing II.
17. Library methods.
18. Nature study.
19. Expression.
20. Geography III.

21. Arithmetic II.

Elective subjects may be taken:

- a. To fulfill the requirements prescribed in any of the foregoing curricula.
- b. As an extra credit.
- c. As a substitute credit for a prescribed subject that has already been completed in a secondary school.

Only students with teaching experience are permitted to elect supervision, administration, statistics.

Students who have received credits in dietetics and home nursing are not permitted to elect health.

Students are not permitted to elect and secure additional credits for a subject or subjects for which they have already been given secondary credit.

## CHAPTER III

### VOCATIONAL EDUCATION IN GENERAL

Vocational education in the Philippines, as classified by the Bureau of Education, is divided into six parts: agriculture, trade, home economics, nautical, commercial, and normal. In this report the first three receive the major emphasis because they represent the greatest problems in vocational education, and because they are, in the opinion of the many, the real fields of vocational education. The rest are slightly mentioned because few problems have emanated from them so far.

#### 1. The Number and Classification of Schools

ELEMENTARY SCHOOLS. Vocational education in the elementary grades is more extensive than in any other division of the school system of the Philippines. Gardening, weaving, cooking, sewing, embroidery, poultry, hog raising, furniture making, and many others are part of the curricula of every elementary school, which can be found in most of the towns and cities. Besides there are the rural schools called the barrio schools where extensive work in gardening is done. Vocational education in the elementary and barrio schools is commendable if the age of the pupils is taken into consideration. Besides the work they do in the school premises they have home projects and agricultural clubs, which are promoted and directed by the instructors of industrial work.

At the present time the instructors of vocational courses in the municipal and barrio schools are not given any teacher training for the job assigned them. They are selected from the teaching staff without

regard to the amount or kind of training they have. It is advisable to have a teacher-training course from one to three years in the kind of work to be taught. For the training of elementary agriculture teachers a course for this purpose should be set up in the agricultural schools which are reached by most students in a province. For the training of trade teachers a teacher-training course for the line should be a part of the provincial trade schools. These schools are easily accessible to any student in the provinces. For the remainder of the courses mentioned above the normal training schools can easily take care. Weaving, sewing, embroidery, and cooking should be part of the curricula for girls in these schools. This type of schools is the right place for such training because most of the elementary school teachers are recruited from it.

SECONDARY VOCATIONAL SCHOOLS: The secondary vocational schools are separate institutions, each having a separate campus, organization, and teaching staff. There are the agricultural, trade, normal, nautical, commercial, and home economics secondary schools. In most provinces the agricultural schools are located in places where there are available land for the students and a good irrigation system to irrigate the plants. There are few high schools where there is a combination of the different courses. The following table shows the number of schools classified by curricula:

(Table on next page)

Classification	Number									
	1925:	1926:	1927:	1928:	1929:	1930:	1931:	1932:	1933	
Academic curriculum only	: 42 :	: 57 :	: 44 :	: 43 :	: 43 :	: 43 :	: 44 :	: 42 :	: 40	
Agriculture " only	: 17 :	: 19 :	: 17 :	: 25 :	: 15 :	: 12 :	: 13 :	: 13 :	: 14	
Trade curriculum only	: 13 :	: 18 :	: 19 :	: 23 :	: 25 :	: 25 :	: 23 :	: 25 :	: 27	
Normal curriculum only	: 7 :	: 9 :	: 8 :	: 7 :	: 6 :	: 6 :	: 6 :	: 6 :	: 5	
Nautical curriculum only	: 1 :	: 1 :	: 1 :	: 1 :	: 1 :	: 1 :	: 1 :	: 1 :	: 1	
Commercial curriculum "	: 1 :	: 1 :	: 1 :	: 1 :	: 1 :	: 1 :	: 1 :	: 1 :	: 1	
Home economics " only	: 1 :	: 1 :	: 1 :	: 1 :	: 1 :	: 1 :	: 1 :	: 1 :	: 1	
Academic and normal	: 4 :	: 8 :	: 4 :	: 5 :	: 6 :	: 5 :	: 4 :	: 4 :	: 3	
Academic and home ec.	: 7 :	: 7 :	: 6 :	: 8 :	: 8 :	: 8 :	: 8 :	: 8 :	: 10	
Home economics and trade	: 1 :	: 1 :	: 1 :	: 2 :	: 2 :	: 3 :	: 3 :	: 3 :	: 4	
Home economics and ag.	: 1 :	: 2 :	: 5 :	: 6 :	: 16 :	: 17 :	: 14 :	: 19 :	: 20	
Home economics and normal	: 1 :	: 1 :	: 1 :	:	:	: 1 :	: 1 :	: 1 :	: 1	
Normal, home ec., trade	: 1 :	:	: 1 :	: 1 :	: 1 :	:	:	:	:	
Academic, normal, home ec.	: 3 :	: 3 :	: 3 :	: 3 :	: 3 :	: 3 :	: 3 :	: 3 :	: 3	
Academic, normal, home	:	:	:	:	:	:	:	:	:	
ec., and commercial	: 1 :	:	:	:	:	:	:	:	:	
Academic, home economics,	:	:	:	:	:	:	:	:	:	
agricultural and trade	:	:	:	:	:	:	: 1 :	: 1 :	: 1	
Academic, home economics,	:	:	:	:	:	:	:	:	:	
agricultural and normal	:	:	:	:	:	:	: 1 :	: 1 :	: 1	

THE GENERAL HIGH SCHOOLS. The general high schools which are purely academic institutions are the central institutions of the provinces. They claim the big majority of the secondary school population with an average of 71.56 per cent every year since 1925. In 1926 there were 57 schools of this type, but since then they have begun to decrease until there are only 40 of them at the present time. The continuous decline in the number of these schools is due to different reasons. Firstly, high tuition is charged in these schools. Secondly, these schools are losing the support of the people because they have proven to be unsuccessful in solving the problems of the community. Lastly, American educators have continuously recommended that this type of schools should be changed in their organization and curriculum.

TRADE SCHOOLS. Next to the general high schools in number are the trade schools, most of which are located in the same town where each of the former is located. The trade schools have continuously increased more than any other secondary school. There were 13 in 1925, 19 in 1927, 25 in 1929, and 27 at the present time. The enrollment slowly increased from 2.63 per cent in 1925 to 12.40 at the present time. The continuous increase in the number of schools and enrollment are found in these reasons: (1) There is free tuition in all the vocational schools; (2) The Filipinos are becoming "economically minded", so that they are giving every support to the vocational schools. These reasons are true for any of the other schools of vocations, except the normal schools which are also decreasing in number.

AGRICULTURAL SCHOOLS. The third in number are the agricultural schools.

(Further explanation about this type of secondary school is given in another section of this report.)

NORMAL SCHOOLS. The normal schools, which are considered as vocational schools by the Bureau of Education, rank fourth in number among the secondary schools, but since 1926 they have continuously decreased from 9 in that year to 5 at the present time. Likewise the enrollment of this type of schools has decreased from 12.90 per cent in 1925 to 6.22 per cent during this school year. The causes for this decline in number and enrollment are the same as those of the general high schools, and in addition to these there is the fact that in the Philippines teaching positions in both the elementary and secondary schools are very few for the hundreds of graduates turned out every year from teacher-training institutions. It has been the experience for many years that of all the normal school graduates every year less than 25 per cent can find position as a teacher. Very few find their way to colleges and universities. The rest remain jobless because they hesitate to work on manual labor, and even if they accept work of such sort they are not as productive and competent as those who are trained for the job. Those who find their way to the colleges and universities have the desire to take other courses instead of education because of their failure during their first attempt to find teaching positions. But being unable to meet the requirements of other courses besides education they are forced to enroll in the latter, or they have to spend one year more in the regular high school to make up the requirements needed. To remedy this the curriculum of the normal schools should be modified. It should include in the program vocational courses that would give the students some preparation for other jobs in

case they could not secure teaching positions. The curriculum should also include the courses which are required for entrance in all the colleges of the University of the Philippines besides the college of education to which the normal school graduates are only allowed to enter. This will save the students the year which is spent for post graduate work in the general high schools which only provides them with the necessary entrance requirements.

NAUTICAL SCHOOL. Up to the present time only one of each of these vocational schools has been established: nautical, commercial, and home economics. The nautical school which was established during the world war has not progressed as much as the other secondary schools. From 1925 to the present school year the enrollment of this school has only increased from .05 to .15 per cent. The reason for this very slow progress is the fact that shipping business in the Philippines has been very much retarded.

COMMERCIAL HIGH SCHOOL. The commercial high school which is situated in Manila is unstable in its development. From 1925 to 1930 the enrollment had decreased from 1.08 per cent to .73 per cent only, and from the latter number it has increased only to 1.06 which is the percentage of enrollment during this school year. The reasons for this unstableness of enrollment are: (1) Commerce and trade have been in the hands of foreigners, (2) The Filipinos in general lack capital to start business in order that they could compete with the foreign traders, and (3) There are few white-collar jobs connected with trade and commerce such as clerical work. In spite of these facts commercial courses should be introduced in all secondary schools for it is one way in which to implant

in the children's mind the sense of economic consciousness.

HOME ECONOMICS. The secondary schools of home economics have also a very slow growth, but not as slow as the nautical and commercial schools. Its enrollment has increased from 4.70 in 1925 to 8.15 per cent during this school year. This slow but continuous increase is explained by the need of more home economics teachers in the grade schools, the entrance requirement which is a completion of the general secondary course, and the natural dislike of the parents to see their daughters as "mere housekeepers". (Further treatment of home economics is in another chapter.)

THE COMBINED HIGH SCHOOLS. There are a few high schools which have combined courses. The schools which have just been described are separate institutions and each is either a college preparatory or a finishing school. But the so called combined high schools have combined courses, and are offering diplomas for separate courses as in the colleges.

GENERAL AND NORMAL SCHOOLS. There are high schools which offer courses of the general and normal schools under the same organization and administration. But these schools have almost continually decreased from 8 in 1926 to only 3 during this school year. The reasons for this are the same as those which explains the decrease of the separate general and normal schools.

ACADEMIC AND HOME ECONOMICS. This kind of high school which has a combination of the academic and the home economics courses show a very slow increase from 7 in 1925 to 10 during this school year. Only once during this period of nine years has the number of schools been less than that

of the preceeding year. This was in 1927 when the number of these schools was only 6 which was below that of the previous year by 1. The closing of that school during that year was due to the lack of funds on the part of the provincial government which supported it.

HOME ECONOMICS AND TRADE. At present there are only four secondary schools which offer these two courses. This number is not so bad when the number of years since the beginning of the movement is taken into consideration. The first school of this kind was started during the school year 1925.

HOME ECONOMICS AND AGRICULTURE. This type of combined secondary school is the most progressive of its kind. Within the nine years that the schools have existed the number of these schools have increased from 1 to 20, during this school year. This rapid increase of these combined vocational schools and the continuous decline in the number of the general and normal schools show the winning support of the people toward the former. The great increase for the last two years has been augmented by the constructiveness of ex-Governor Theodore Roosevelt Jr. who carried over from Puerto Rico his knowledge and experience about vocational schools. There was an increase from 14 in 1931 to 19 the following year, the year when there was a change in the administration in the government of the Philippines.

HOME ECONOMICS AND NORMAL. The combination of these two courses into one high school has not showed much progress. The only high school which is offering these two courses has never increased its number. For two successive school years, 1928 and 1929, there have been no school of this type. The stability of this type of school is explained by the

same reasons which cause the continuous decline of the secondary normal course.

NORMAL, HOME ECONOMICS, AND TRADE. This combination of courses under the same administration made a worse showing than that which is just mentioned. It completely disappeared in 1930, and so far it has not been revived.

ACADEMIC, NORMAL, AND HOME ECONOMICS. During this period of nine years covered in this study the number of this type of secondary school has remained unchanged. There were three of them in 1925 and the number has remained the same up to this time. The fixed budget of this school which is provided by the Insular Government explains this.

ACADEMIC, NORMAL, HOME ECONOMICS, AND COMMERCIAL. This kind of high school disappeared in 1926.

ACADEMIC, HOME ECONOMICS, AGRICULTURAL, AND TRADE. These four courses combined under one administration was introduced during the school year 1931. This movement is an expression of the ever increasing demand for practical necessities of the Philippines. So far only one of this type of high school is in existence today, and further development of its kind should be encouraged.

ACADEMIC, HOME ECONOMICS, AGRICULTURAL, AND NORMAL. This came also into existence during the same year when the high school just mentioned was started. Only one is also in operation at the present time.

## 2. The Vocational Education Act

On December 3, 1927, an act of the Philippine Legislature was approved, which established courses for teachers of agriculture in the

College of Agriculture of the University of the Philippines, which created the office of Vocational Division in the Bureau of Education, and which improved the vocational schools partly or entirely supported by the Insular Government. This act was called the Vocational Education Act.

Some of the provisions of the act are as follows:

1. The establishment and maintenance of agricultural education courses in the College of Agriculture, which give practical training to teachers in agriculture to be employed in the agricultural schools.

2. The establishment of schools of secondary grades, which give training to pupils for useful employment and to meet the needs of individuals over fourteen years of age who already have entered upon the work on the farm or the farm house.

3. Giving the Director of Education authority to determine the standard equipment to be used and to prescribe the course of study, the methods of instruction, the qualifications of teachers, supervisors, and directors, and the amount of property to be used by the vocational schools.

4. The training of teachers for the provincial trade schools be assumed by the Philippine School of Arts and Trades.

### 3. Recommendations

1. The so called general high schools, which claim 70 per cent of the secondary school population, should be entirely reorganized in their curricula. They should change from merely being college preparatory schools to institutions which are capable to solve the practical problems of the community.

The curriculum should include the following courses: academic, agriculture, trade, and home economics.

Graduation requirements should include two to four units of vocational courses. In order to make this very effective the University of the Philippines should also change its entrance requirements.

2. This proposed high school should be divided into separate departments in accordance with the courses offered. Each department has a head, and the principal should have control over them all. With such a big-sized high school as is found in the Philippines the principal should be relieved of classroom duties. His duties should be confined only to administration and supervision.

3. The provincial government should support only the academic department, while the insular government should support those which are vocational. This system is more feasible, economical, and advantageous than the present system of separate high schools. It affords to more students training which is capable to solve the problems and to provide the needs of the community. A more democratic system of education is expected if the insular government provides the support of the vocational departments and schools and if the provincial governments support only those of academic curricula.

## CHAPTER IV

### AGRICULTURAL EDUCATION

There are three types of agricultural schools which are maintained by the Bureau of Education: The agricultural school or what might be called the more advanced agricultural school; the rural high school in which some agricultural instruction is given; and the farm settlement school in which instruction in farm work is given to pupils of less general education.

#### 1. Agricultural Schools

DESCRIPTION. The agricultural schools are the largest and the most advanced among the different types of schools of agriculture in the Philippines.

The training given in them are essentially practical, one in which the student is made familiar with actual farm conditions by personally taking part in all activities which should be encountered in a well regulated homestead. The school environment is made to resemble as nearly as possible the student's future working environment, and the tasks which he undertakes are, on a small scale, identical with those which he will perform in occupational life. This practical training emphasizes both the instructional and productive phases and adequately prepares the student for the life of a farm owner or homesteader. The student farmers, in most cases, build their own houses, have their own garden and poultry projects, and face, on a small scale, the same experiences which they will later encounter on the farm.

The student body is controlled largely by a community form of

government, based on a democratic system. It selects its own president, councilors, police force, and other officials. The student pay taxes, have their bank accounts, take their produce to the school granary, and learn the rudiments of credit by actual experience. They also take part in the management of different school enterprises which develop their spirit of cooperation and civil usefulness.

While the courses in these schools are the same, adaptations are made where there are differences in climate and agricultural conditions in the regions served by each of them. They specialize in the production of rice, sugar, tobacco, coconuts, abaca, or other staple products, each giving a special emphasis on some definite staple product peculiar to its respective region.

GRAVE HANDICAPS. All of these schools are laboring under tremendous handicaps which are sufficient to discourage less earnest men and to destroy institutions founded on social needs less sound.

None of these schools are adequately equipped for their task. Many lack proper living conditions and an adequate budget with which to render efficient service to the students they enroll. Many of the provincial agricultural schools are denied almost annually modest and meager requests for needed funds. As a result many of these schools are unable to accommodate the youths who apply. In many cases they are forced to overcrowd quarters and overwork underpaid instructors.

One only and the best equipped of the agricultural schools is an insular school, called the Muñoz Agricultural School. This is supported by the insular school funds and the earnings of the school itself. The Bureau of Education and the Legislature are jointly responsible for it.

The provincial schools are supported by the respective provinces, supplemented by their own earnings and by such insular aids as may be appropriated from time to time by the Philippine Legislature. For these schools the respective provinces are directly responsible and the Legislature and the Bureau of Education only indirectly responsible.

COMMENDABLE FEATURES. Besides the commendable features already mentioned or implied above, this type of schools have the following that are worthy of mention:

1. The agricultural schools have provided the means through which thousands of poor boys have been able to get a practical education, and who otherwise could not have obtained this benefit.
2. Some of these schools show a net earning from the sale of products which, when fairly deducted as money turned back into the provincial treasury, makes the per capita cost of instruction much less than is commonly reported.
3. Because they are in virtually continuous session for 12 months per year and require, on the average, at least 8 hours per day of classroom and field work experience, the agricultural schools give 2-1/2 times as much instruction as the general high school. In other words, the graduate of the former receives 2-1/2 as many student hours of training as the typical graduate of the latter.
4. Instead of being responsible for their students during about 1,000 hours of instruction annually as in the general high school, the agricultural high school is responsible for both instruction and custodial care during 24 hours of virtually 365 days annually, a total of 8,000

hours.

5. The agricultural high schools are responsible in an active way for the training, sheltering, feeding, and disciplining of resident students for a period of almost 8 times longer than the period of responsible contact by the general high school with its students.

NUMBER OF SCHOOLS, ENROLLMENT, LAND CULTIVATED, AND VALUE OF PRODUCTS.

The development of the agricultural schools have been rather slow if compared with the development of other schools.

The following table shows the extent of the activities and the development of these schools:

Year	: : Number of : schools :	: : Enroll- : ment :	: : Hectares <sup>oo</sup> : cultivated :	: : Value of : products :
1925	: 14	: 2,900	: 1,158	: \$104,851.88
1926	: 14	: 3,143	: 1,104	: 126,605.69
1927	: 14	: 3,396	: 1,262	: 124,724.42
1928	: 14	: 3,212	: 1,440	: 100,019.50
1929	: 15	: 3,989	: 1,334	: 98,154.66
1930	: 15	: 4,204	: 1,742	: 113,012.78
1931	: 14	: 3,676	: 1,688	: 80,672.67
1932	: 14	: 4,126	: 1,730	: 85,132.50
1933	: 14	: 4,200	: 1,745	: 82,691.20

During the nine years covered in this study the number of this type of schools has remained almost stable, except for the two school years 1929 and 1930 when there were in operation 15 agricultural schools.

Inspite of the almost constant number of the schools the enrollment within the same period has increased at a very slow rate. It has increased from 2,900 in 1925 to 4,200 this present school year. The constancy of the number of schools and the very slow rate of increase in enrollment is explained by the lack of funds which is provided by the provinces. At the present time the controlling administrator of these schools are the provincial treasurers, who are not at all school officials. They have direct control of the finances, and with this situation they can direct what the schools can do and should not do. It has been the case that they hold the finances and retard the progress of the provincial agricultural schools.

The area of land cultivated by the students enrolled in the agricultural schools has likewise increased slowly, the cause of which is explained by the same cause mentioned above. In 1926 there were 1,104 hectares\*\*cultivated as compared to the 1,745 which are cultivated at the present time.

The value of the products raised each year by the students shows a fluctuation in the amount, and the tendency is for it to become less and less every year. The reason for this is that most of the produce is sold only in one market, because of the lack of transportation.

RECOMMENDATIONS. The following recommendations are worthwhile to consider in order to improve the work of the agricultural schools:

1. Farm mechanics should be part of the curriculum of these schools. At the present time the implements in most of them are very crude, and if the Philippines expects a great agricultural future each

\*\*A hectare equals 2.47 acres

boy should know something about the modern farm implements, and have the ability to handle them. Modern farm implements in each school will also increase the production, and there is a chance to make it self-supporting.

2. Decent living quarters should be provided in each of these schools. With such, the health of the children are protected; their self-respect is increased; and a reasonable standard for their living after leaving the school is set for them.

3. Better salaries for teachers should be provided. At the present time the prevailing wages in these schools furnish little lure for a first-class man. Most of the teachers that are employed now are incompetent because they lack experience, a technical knowledge of farm processes, enough general education to be able to impart what they know to others, and the knack of teaching.

4. Better trained teachers should be demanded when there are enough men trained for the purpose. Applicants for teaching in the agricultural schools must have had actual preparation for farming, practical experience in farming, and special training as teachers.

5. More and better supervision of teachers should be made. At present the Vocational Education department has only two men; not enough to do the whole supervision throughout the Philippines. The personnel of this department should be increased in order to facilitate better supervision. This will decrease the duties of the overworked principals as is now the case.

6. A definite itemized budget or allowance of funds from year to year on which the principal can definitely rely as an assured maximum which he is authorized to spend should be provided by law.

7. The administrators of these schools should be school officials, and not provincial treasurers as is the present practice which has retarded the improvement of the schools. If the provincial treasurers are unfriendly they will find every reason to withhold the money. They decide what the school can do and cannot do. In this way they shape the policy of the school; determine the kind of activities the school pursues, and how far it shall pursue them. They also indirectly control the methods which the school uses. Until the agricultural schools are freed from this domination no progress or improvement will be expected of them.

8. An advisory or committee for the agricultural school should be appointed by each province for its respective school. The members of the board should be men with a sympathetic interest in the work which the agricultural school is willing to do. This committee would become acquainted with the school, its work, and its needs.

The chairman of this committee should be the superintendent of the schools of the province, and the principal of the school should be the secretary. They should have no vote. The committee should have only recommendatory power. They would see the need for a definite itemized budget, and recommend this policy to the provincial board. This will prevent the interference of the provincial treasurer or of other officials.

## 2. Rural High Schools

DESCRIPTION. The second type of agricultural schools are called the rural high schools. These high schools are either under the management of the municipalities or the provinces. In them are offered the special

course for boys, and the general intermediate course for girls. Most of these schools are intermediate, but some of them offer secondary courses. Dormitory accommodations and board are not provided as in the agricultural schools.

COMMENDABLE FEATURES. The rural high schools are doing plenty of services which are of benefit to the Philippines. Among these are:

1. In most towns where they are located they are the only source of supply of fresh vegetables and other food products for the people.
2. With the cost of production and the services of the pupils in repair work in the schools the expenses encountered by the government concerned are less than what they are supposed to be.
3. In spite of the meager knowledge in agriculture found in these schools the local farmers have profited from it for it is better farming knowledge than their own primitive ways.
4. Where there is lack of accommodations in other schools for excess pupils the rural high schools have found place and instruction for them.
5. Many vacant lots that have remained idle for years have been put into use by pupils who have home projects, such as home gardens, poultry projects, and swine projects.

NUMBER OF SCHOOLS, ENROLLMENT, LAND CULTIVATED, AND VALUE OF PRODUCTS.

The activities and the development of the rural high schools are shown in the following table:

(Table on next page)

Year	Number of schools	Enroll- ment	Hectares cultivated	Value of products
1925	14	2,505	204	\$31,157.06
1926	13	3,274	211	38,075.53
1927	15	3,715	250	38,425.59
1928	16	3,157	284	23,223.93
1929	18	3,818	360	36,671.51
1930	16	3,278	402	27,019.81
1931	15	3,164	405	28,275.71
1932	15	3,152	412	26,211.06
1933	16	3,184	408	25,762.00

Within the number of years covered in this study there has been an irregularity in the number of schools. In 1926 there were only 13 of this type of schools in operation, and in 1929 there were 18. The number has decreased to 15 during 1930 and 1931. This year there are 16 rural high schools. The enrollment has also been irregular. The highest recorded was 3,818 which was in 1929. The lowest was in 1925 when there were only 2,505 pupils enrolled in these schools. At the present time the enrollment is 3,184. The irregularity in the number of schools and enrollment is due to the lack of a fixed budget for these schools. There is hardly one of the rural high schools which fixes its budget before or at the beginning of the school year.

Inspite of the irregularity of the schools and enrollment, there

there has been a slow but continuous increase in the area of land cultivated. It has increased from 204 hectares in 1925 to 408 hectares at the present time.

Although the area of land cultivated increased from time to time in these nine years of study, the value of production did not show the same trend. Instead, it continued to fluctuate. From 1925 to 1927 it has increased from \$31,157.06 to \$38,425.59, and from then on it had fluctuated. This year the estimated value of the products is \$25,762.00. The fluctuation in the prices of commodities in the Philippines accounts for this.

### 3. Settlement Farm Schools

DESCRIPTION. The third type of agricultural schools is called settlement farm schools. These schools are located in isolated communities, especially among the non-Christian settlements. They are more vocational than the elementary schools in the Christian provinces. It is the purpose of these schools to encourage settlement of the unsettled territories by the Christian Filipinos. With this the government has in mind the Christianizing of these places so that it has better control of them.

COMMENDABLE FEATURES. The settlement farm schools are taking a very important place in the economic development of the Philippines, and are accomplishing much in the education of children in sparsely settled communities. It is not only the Christian children who are getting benefit from these schools, but the children of the non-Christian tribes such as the Igorotes and the Moros (these are semi-civilized people). The schools in the southern provinces, where the Moros live, have done more in attracting immigrants to these places than any other agency.

Some of them have school plantations where they specialize in the production of manila hemp, rubber, pineapple, and some other crops.

Besides their economic value to the Islands they are also invaluable politically. They are helping bind the whole Filipino people into a closer union. They are the primary agencies in letting the Mohammedan Filipinos realize that the Christians are not enemies but brothers and friends. It is only through them that they can learn western culture and come abreast with the rest of the civilized and westernized Filipinos. Many Moros have given up their barbaric customs and are rapidly coming into the light of civilization.

NUMBER, ENROLLMENT, LAND CULTIVATED, AND VALUE OF PRODUCTS. The following table shows the development and extent of activities of the settlement farm schools.

Year	: : Number of : schools :	: : Enroll- : ment :	: : Hectares : cultivated :	: : Value of : products :
1925	: 290	: 18,374	: 1,381	: \$58,164.55
1926	: 274	: 14,783	: 901	: 56,565.33
1927	: 274	: 19,666	: 1,078	: 57,555.16
1928	: 277	: 20,764	: 1,195	: 54,345.34
1929	: 375	: 21,501	: 1,216	: 55,211.54
1930	: 295	: 26,697	: 1,241	: 54,563.79
1931	: 282	: 21,762	: 1,409	: 66,004.19
1932	: 280	: 20,509	: 1,500	: 62,354.16
1933	: 285	: 21,600	: 1,560	: 54,351.16
	:	:	:	:

The settlement farm schools are far more numerous than any of the other types of agricultural schools at any time during the nine years covered in this study. Like the others they have been irregular in number and enrollment from year to year instead of making a continuous increase. There were 290 settlement farm schools in 1925 with an enrollment of 18,374. In 1929 the number of these schools was 375 with an enrollment of 21,501, while this year there are only 285 schools with an enrollment of 21,600. Unsettled conditions in the non-Christian regions consisting of massacres of the Christians by the Mohammedans and Igorotes explains the irregular situation and retardation of the improvement of these schools. This and the fluctuating prices of the value of products from year to year cause the same irregular condition in the value of production. However, the number of hectares cultivated has a continuous increase from 901 during the school year 1924-25 to 1,560 hectares at the present time.

RECOMMENDATIONS. All the types of agricultural schools are almost similar in the problems that they are confronted with. In addition to the recommendations suggested under agricultural schools in this chapter, the following suggestions are worthwhile to insure stability and continuous progress of the settlement farm schools.

1. The government should provide military or a strong police protection of these schools from the hostile tribes who live in the regions where the schools are situated, for several times since the establishment of this type of schools in those unsettled regions bloody massacres have been staged by the hostile tribes, especially the Moros and the Igorotes.

Many schools have been attacked and scores of children have been butchered by the hostile attackers. The schools have been abandoned again and again because of this. Unless protection is given to these schools the attempt to further the economic development of these regions wherein these schools are located will be a failure.

2. The government should also extend moral support. The total lack of this kind of support from the government has discouraged many enterprising individuals who had the means and initiative to help improve those schools. The Insular government should lend all its efforts to provide this. The leaders in the government should cease to play politics in the execution of their duties which are delegated to them by the people. Constructive measures that have been introduced for the purpose of improving these schools have been killed in the legislature by petty politicians.

#### 4. Agricultural Clubs

Connected with the different agricultural schools the students, particularly in the rural and settlement farm schools, have formed organizations called agricultural clubs. The members are classified as to the kinds of products they raise or the kind of work they do. There are the garden members, hog members, poultry members, fruit members, corn members, and cooking members. The members are those who have home projects, and the children's ages are from 10 to 13. These clubs are like the 4-H Clubs, but are not nationally organized.

The following table shows the total membership and the value of production each year from 1925 to the present time:

Year	:	Members	:	Value of Production
1925	:	30,578	:	\$216,086.50
1926	:	34,981	:	187,004.50
1927	:	41,102	:	209,564.64
1928	:	36,941	:	185,200.21
1929	:	30,268	:	140,783.54
1930	:	29,708	:	141,322.01
1931	:	29,728	:	144,992.80
1932	:	29,800	:	145,200.20
1933	:	30,424	:	135,316.00

RECOMMENDATIONS. The following suggestions are very important to further the improvement of the clubs:

1. Service and extension home project work must be provided the club members by the gardening teacher employed by the school. At the present time little suggestion is given to the students as to how to improve their work. They are left alone to find for themselves the best practices to make their projects better. The gardening teachers visit the projects as inspectors without giving any suggestions. When he visits he should be useful to the pupils who have club projects.

2. The garden teachers should be able to do all the following:

a. Select, plant, and care for flowers, so that he knows how to teach others.

b. Select, plant, and care for vegetables, corn, and other

garden crops, so that he knows how to teach others.

- c. Select, breed, and take care of poultry and hogs, so that he can teach the pupils.

Garden teachers for the grades should be trained in the normal schools where the grade teachers are usually recruited. The normal schools should add to their curricula a simple course in gardening, or the training of garden teachers should be assumed by the agricultural schools.

#### 5. A Proposed Course of Study in Agriculture for the General High Schools

It is implied or shown in another section of this study that one of the greatest needs in the school system of the Philippines is to introduce vocational courses in the general high schools. Since this type of high schools claims 70 per cent of the secondary school population, and since the high tuition in them is not enough to discourage this high percentage in enrollment, it is the wisest plan to reorganize the curricula of these schools and introduce in them vocational courses. A liberal and practical education should be given to these students, so that they shall be more of an asset to the community to solve its problems than liabilities as is the case at the present time. The first vocational course to be introduced is agriculture.

OBJECTIVES OF AGRICULTURE IN THE GENERAL HIGH SCHOOLS. The following are suggested as the objectives of agriculture:

1. To acquire skill in the use of efficient tools, equipment, and methods in a variety of farm activities.

2. To understand and use the best knowledge and best experience of successful people in a variety of farm activities.

3. To learn where to get facts and ideas which will help solve farm problems and difficulties.

4. To acquire habits of straight thinking with usable facts and ideas about farm problems and difficulties.

5. To acquire habits of living that will safeguard health and promote and preserve physical fitness.

6. To acquire right social habits and attitudes toward all such things as: Work, workmanship, efficiency, self-support, rearing a family, honest dealing with other men, thrift, savings, safeguarding old age, obeying the law, doing one's bit for the country, and all other habits and attitudes that go to make up a good citizen.

7. To understand the economic problems of the farmer which would cover all such things as: Getting a job or acquiring a piece of land; holding a job or making the land pay; getting along with other members of the community; preserving the fertility of the soil; learning what to plant and how to market the product; reducing cost of production by using better seed plants, better implements, better methods, better planning and better management; getting and protecting good implements, getting and using the best seed plants, planning work, improving the home, investing savings in more land, and getting ahead as a farmer.

8. To learn how to use the contributions to scientific agriculture made by the work of the various Bureaus in the Department of Agriculture and Natural Resources, the College of Agriculture, and the School of

Forestry.

9. To get the students get places after they have finished the schools, either in employment or on the public land.

GENERAL COURSE OUTLINE.

1. First Unit - Animal Production

a. Types and breeds of livestock. Stock judging.

b. Feeding, care, and management of livestock.

(1) Beef cattle.

(2) Carabao (Water buffalo).

(3) Swine.

(4) Sheep and goats.

(5) Poultry.

(6) Horses and mules.

c. Suggested projects.

(1) Scoring and judging the various kinds of livestock and project work at home.

(2) Individual, team, and inter-scholastic judging contests.

(3) Demonstrations and contests at fairs and sales.

(4) Studying various feeds.

(5) Compounding and mixing rations.

(6) Determining the age and recognizing the defects of horses and other animals.

(7) Recognizing the symptoms of the more common diseases of animals.

- (8) Drenching and other methods of administering medicine.
  - (9) Casting horses, cattle, and carabaos.
  - (10) Milking cattle in a sanitary way.
  - (11) Operating an incubator.
  - (12) Handling chicks with a hen or in a brooder.
  - (13) Culling a flock of hens.
- d. A contract method which constitutes the following steps is a good incentive to interest the students:
- (1) A number of animals owned by the school should be distributed to students at the beginning of each school year.
  - (2) A value is assigned to the animal to be distributed.
  - (3) The teacher of agriculture selects the student to be benefited by the distribution.
  - (4) A contract is entered upon by the teacher of agriculture, the student, and the parents or guardians.

"The student agrees to care properly for the animal, following instructions given by the teachers and to return to the school, when the animal reproduces, a young one of the same value of the one given him. In case of male animals the student will sell it when well developed, returning to the school the original value for which the contract was made."

2. Second Unit - Soils and Soil Problems.

- a. Conditions necessary for plant growth.
- b. Origin and classification of soils.
- c. Soil formation and transportation.
- d. Texture and structure of soils.
- e. Organic matter of soil.
- f. Forms and movements of soil water.
- g. Plant food materials of the soil.
- h. Soil air and soil temperature.
- i. Germ life of the soil.
- j. Manures and fertilizers.
- k. Acid and alkali soils.
- l. Drainage.
- m. Irrigation of crops and soils.
- n. Rotation of crops.

3. Third Unit - Dairying.

- a. Importance of dairy industry.
- b. Breeds of dairy cattle.
- c. Milk and its products.
- d. Selection and improvement of dairy cattle.
- e. Management of dairy cattle.
- f. Feeding dairy cattle.
- g. The dairy barn and equipment.
- h. Common ailments of cattle.
- i. Conditions effecting the development of dairying.
- j. System on the dairy farm.

k. Cost of production and method of marketing.

l. Summary of important factors in profitable dairying.

4. Fourth Unit - Crop Production.

a. Studies of field crops.

(1) Rice.

(2) Corn.

(3) Sweet potatoes.

(4) Sugar cane.

(5) Tobacco.

b. Orchard studies.

(1) Oranges and other citrus fruits.

(2) Coconuts.

(3) Bananas.

c. Common farm grasses.

d. Weeds.

e. Review of soils which was taken in the second unit.

f. Structure and work of plants.

g. Plant propagation.

(1) Seeds.

(2) Root divisions, bulbs, tubers, suckers, etc.

(3) Cutting, layering, grafting, budding.

h. The farm vegetable and fruit garden.

i. Improving the home grounds

j. Planting and caring for the garden

k. Factors of success in crop production

Suggestions for laboratory work:

- (1) Field trips for observation of growing crops, method of preparing soil, seeding, cultivation, irrigation, harvesting, and for the study and collection of weeds.
- (2) Grain grading.
- (3) Identification of weeds and weed seeds.
- (4) Simple exercise with soils.
- (5) Seed testing, pruning, spraying, grafting.
- (6) Planting garden, setting out trees and shrubs.
- (7) Practice in seed treatment, adjustment, and operation of seeding and other machinery, and other operations connected with crop production.

5. Fifth Unit - Farm Implements.

- a. Farm machinery.
  - (1) Gas engines.
  - (2) Farm tractors.
  - (3) Automobiles and trucks.
- b. Rope work.
- c. The wooden and iron plow.
- d. Harness making, care, and repair.
- e. The Harrow.
- f. Modern farm machinery.
  - (1) Gas engines.
  - (2) Farm tractors.
  - (3) Automobiles and trucks.
- g. Irrigation and drainage.
  - (1) Methods of irrigation; flooding, border, ditching.

- (2) Land preparation; leveling and leveling tools.
- (3) Laying out, constructing, and care of farm ditches.
- (4) Drainage.

Suggestions for laboratory work.

- (1) Visits to farm and implement houses to study the machineries or tools.
- (2) The setting up of new implements.
- (3) Comparing different kinds of implements, old and modern.
- (4) Making and splicing rope, tying knots.
- (5) Making harness.
- (6) Practice with the farm level in running boundary lines and locating ditches and drainage system.
- (7) Building farm houses.

6. Sixth Unit - Farm Management.

a. Farming as a business.

- (1) Training for a farmer.
- (2) Farming as an investment.
- (3) Choice of region in farming; choice of farm.
- (4) Starting the farm business.

b. Types of farming.

- (1) Diversified and specialized farming.
- (2) Intensive and extensive farming.
- (3) Conservative and exploitive farming.

c. Factors effecting type of farming.

- d. Farm and farmstead layout.
- e. Crop production problems.
- f. Livestock production problems.
- g. Farm records and accounts.
- h. Farm efficiency.
  - (1) Man, animal, and machine labor efficiency.
  - (2) Capital efficiency.
  - (3) Efficiency in management.
  - (4) Balance of factors at work on the farm.
- i. Marketing farm products.
- j. Business practice on the farm.
  - (1) Contract, abstract, mortgage, etc.
- k. Farm organization and cooperation.
- l. Choosing and buying a farm.
  - (1) Characteristics of a good farm.
  - (2) Choice of community; future prospects.
  - (3) Educational and recreational advantages offered.

Suggestions for laboratory work.

- (1) Determining cost of production of each of the various crops, kinds of livestock, and livestock products.
- (2) Calculation of labor income from condensed records of farm business for the year.
- (3) Keeping a complete and detailed record or account book on one year's business on actual farm, from data supplied.

(93)

- (4) Determining carabao, man, and machine efficiency as concerned in the production of certain acreage of crop or on a certain farm.
- (5) Drawing up legal papers of various kinds with which the farmer is concerned.
- (6) Detailed study of the farm bureau organization, the Philippine department of agriculture and natural resources, and the College of Agriculture.
- (7) Scoring, judging, and criticisms of the farms and farm business of the community.

## CHAPTER V

### TRADE AND INDUSTRIAL EDUCATION

Trade and industrial education are both given in the elementary and secondary schools. The Bureau of Education classifies the trade schools into three classes: Provincial trade schools, provincial shops, and municipal trade schools.

#### 1. Provincial Trade Schools

DESCRIPTION. The provincial trade schools are secondary institutions which are very different from the general high schools. They have a different organization, curricula, and administration. These schools are usually located in the provincial capital where the general high schools are located, but have different property from these. Some of these schools are four year institutions, but the majority of them are two years in duration. In addition to the academic subjects which are necessary for graduation, a great part of the time is devoted to practical shop work, such as woodworking and building construction. After a student completes the course of study prescribed for his school, he is given a diploma which entitles him to enter the Philippine School of Arts and Trades which is located in Manila. He is also entitled to enter the College of Liberal Arts of the University of the Philippines.

GRAVE HANDICAPS. In addition to the financial handicap which is encountered by all vocational schools, the provincial trade schools have the following handicaps:

1. Most of these schools have their shop work consist only of

furniture making. The students after graduating from these schools know nothing more than woodworking. They do not know about such work as blacksmithing and other trades which should be learned in this kind of schools.

2. Because of the overproduction of furniture by these schools and other professional firms there is very little market for furniture products. This condition has resulted often times in the very low value of furniture, the value is sometimes lower than the cost of production.

3. The implements found in these schools, except the Philippine School of Arts and Trades, are crude hand tools. No modern trade machinery is ever introduced in them, thus the pupils are ignorant of such.

4. There are not enough buildings to accommodate the students enrolled. Some of the buildings are unfit to be used for classrooms. They are not well ventilated.

5. A great part of the teaching staff have had little training in the trade and practically none in the teaching profession.

COMMENDABLE FEATURES. The following are commendable features of the provincial trade schools:

1. In provinces where there are no manufacturing of furniture the provincial trade schools have supplemented the need of the community. This is also true of the municipal shops as to the towns served by them.

2. The furnitures used in most schools in the provinces are manufactured by the trade school students.

3. Only through these schools have many homes been beautified by the sons of the family who learn the trade of furniture making.

4. These schools have found room and provided instruction to those

who have no place in other secondary institutions of the provinces.

ENROLLMENT AND THE VALUE OF PRODUCTION. The enrollment and the value of production in the provincial trade schools from 1925 up to the present time is shown in the following table:

Year	:	Enrollment	:	Value of Production
1925	:	3,312	:	\$134,407.04
1926	:	3,788	:	110,989.75
1927	:	4,077	:	86,821.84
1928	:	4,135	:	96,387.16
1929	:	5,102	:	118,076.18
1930	:	5,987	:	152,845.36
1931	:	6,618	:	126,317.94
1932	:	7,212	:	127,350.11
1933	:	8,200	:	100,304.00

Unlike the general high schools which have a tendency to decrease in enrollment, the trade school like other vocational schools shows an increase of enrollment from year to year. Within the nine years included in this study the enrollment has increased from 3,312 in 1925 to 8,200 during this school year. This shows the increasing interest of the students towards the vocational schools inspite of the handicap heretofore mentioned. However the value of production during the same period has not shown the same tendency as that of the enrollment, but it rather tends to fluctuate from time to time. In 1930 the value of the products

manufactured by the provincial trade pupils was \$152,845.36. This is the highest within the period studied. The lowest was in 1927 when the value of the goods made was only \$86,821.84. This year the estimated value of the goods is \$100,304.00.

RECOMMENDATIONS. In order to improve the work of the provincial trade schools the suggestions mentioned below are worthwhile to take into consideration:

1. The shop work should not only confine itself to woodworking, but should include such courses as the following: concrete and cement work, plumbing and painting, machine shop, sheet metal work, blacksmithing, auto repair work, simple and practical electricity; gas engine, diesel engine and electrical motor-installation, care, repair, adjustment and operation. In large cities where there are newspapers and publishing firms printing should be a part of the curriculum of the trade schools.

2. The four year course plan should be abandoned, and a new course should be planned on the basis of a maximum length of training which should not exceed two years. A certificate should be issued to those who complete satisfactorily this two-year course and a diploma to holders of this certificate who later present satisfactory evidence of successful employment in the "trade" for two years following graduation.

3. Abandon or greatly modify the plan of providing paid work for student self-support. It cannot be done except by operating a furniture working shop.

4. The trade schools should cease to be college preparatory institutions, but a finishing school. If the students want to go to a univer-

sity, they should enter the third year of a reorganized general high school.

5. The three fundamental lines in which greater mechanical skill and intelligence are needed by the community are wood, metal, and power. Abandon the idea that training in woodworking provided by work in a school furniture shop gives the kind of mechanical skill and intelligence in the use of wood which the community needs. Beyond elementary experiences in handling woodworking tools, there is but very little carry over from furniture making to building construction, the making of concrete forms or the like.

6. The shops should be equipped with up-to-date shop implements and machineries, so that the students can acquire the knowledge and skill in manipulating them. This will prove useful in their occupational life.

7. The individuals who are employed as instructors in the trade schools should have commercial experience in their respective lines.

8. A one-year course in the use of tools and processes in woodworking should be provided, but the emphasis should be on carpentry and not furniture making. One-year course in metal working tools and processes as those employed in sheet metal working and modern blacksmithing should also be provided. Each year work should be a distinct unit so that if the youth should not return a second year he will carry out with him some marketable asset in one line at least.

9. Subjects to be taught in the classroom should only be those which will help youth meet the problems of living and of wage earning. Provide instruction in these subjects according to such plans as this:

- a. Shop instruction - 3 hours daily.
- b. Trade knowledge - one period daily for two years.
- c. English - one period daily for two years.
- d. Spanish - one period daily for two years.
- e. Health and hygiene - three periods a week for two years.
- f. General science (natural) - two periods a week for two years.
- g. Social science (civics and working boys problems) - two periods a week for two years.
- h. Supervised reading and study - three periods a week for two years.

10. According to methods used, there should be less lecturing, talking, preaching, book drill on important facts and memoriter recitations. These are faults common to all schools, but they have no place in trade schools. In their place there should be substituted conference; free class discussion; emphasis on usable facts and ideas; constant application of these facts and ideas to trade jobs and problems; thinking instead of memorizing; participating experience by the learner instead of listening; fewer facts and ideas but vital ones well taught; doing instead of too much talking; testing progress by the ability to do and to use what has been taught and not by written examination; training in habits of thinking and doing and not of absorbing and repeating.

11. The teaching method should be aided by devices and materials such as the following: Models, charts, diagrams, cut away parts, lantern slides, blue prints, duplicate drawings, plans, specifications, manu-

facturers catalogues, circulars, pamphlets, simple trade books and processes and trade journals. Without such teaching materials no instructor can make related trade information intelligible and usable by a student in any mechanical line.

## 2. Provincial Shops

The provincial shops are the second type of trade schools in the Philippines. They are a part of the trade schools, but are composed of grades five, six, and seven. These schools are supported by the provincial government.

No attempt is made in this report to go into details about the provincial shops, because in the opinion of the writer these schools should be entirely abolished. The nature of their work is very similar to that of the municipal shops described in the next section of this chapter. They are a matter of burden to the provincial governments which are supposed to deal only with secondary institutions, not of elementary schools. Therefore, the provincial government should be relieved of the expenses incurred by these schools, and the municipalities concerned should take care of them.

## 3. Municipal Trade Schools

DESCRIPTION. The third type of trade schools is called the municipal trade schools, or what is usually known as intermediate trades or municipal shops. The different municipalities maintain and support these schools, but they are under the supervision of the Division Superintendents. Most of these schools are furniture manufacturers only. No courses in sheet metal work and other home-mechanic arts are taught.

These schools have shown commendable features very similar to those mentioned under provincial trade schools. Their handicaps are also the same.

ENROLLMENT AND VALUE OF PRODUCTION. The enrollment and the value of the products made by the pupils each year from 1925 up to this present school year is shown in the following table:

Year	:	Enrollment	:	Value of Production
	:		:	
1925	:	13,287	:	\$61,983.05
1926	:	15,231	:	55,688.55
: 1927	:	15,490	:	52,933.41
1928	:	18,907	:	53,339.01
1929	:	24,232	:	68,264.82
1930	:	24,834	:	88,814.49
1931	:	31,737	:	88,368.53
1932	:	33,500	:	86,342.23
1933	:	33,822	:	84,926.00

Despite the lack of adequate financial support, the inadequate courses, and the lack of buildings to serve as shops the enrollment has continuously increased from 1925 to the present time. The enrollment in 1925 was 13,287 compared to the 33,822 students enrolled at the present school year. The reason for this continuous increase is that trade education is compulsory in the intermediate grades for all boys regardless of age.

The value of production of these schools has been very irregular. The highest one in record during the nine years included in this study was in 1930 when the products manufactured were worth \$88,814.49. The lowest was in 1927 which was only \$52,933.41. The estimated value of the products this year is \$84,926.00, less than that of last year by \$1,416.23.

RECOMMENDATIONS. The suggestions mentioned below will make the so-called intermediate trade schools more serviceable to the community:

1. That the shop work consist of a home mechanic's course in wood and metal, in which the pupils make and repair various articles used in the homes. The activities should enable them to make repairs at home, to make improvements at home and in home conditions with simple mechanical work.

Below is a list of suggested projects for the students in home-mechanics arts:

1. Repairing a simple lock.
2. Repairing a faucet.
3. Building a shelter for chickens.
4. Repairing toys.
5. Making shelves.
6. Making a new bottom for a rattan chair.
7. Making a simple screen for windows.
8. Making a simple form for concrete work.
9. Repairing a broken furniture.
10. Repairing steps.

11. Replacing broken handles on garden and home tools.
12. Mending kitchen utensils.
13. Soldering a kitchen utensil.
14. Putting on drawer knobs and other fixtures.
15. Setting a screen hook and eye.
16. Replacing broken lock springs.
17. Setting hinges.
18. Setting a drawer or door lock.
19. Repairing a shell window.
20. Repairing a hole in the floor.
21. Cutting glass.
22. Cleaning a drain pipe.
23. Reading the gas or water or electric meters.
24. Shutting off the water supply for the house.
25. Cutting and threading pipe.
26. Wiring electrical implements.
27. Replacing a blown fuse.
28. Installing an electric bell.
29. Cleaning and adjusting a kerosene lamp.
30. Making concrete.
31. Mending concrete flower pots, boxes, etc.
32. Drilling holes in brick and concrete walls.
33. Coloring mortar and concrete.
34. Sharpening tools of different edges.
35. Adjusting a lawn mower.

36. Removing rust from tools and cutlery.
37. Tying the more common knots.
38. Preventing a rope from raveling.
39. Rehandling utensils, tools, and cutlery.
40. Repairing tire tubes.
41. Installing a new inner-tube in a bicycle or automobile tire.
42. Painting tire rims.
43. Using rivets in sheet metal work.
44. Applying common house paint.
45. Putting galvanized iron on a roof.
46. Making structures, coverings, and screens out of native materials.
47. Making cheap paint.
48. Making a better stove and properly constructed chimney and connect the two.
49. Making a crude shower.
50. Making a sanitary closet.
51. Making glue.
52. Making stains with available native products.
53. Making tools from native materials.
54. Making and setting concrete posts.
55. Setting corner posts and stretching wire fence.
56. Constructing an automobile watering device from kerosene and gasoline cans.

This scheme involves the substitution of the scheme of general shop in place of the present wood shop found virtually everywhere at the present time in the intermediate schools where any shop work is attempted.

2. The formal course in drawing, to which 80 minutes of 2 days each week are now given be entirely abolished. The time devoted to this must be added to shop work, and drawing be taught in connection with this shop work. This would allow 80 minutes per day to shop and drawing for 5 days per week. Exercise work in drawing should be limited to instruction in the manipulation of simple drawing tools and the recognition and drawing of the different lines.

3. The teachers of these schools should be graduates of the Philippine School of Arts and Trades and of the Provincial Trade Schools, but such graduates be given, in addition to such trade school experience, special training for their duties as instructors.

4. There should be more supervision of this type of work by men who are competent and trained for the job. The supervisor should have professional training in the trade and as a teacher.

#### 4. A Suggested Course of Study

in Trade Education for the General High School

#### OBJECTIVES.

1. To give a knowledge and an appreciation of the raw materials and the processes used in the production of life necessities.
2. To develop knowledge and skill which will be of value in maintaining a home and in helping him enjoy life.
3. To develop judgement, taste, and an appreciation of values, so

that he may select wisely when purchasing articles offered for sale.

4. To coordinate the mental and muscular powers.

5. To develop a knowledge of and sympathy with the problems of the various groups of individuals in industry who have to do particularly with the process of production.

6. To give a training that will have an economic value because it will save the individual time and money by making it unnecessary for him to call experts for small jobs.

7. To help socialize the child through group and team work.

GENERAL COURSE OUTLINE.

1. First Unit

a. Drawing - Elements of mechanical and shop work.

Suggested projects:

- (1) Blocking out lines.
- (2) Relation of views.
- (3) Sketching.
- (4) Dimensioning.
- (5) Shop drawings.

b. Woodwork - Simple joinery.

Suggested projects:

- (1) Toys in thin wood.
- (2) Broom holders.
- (3) Nail boxes.
- (4) Bill files.

c. Printing.

Suggested projects:

- (1) List of words missed in spelling.
- (2) Tickets.
- (3) Visiting cards.
- (4) Letter heads.
- (5) Return addresses on envelopes.
- (6) Exercises taken from work in English.

d. Fibre furniture weaving.

Suggested projects:

- (1) Camora root fans or bamboo fans.
- (2) Buntal hats.
- (3) Baskets.
- (4) Rattan chairs, etc.

2. Second Unit

a. Sheet metal work.

Suggested projects:

- (1) Pans.
- (2) Soldering buckets.
- (3) Patches on buckets.
- (4) Table tops.

b. Household mechanics.

Suggested projects:

- (1) Sharpening tools.
- (2) Make and repair windows.
- (3) Locks, hinges, and door construction.

(108)

(4) Paints, stains, varnish, fillers and shellac.

(5) Furniture repair and refinishing.

(6) Make and repair picture frames.

(7) Make and repair hat racks, etc.

c. Concrete construction.

Suggested projects:

(1) Fence posts.

(2) Steps.

(3) Garden seats.

(4) Culverts.

(5) Concrete walks.

(6) Flower boxes.

3. Third Unit

a. Blacksmithing.

Suggested projects:

(1) Iron crowbars.

(2) Bolo knife.

(3) Gate hooks and hinges.

(4) Charcoal iron.

(5) Axes.

(6) Wagon stake braces.

(7) Book ends.

b. Farm woodwork.

Suggested projects:

(1) Self feeders for hogs.

(109)

- (2) Trap nests.
- (3) Work benches.
- (4) Stools.

c. Auto mechanics.

Suggested projects:

- (1) Care and use of tools, safety precautions.
- (2) General knowledge of stock and care to be exercised to avoid damage to parts.
- (3) Cylinders and connections.
- (4) Valves and camshafts.
- (5) Pistons.
- (6) Fuel system.
- (7) Ignition system.
- (8) Electric equipment.
- (9) Clutch.
- (10) Transmission.
- (11) Universal joints.
- (12) Rear axle.
- (13) Brake system.
- (14) Wheels.
- (15) Steering gear and front axle.
- (16) Tires and rims.
- (17) Springs and shock absorbers.

4. Fourth Unit

a. Carpentry.

Suggested projects:

- (1) Granary houses.
- (2) Frame structures, kinds, uses, location, costs, estimates.
- (3) Framing, forms of construction, full frame, floor joists, rough floors, studding, openings, doors, windows, sheathing.
- (4) Porch construction.
- (5) Roof construction; methods of laying out rafters with carpenters' steel square, forms of roofs, plan of roofs, pitch, rafters, and sheathing.
- (6) Roof coverings; metal, brick, grass.
- (7) Outside finish: kinds; cornice, doors, windows, siding, belt courses, setting of doors and window frames.
- (8) Laying out stairs, head room, stair building.
- (9) Floor laying.
- (10) Inside finish. Study of woods, window and door casings, baseboards, closets and strips, stairs, hand rails, balusters.
- (11) Door frames, door hanging, fitting locks.
- (12) Painting outside, staining, finishing inside.

b. Cabinet making and wood turning.

Suggested projects:

- (1) Dressing tables.

(111)

- (2) Office desks.
- (3) Sewing cabinets.
- (4) Beds.
- (5) Chairs.

#### Teaching Aids

For lack of enough reference books it is suggested that:

1. Teacher should study carefully the school curricula and keep himself informed as to the progress of his pupils in various school subjects, so that whenever possible he may strengthen the academic work by making industrial applications.
2. First hand knowledge obtained by visiting various manufacturing or repairing plants will be of much benefit.
3. A good filing system should be worked out to contain clippings, photographs or pictures, catalogues, government bulletins, etc., bearing on all topics which may be of value in teaching.
4. Conferences should be held with the teachers of various subjects to secure cooperation.
5. Films, slides, etc., are valuable almost beyond belief and should have a part in the program.
6. Various manufacturers should supply valuable charts, booklets, and data of considerable usefulness. Consult magazines in industrial arts.
7. Experts in the field should come to demonstrate or lecture to the class concerned.

## CHAPTER VI

### HOME ECONOMICS EDUCATION

#### 1. Present Conditions of Home Economics Education

The third most important vocational education course that is found in the Philippine public school system is home economics education. It is found extensively in the grade schools, and practically neglected in the secondary institutions.

HOME ECONOMICS IN THE ELEMENTARY GRADES. The best work in home economics is done in the intermediate schools. The pupils practice the proper performance of home duties in a practice cottage on the school premises. at the same time they are given the simple reasons for the methods used in cooking, serving meals, sewing, sanitation, and the like. All the appointments of these cottages are kept simple and furnish the pupils a constant illustration of better home making.

The work is very commendable, taking into consideration the age of the pupils. It is only suggested that more home economics cottages should be built throughout the Philippine Islands, both for the elementary and high school students. This gives an opportunity to all girls to learn the science of modern home making.

HOME ECONOMICS IN THE SECONDARY SCHOOLS. Home economics in the secondary schools is not as extensive as that in the elementary grades. There are virtually no practice cottages or laboratories. There is too much assumption that the pupils come from homes where they have already gained experience in modern methods of housekeeping and are familiar with better standard and better equipment. There is very little real practice in

either cooking or sewing except in the one separate home economics high school mentioned in the latter part of the report. The prevailing theory is that girls can gain skill and understanding of household arts by reading a book on the subject, by reciting what the book says, and by passing an examination occasionally. There are of course exceptions to this statement, but they are not numerous.

In addition to the lack of proper equipment for teaching correct practice in home economics and to the consequent bookish character of the work it suffers also from the lack of practical experience in real home making on the part of many of the teachers. They know what the book says, but have never gained any skill in the performance of the household arts they are supposed to teach. The graduates of the Philippine Normal School have a much better situation than the graduates of the School of Home Economics at the University of the Philippines, but the graduates of both institutions lack skill and familiarity with the problems, processes, and conditions of real home making. As a result they are not competent to train girls in the correct habits, attitudes, and standards which they need and which their homes need.

There is too much theory and not enough practice in the preparation of these teachers. Courses of instruction are long on technical information but short on usable facts and ideas.

Up to the present time there is only one high school which is a purely home economics institution. Some other high schools, mostly the agricultural rural high schools, have included in their program home economics. Of all the secondary school population the enrollment in all the home economics courses has continuously increased from 4.92 per cent

to 8.15 of the present school year. The reason for this very slow growth is that the people have not entirely supported the idea of introducing such courses connected with home economics in the high schools. There is very little exception to this in the entire Philippines. They suppose that their daughters have had enough training in the line while they were in the elementary school. They further believe that the education of one is measured by what he academically knows.

## 2. Recommendations

1. Home economics cottages should be built in every place where home economics is taught. This will provide practical instruction to the students instead of lengthy information through lectures and recitation. It will give real practice in the correct ways of doing things connected with the home. This practice can never be afforded by any device other than a home of some kind.

In every case this practice building should not make either of two grave mistakes. One is that it should not be so fine as to be beyond the understanding or possibilities of its adolescent girl students. Another is that the building and its equipment should never descend to the lowest conditions as represented by the homes of many students. There should be training always for better things. "Somewhere between the most elegant home in the community and its poorest lies the golden mean in equipment, appliances, comfort, convenience, decoration, and appearance."

2. Courses in home economics should not be too foreign to the students. They should be composed largely of native practices which can be improved to their very best. The practices of other peoples should only

be introduced for comparison, and to acquire when they are more desirable than those of the native practices.

3. Every teacher in home economics subjects should be required to present evidence that she is able to do what she undertakes to teach others. At both normal school and the university, the centers of teacher training for home economics, there should be a practice cottage for the premises. Before graduating every prospective teacher should be required to demonstrate her ability to manage a home and perform its duties. The course of study in home economics subjects at the Philippine Normal School and the provincial schools should be widened to emphasize other subjects than sewing, cooking, and hygiene. In these institutions there should be more practice teaching required of the student and this practice teaching should be done not in a laboratory but in a practice cottage.

4. Every girl should be required to take at least two years work in home economics (2 credits).

### 3. A Proposed Course of Study

#### for Home Economics in the General High School

The aim here is to present a practical and progressive course of study, not necessarily accepted by every school in its entirety, but to be adapted to the needs of a particular school. In the opinion of the author there are at least four different lines in which every girl as a prospective wife and mother should receive instruction: (1) The preparation and serving of food; (2) The conserving of family health; (3) Clothing and Textiles; (4) Personal and home improvement.

GENERAL OBJECTIVES.

1. To give the girl a well rounded conception of the many studies contributing to worthy home membership.
2. To train the girl who must leave school to live her daily life more wisely and to find her place in the working world.
3. To coordinate the mental and physical powers.

SPECIFIC OBJECTIVES.

1. To teach the classification and functions of foods; the purchasing and preserving of foods; the principles underlying their preparation; the planning and serving of meals; the fundamentals of good housekeeping generally.
2. To give training in neatness, order and technique.
3. To develop initiative, together with a due measure of independence and cooperation.
4. To make the pupil familiar with the different textile fabrics, their sources and quality, so as to enable her to purchase and care for them intelligently.
5. To develop good taste in dress through an understanding of good line, tone, color, and general suitability of material and pattern to the person and for the purpose to which it is intended.
6. To develop technique and initiative so that the person may be more independent in solving the problems of dress.
7. To train the student how to conserve the personal and family health.
8. To train the student how to improve her person and the home.

GENERAL COURSE OUTLINE.

1. First Unit - Preparation and serving of foods.
  - a. Food value.
  - b. Selection of foods.
  - c. Purchasing and budgeting.
  - d. Menu planning.
  - e. Preparation.
  - f. Sanitary safeguards.
  - g. Variety of foods and their preparation.
  - h. Serving.
  - i. Kitchen sanitation and dining room attractiveness.
  - j. Food chemistry.
2. Second Unit - Conserving family health.
  - a. Sanitation.
  - b. Causes, symptoms, and remedies for the most common diseases.
  - c. Safeguards against contagion and infection.
  - d. Safety first protection and knowledge of first aid.
  - e. Exercise, recreation, and cleanliness as factors.
  - f. Prenatal care of infants.
  - g. Safeguards at birth.
  - h. Care, feeding, and clothing of infants.
  - i. Special safeguards and precautions.
  - j. Training of infants in elementary habits.
  - k. Practice in the use of reference material and suggestions

regarding what to read and how to get helpful books, pamphlets, and circulars of information.

3. Third Unit - Clothing and textiles.

- a. Kinds, properties, and uses of different textiles. This includes a study of weaves and dyes employed commercially or otherwise.
- b. Source, relative cost and comparative values.
- c. Special treatment required in handling, caring, cleaning, repairing, and making.
- d. Special uses for which different textiles are especially adapted.
- e. Color, harmony, adaptability of different textiles to different coloring values, and appropriateness of color to individual.
- f. Special uses of textiles for clothing and for household comfort, convenience, and decoration.
- g. Simple experiences in embroidery with emphasis laid on: appreciation of design, adaptation of embroidery to garments, household decoration, and color, making and studying of attractive and artistic designs for embroidery. Elementary training in the execution of embroidery design. Same thing with lace.
- h. Practice in the use of reference material and suggestions regarding what to read and how to get helpful books and pamphlets, circulars and information, and the like.

4. Fourth Unit - Personal and home improvement.

- a. Simple budgeting of expenditures.
- b. Economic purchasing.
- c. Better care of food, clothing and household equipment;  
better organization of home duties; better recognition of  
home responsibilities; better care of children as dis-  
tinguished from babies; better understanding of family  
relationship and obligations; personal hygiene and better  
regimen of life; personal adornment; attitudes, ideals,  
manners and conduct.
- d. Practice in the use of reference material and suggestions  
regarding what to read and how to get helpful books and  
pamphlets, circulars of information and the like.

## CHAPTER VII

### VOCATIONAL GUIDANCE AND PLACEMENT ACTIVITIES

One of the greatest needs in the Philippines is the extension of vocational guidance and placement activities in the secondary schools and in the institutions of higher learning, because of the rapid social and economic changes that the Philippines are undergoing. It is very imperative in a democracy like the Philippines and the United States that the young man and woman should be guided into the right vocation or profession which is adapted to their native capacity and which can give them a promise in life, either in money or social remuneration. The placement of the graduates is just as important as the guidance given them if the public wishes to realize the fruits of their investment in the public schools.

#### 1. Present Conditions and Practices in Guidance

Vocational guidance was introduced in the public schools of the Philippines during the school year 1928 after the establishment of the Division of Vocational Education by an act of the legislature. Under the rulings of the Director of Education it was made a part of the duties of the office of vocational education to conduct guidance in the schools in which it has responsibilities. The office has a personnel of three members, who are not enough to conduct guidance throughout the entire Philippines.

A list of books on educational guidance is included among the approved books for elementary and secondary schools. Recently the book, *Vocations* by Proctor, has been added to these books. At the present time

it is used as a textbook in the last semester of the second and third year of some of the trade schools. The book is not adopted for use in the Philippine schools. In addition to this shortcoming the guidance courses are trusted to the English teachers, who have practically no idea or training in the performance of guidance work. Under such conditions the course is practically useless to the pupils, because the teachers, largely, consider it as a course in literature.

In the Philippines many elementary or secondary school graduates leave the school with no other guidance toward future occupations than the insistence of parents, the examples of friends, the random or biased suggestions of teachers. They accept whatever is told them and are inclined to do whatever they are instructed to do in spite of their inability to meet the demands of the occupation or their lack of interest in it. These have given rise to the serious problems which are very alarming to the keen observer and student on vocational guidance. The professions are crowded, and the sources of income to the whole nation are practically neglected.

Workers in the Philippines learn by demonstration-imitation method. A trade is seldom taught by the boss, by reasons, by explanation, or by theory lying behind it. Under present conditions the learner is unable to get information from books, because the information is written in English of which he has very little knowledge, and as a consequence he finds it hard to apply what he has learned or read if he has had any. No vocational information has ever been written in his native tongue.

## 2. The Extent of Placement

The placement Department was established in 1928 when the office of the Division of Education was created. It was a one-man department at first, but through the influence of the Director of Education its personnel has been increased to three, adding to the chief of that department an assistant and a clerk-stenographer.

The department has endeavored to accomplish the following since it was established:

1. To establish cooperative relations with concerns employing a large number of persons in agriculture or in industrial occupations.
2. To learn from such concerns the number and kinds of workmen they require annually.
3. To inform such concerns regarding the kinds of employment for which the graduates of the various vocational schools are suited.
4. To arrange a definite and systematic plan for furnishing suitable graduates of vocational schools to such concerns.
5. To keep informed as to new enterprises requiring a considerable quota of workmen.
6. To establish the same kind of working arrangements with them for the placement of graduates.
7. To visit as many as possible of the vocational schools so as to keep informed regarding their work and their prospective graduates.
8. To adjust difficulties and misunderstandings of graduates after placement.
9. To follow up with employers to find out what kind of service

graduates are rendering, to adjust complaints, and to strengthen working relations.

10. To answer correspondence making inquiries about the vocational schools as a possible source of labor supply for different occupations.

11. To send out information to schools regarding special calls for workmen and special opportunities for graduates.

12. To study the want-ads in the daily paper as well as the written inquiries of employers in order to determine the demand for trained workers in those lines which the schools do not teach.

13. To compile and interpret the annual record of positions filled and positions not filled.

14. To assist agricultural graduates to obtain public land. This is one of the hardest tasks undertaken by the Placement Department because the government does not give a helping hand.

Since the creation of the department several students have been aided and placed in some kind of employment in accordance with their own training. Other students who applied for help from this office had been advised to do better in their jobs until they could find better employment. There have been placed 933 vocational school graduates within the six years the department has been in existence. Most of these placed were graduates of the agricultural schools, and very few from the other vocational schools.

### 3. Recommendations

1. There should be a counselor in each of the vocational schools and the reorganized general high schools mentioned earlier in this report.

The counselors should be Filipinos rather than imported Americans, because the Filipinos can understand more about their countrymen than do the Americans. If an American is to be employed as a guide he must have full knowledge of the country, its peoples, and their problems, before he attempts to do any guidance work.

2. There should be a placement department in each school where graduates may find employment in the line for which they have prepared themselves. The office at Manila is not accessible to most of the students.

3. The Y.M.C.A. and the Y.W.C.A., the Knights of Columbus, the Women's organizations, and the Rotary clubs should include in their program assistance to the schools in vocational and educational guidance.

4. Vocational guidance should be a part of the curriculum in all secondary schools. This will aid the students select the vocation in which they and the community can profit.

#### 4. A Proposed Course of Study

##### for Occupational Information in the Secondary Schools

GENERAL EXPLANATION. This course of study for vocational guidance which is to be used in the secondary schools of the Philippines is divided into two parts, the elementary and the advanced courses. Each of these is a years course, divided into semestral work. The work of each semester is different from the other. With this arrangement one could not take the higher course without taking the one below it. Work for a semester is valued one-half unit, and the two years work in vocational guidance is valued two units.

Under the elementary course in vocational guidance, the work for the first semester is a study of the problems and issues of industry and business. This is the same as the course in the Principles of Economics, is a required course for juniors in the high schools of the Philippines. This course, Principles of Economics, should cease to be a junior subject to become a required course for freshmen. It serves well as a prerequisite for the next unit in vocational guidance, which is a study of local industries without reference to books.

Under the course in advanced vocational guidance, the work for the first semester is a study of more occupations. Outside speakers are invited to speak and there should be constant use of printed matter available. The work for the second semester in the advanced course is a study of different colleges and universities, and technical institutions of the Philippines in regard to the kind of training and opportunities they can give to the high school graduates from all angles conceivable.

#### AIMS AND OBJECTIVES.

1. To bring about a wider range of vocational interest among the students.
2. To obtain specialized knowledge of two or three vocations in which the students are interested, and into which there are some chance they might enter successfully.
3. To obtain knowledge of entrance requirements, training offered, and costs at specific colleges, trade, continuation, correspondence schools, business colleges, and schools conducted by trade and industries.
4. To develop a workable knowledge of reliable ways and means in

investigating an occupation.

5. To give a knowledge of the importance and advantages growing out of education in general.

6. To make the students conscious of the life career motive.

7. To broaden the viewpoint, a sympathetic understanding, and an appreciation of the social and economic importance of all fields of honorable work, particularly those of the manual labor class.

8. To develop an appreciation of the significance of the vocation to the community.

9. To help adapt the schools to the needs of the pupils and the community, and to make sure that the child obtains the quality of opportunity which it is the duty of the public schools to provide.

10. To encourage the setablishment of courses of study in all institutions of learning that will harmoniously combine the cultural and practical studies.

GENERAL COURSE OUTLINE.

1. Elementary Occupational Information

1. First Unit - Principles of Economics.

a. Methods.

(1) Recitation.

(2) Reporting in class current events pertaining to economic problems of the Islands.

(3) Assigned reports.

b. Units.

(1) Economic motives and attitudes.

(2) Form of economic organization and industrial control.

(127)

- (3) The distribution of wealth.
- (4) Business methods.
- (5) Banking and finance.
- (6) Economic waste and abuses.
- (7) Relations of capital and labor.
- (8) Protection and improvement of the condition of labor.
- (9) Labor organizations.
- (10) Production of goods and development of resources.
- (11) Conservation.
- (12) Buying and selling.
- (13) Economic consumption.
- (14) Corporations and monopolies.
- (15) The roads and railroads.
- (16) Coal.
- (17) The farmer.

## 2. Second Unit - Survey of the Community.

### a. Methods of instruction.

- (1) Oral and written reports.
- (2) Trips and excursions to different industrial plants.
- (3) Films and slides.
- (4) Organized campaigns.
- (5) Occupational group conferences. The children should be organized in groups according to the occupation of their parents, and each group should make a report about their parents' vocation or profession.

b. Requirements.

- (1) A term paper about the occupation of the child's parents, or the vocation each pupil is interested in. The girls should write about their mothers' or any vocation for women in which they are interested. The boys should write about their fathers' occupation or any of the men's occupation of which they are interested.
- (2) A scrap book of occupations. This is not a mandatory requirement, but those who have done some work in this should be given credit.

c. An outline which will aid the student in elementary vocational guidance in analyzing a vocation or profession.

- (1) What importance to society is the occupation?
- (2) What things are actually done by a person who is in the calling? Make a list of them. Outline a typical day's work.
- (3) What are the main advantages of the occupation?
  - (a) Service to humanity.
  - (b) Chance to learn.
  - (c) Demand for worker.
  - (d) Steady work.
  - (e) Growing importance of the vocation.
  - (f) Interesting work.
  - (g) Promotion.

- (h) Friends and associates.
  - (i) Hours of work.
  - (j) Vacations.
  - (k) Good living.
  - (l) Healthful work.
  - (m) Moral conditions.
  - (n) Other points.
- (4) Disadvantages and problems (same as no. 3)
  - (5) What are the requirements for entering and succeeding in the occupation?
  - (6) What income may be expected, at first and later?
  - (7) What are the educational or other preparations desirable?
  - (8) What effect has the occupation on the social, civic, physical, recreational, and moral life of the workers.

## 2. Advanced Occupational Information

### 1. First Unit - Authoritative Study of Vocations and Professions.

#### a. Methods.

- (1) Recitation.
- (2) Oral and written reports.
- (3) Bringing in specialists to lecture.

#### b. Requirements.

- (1) A term paper or papers about a vocation or professions in which the pupil has interest. The student should gather his data from concentrated experience,

supplementing them or modifying them by interviewing people in his community who are engaged in the line.

(2) Assigned reports from pamphlets or magazines which deal with occupations or which advertise their work.

(3) Book summary of one of the books on occupation.

c. Suggested references.

Because of the lack of books which are intended for the public schools of the Philippines it is necessary that books in occupation used in the public schools of the United States be provided for use by the school until there are books published to suit the conditions of the country. When using these books the teacher should explain to the students that not all the items in the books are true to the conditions of the Philippines. Money remuneration may be entirely different, but such things as preparation and personal qualification for success in the vocation or profession may be the same all over the world.

The following list of books is suggestive, but any book that appears to be in conjunction with the conditions of the Islands should be added to the list. It is suggested that books 1,2,3,4, and 7 be purchased in sets sufficiently large that each class member can have the use of a book. A table should be reserved on which these books are put so that each student has access to them

without difficulty.

Books for Pupils

1. Annual report of the Governor-General of the Islands.  
Bureau of Printing. Manila.
2. Occupations. Gowin, Wheatley, Brewer. Ginn and Co.
3. Social Problems. Towne. Mac Millan Company.
4. What Shall I Be? Ernst.
5. Choosing Your Life Work. Rosengarten. McGraw-Hill  
Company.
6. Profitable Vocations for Boys. Weaver-Byler. Laid-  
law Brothers.
7. What Girls Can Do. Wagner.
8. Making a Living. Lyon.
9. Vocations. Proctor.
10. Aces for Industry. Rufus Steel. Houghton Mifflin  
Company.
11. Vocational Civics. Giles. Mac Millan Company.
12. The Boy and His Vocation. Sowers. Manual Arts  
Press.
13. Our World of Work. Holbrook and McGregor.
14. Planning Your Future. Myers, Little, Robinson.
15. My Life Work. Cooley, Rogers, Belman.
16. Jobs for Girls. Cades.
17. Planning a Career. Smith and Blough.
18. Vocations in Industries. May Rogers Lane.

Note: Books 2, 4, 5, 6, 7, 8, 15, 16, and 18 of the list describe different vocations in an interesting way. They are good sources for compositions, whether written or oral.

Books 3, 11, 12, 13, 14, and 17 are very good for a background in the study of Vocational Guidance and social problems as a unit.

Books 1, 9, and 10 are valuable for reference in classroom work.

#### Books for Teachers

1. Vocational and Moral Guidance. Davis. Ginn and Co.
2. Organization of Vocational Guidance. Payne.  
McGraw-Hill and Co.
3. Educational and Vocational Guidance. Proctor.
4. Vocational Guidance. Committee on Vocational Guidance and Child Labor. White House Conference on Child Health and Protection. Section III Education and Training. The Century Co.
5. Junior Wage Earners. Reed. Mac Millan Co.
6. Choosing a Vocation. Parsons. Houghton-Mifflin Co.
7. The Vocational Guidance Movement. Brewer. Mc Millan Co.
8. Vocational Guidance Bulletin. Pittsburg Public Schools.
9. Vocational Guidance Magazine. Harvard University Press.
10. Part II Twenty-third Year Book, "National Society

for the Study of Education" 1924. Public School Publishing Co..

11. Tests for Vocational Guidance of Children. Toops, Teachers College, Columbia University.

12. Case Studies in Educational and Vocational Guidance. Brewer and others. Ginn and Co.

d. Suggestive outline that will aid the student in advanced occupational information to analyze a vocation or profession.

- (1) What importance to society has the occupation?
- (2) What are the main branches of the occupation?
- (3) What kind of tasks are actually undertaken by a worker in the calling?
- (4) Is the work interesting and stimulating, and is it vital to the success of the main activity of which it is a part?
- (5) Does one learn new things as he progresses in the occupations? Is there opportunity and initiative or originality and pioneer work?
- (6) If the work is uninteresting, routine, or monotonous, are there adequate compensations?
- (7) Are other working conditions satisfactory?-good associates, opportunity for doing one's best work, a healthful and pleasant atmosphere, sanitary surrounding, etc.

(134)

- (8) How should one prepare for the occupation?
- (9) How does one begin work? What kind of work leads up to this calling, and to what callings may it itself lead?
- (10) What qualities of character does it require for success, and how may this be developed?
- (11) Is there a demand for new workers in this occupation?
- (12) Is a good living secured, with regular work in an important and necessary occupation, and opportunity for promotion, and increased wage?
- (13) What are the economic and social problems and standards of this vocation?
- (14) What kind of organizations, unions, and associations do workers in this calling have?
- (15) How is the occupation regarded by the public?
- (16) What are the ethical standards in the occupation and what are its influences upon those engaged in it? Are the workers likely to be good citizens?

## 2. Second Unit - Colleges and Professional Schools.

### a. Methods.

- (1) Recitation.
- (2) Oral and written reports.
- (3) Outside speakers.
- (4) Trips to the colleges of the country.

b. Requirement--A term paper.

Suggested topics for term papers:

- (1) What I expect to get from college if I am a college student?
- (2) The college or university I am expecting to enter.
- (3) How colleges and universities and professional schools help my country?
- (4) Why I choose the University of \_\_\_\_\_?

c. References.

- (1) College and professional school catalogues and pamphlets.
- (2) Sanders. Will it Pay Me to go to College?
- (3) Halle. Which College?
- (4) Gavit. College. Brace and Co.
- (5) Hawkes. College, What's the Use? Page and Co.
- (6) Hodgson. Trends in University Education. H. W. Wilson and Co.
- (7) Butler. The Meaning of Education. Mc Millan Co.

d. Colleges and universities of the Philippines which should be studied.

- (1) University of the Philippines.
- (2) University of Santo Tomas.
- (3) National University.
- (4) Philippine Normal School.

- (5) Philippine Nautical School.
- (6) Philippine Army School at Baguio.
- (7) Escuela de Derecho.
- (8) El Colegio de San Juan de Letran.
- (9) Silliman Institute.
- (10) Jose Rizal Business College.
- (11) Escuela de Senoritas.
- (12) Ateneo de Manila.

e. Development of the Unit.

- (1) The aims of a college education.
- (2) The university as a group of professional schools and colleges under one management.
- (3) Liberal arts colleges.
  - (a) Courses and subjects.
  - (b) Entrance requirements.
  - (c) Values received.
  - (d) Degrees offered.
  - (e) Course and subjects in high school that prepare for arts colleges, and show promise of ability to succeed in them.
- (4) Professional schools.
  - (a) Kinds of professional schools and degrees.
  - (b) Purposes.
  - (c) Vocations for which they prepare.
  - (d) High school requirements.

(137)

- (e) Studies emphasized in various professional schools, and high school counterparts.
- (5) The normal school.
  - (a) As a professional school.
  - (b) As a part of a state system of education.
  - (c) Courses offered and requirements.
  - (d) Comparative expenses.
- (6) College and university success based on high school work.
- (7) Success in various school subjects a key to choice of college and university courses.
- (8) College as opportunity to develop and to show ability for positions requiring such education for entrance.

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A P P E N D I X

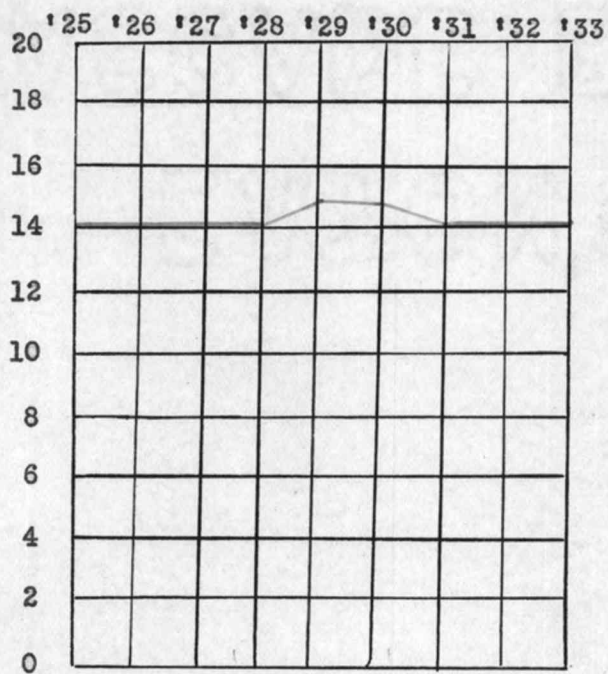


Figure 1.

Number of Agricultural Schools

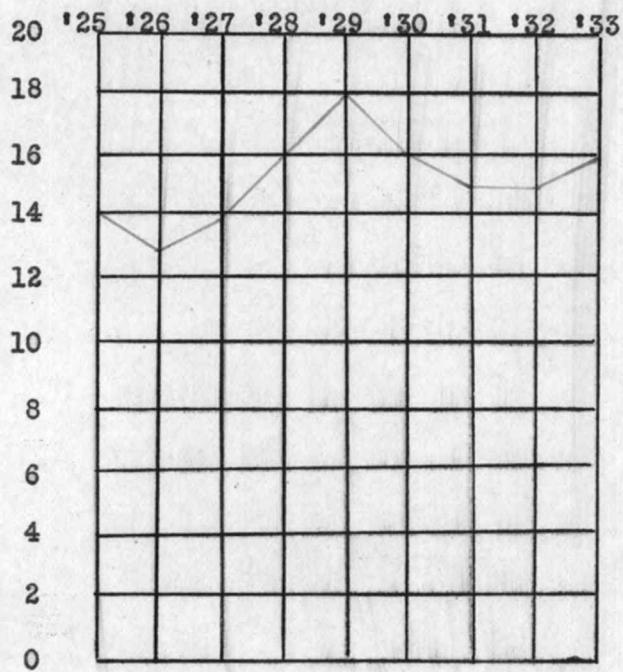


Figure 2.

Number of Rural High Schools

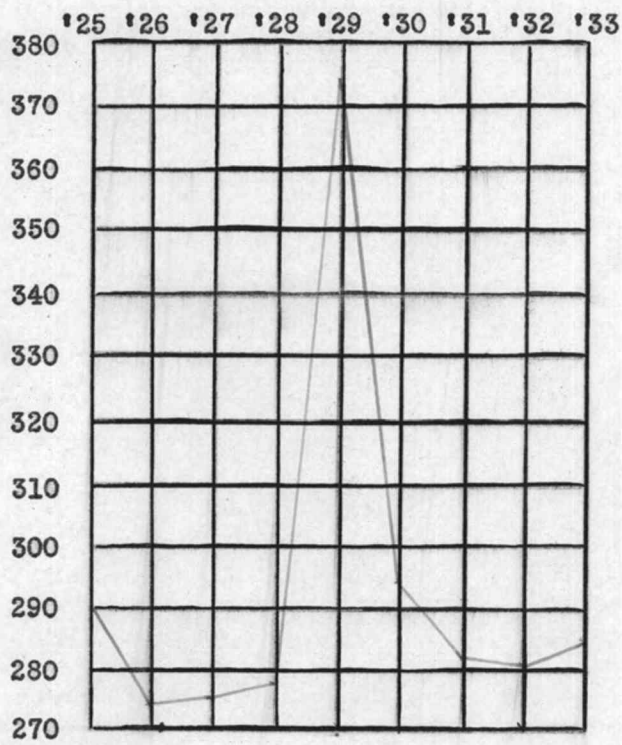


Figure 3-

Number of Settlement Farm Schools

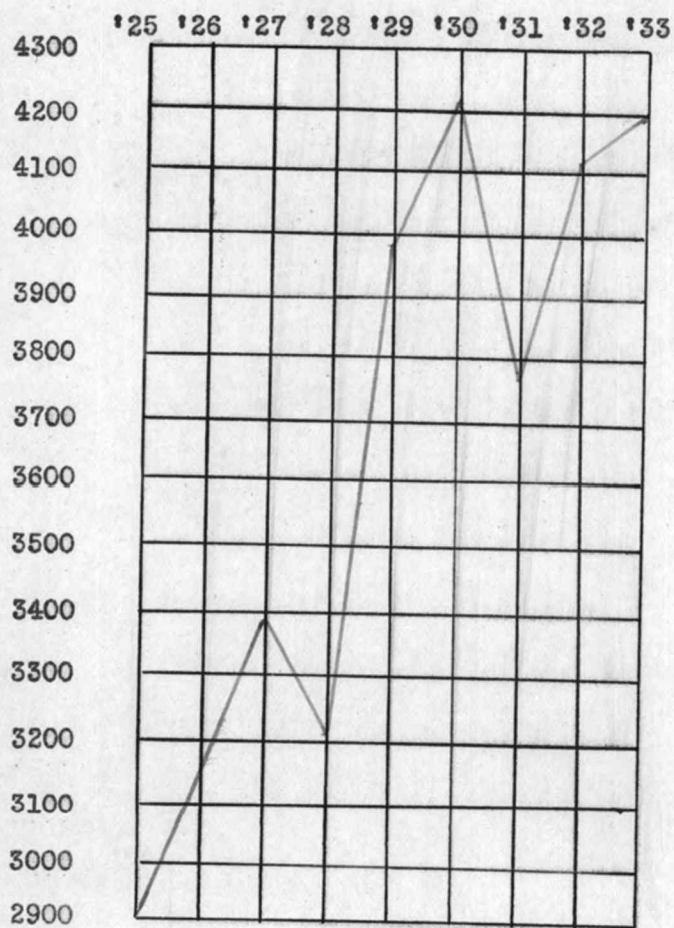


Figure 4.

Enrollment in the Agricultural Schools

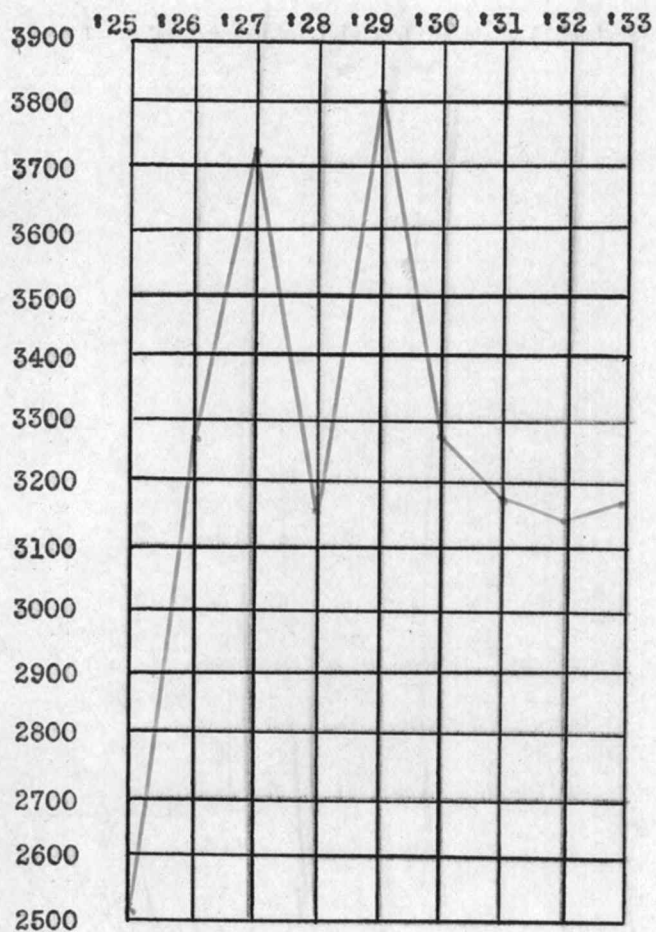


Figure 5.

Enrollment in the Rural High Schools

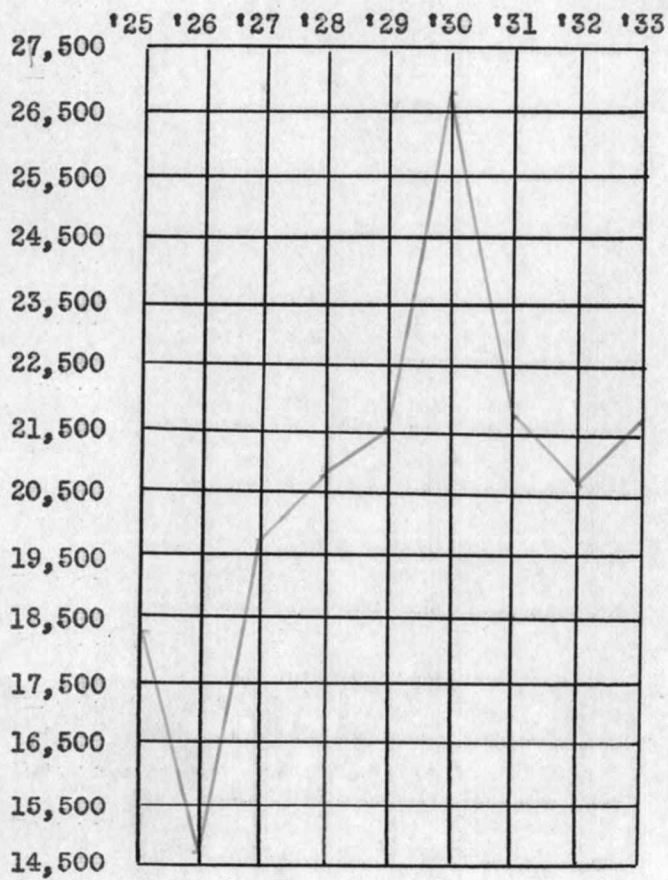


Figure 6.

Enrollment of the Settlement Farm Schools

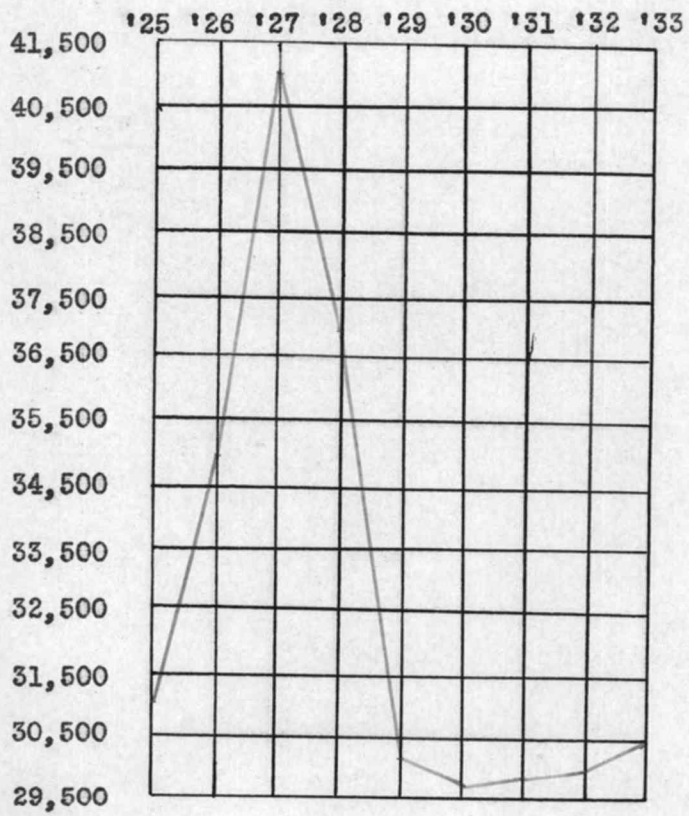


Figure 7.

Members of Agricultural Clubs

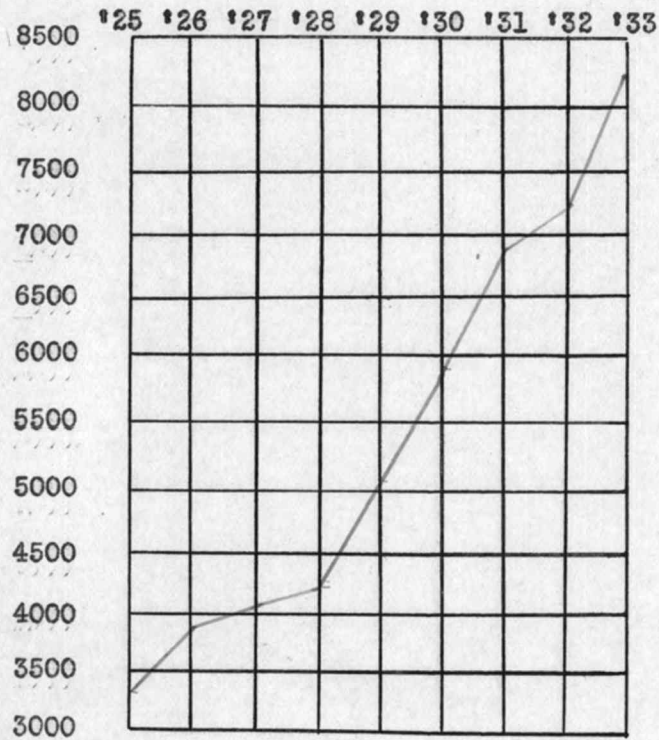


Figure 8.

Enrollment of the Provincial Trade Schools

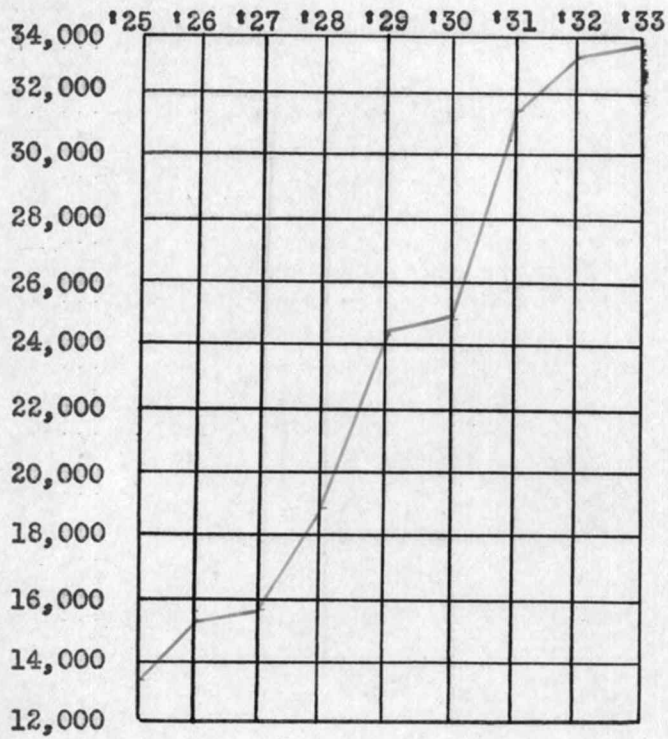


Figure 9.

Enrollment in the Municipal Trade Schools

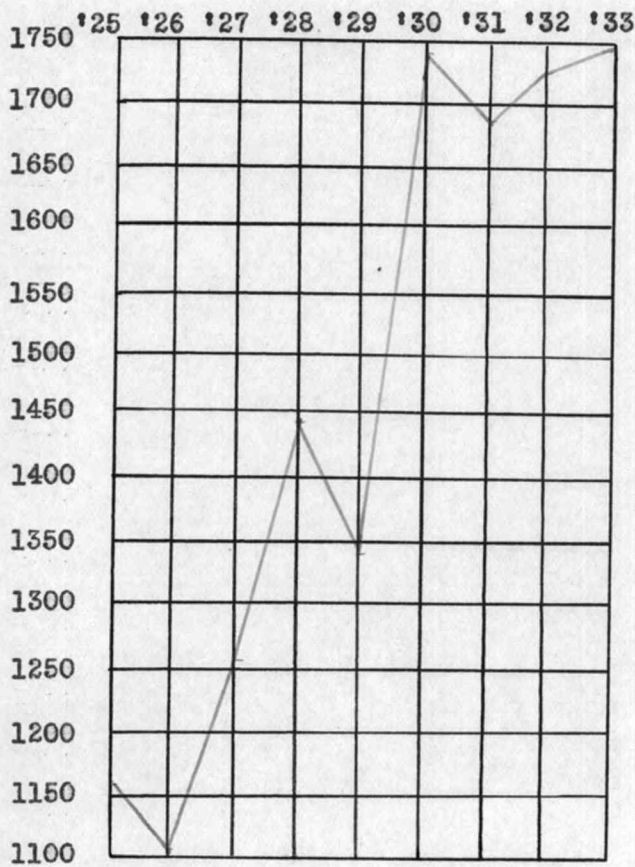


Figure 10

Hectares\*\*cultivated by the Students  
in the Agricultural Schools

\*\*A hectare equals 2.47 acres

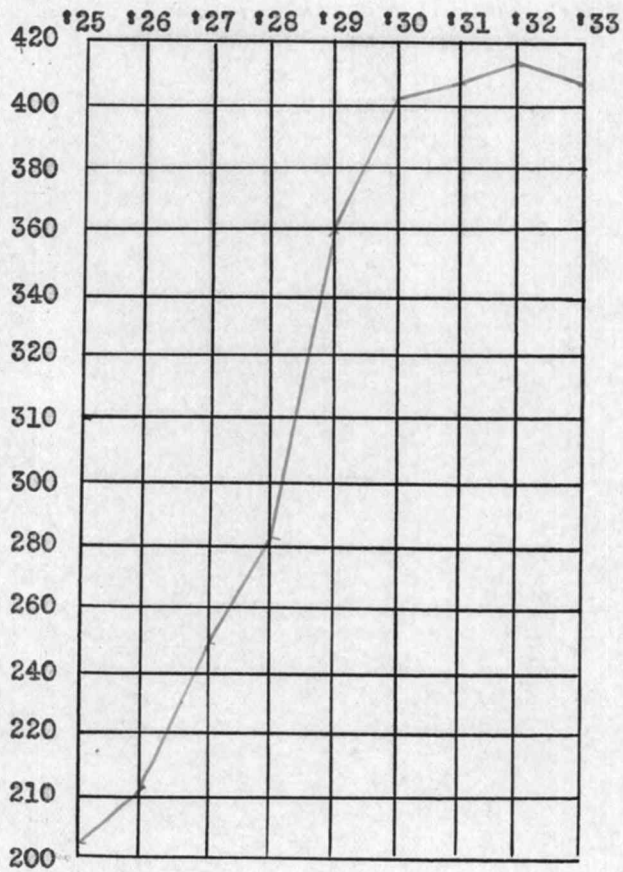


Figure 11.

Hectares Cultivated by the  
Rural High School Students

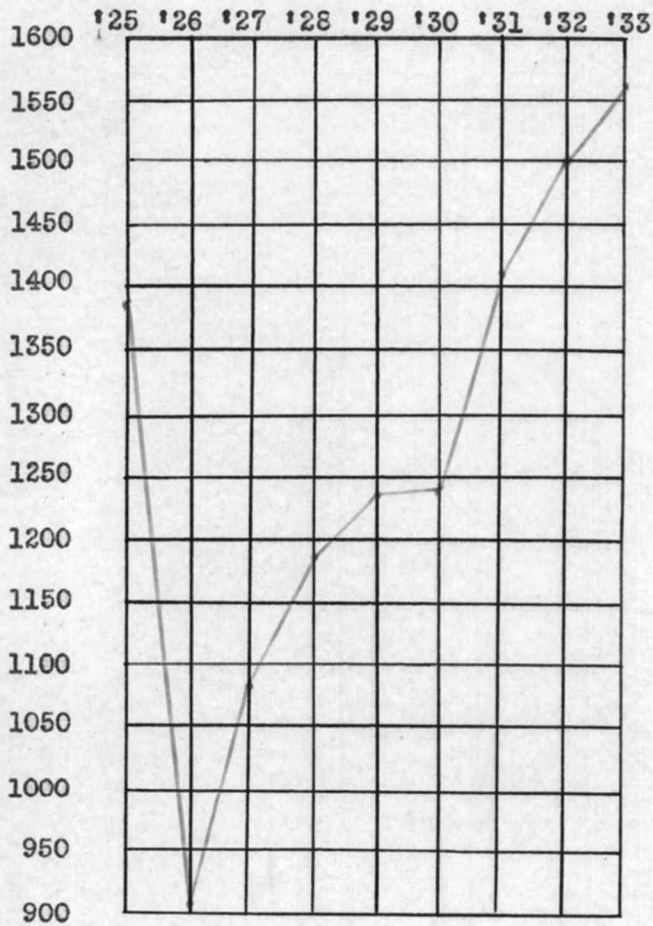


Figure 12.

Hectares Cultivated by the  
Settlement Farm School Pupils.

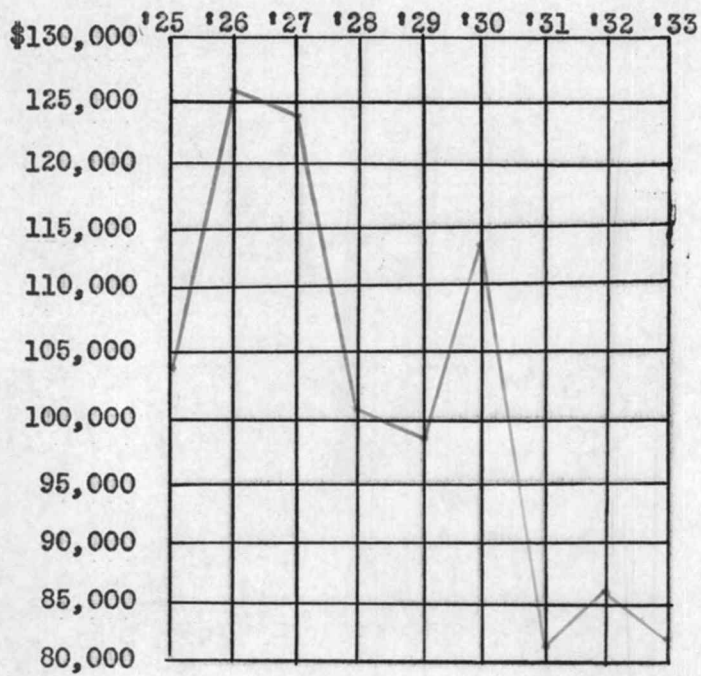


Figure 13.

Value of Production in the  
Agricultural Schools

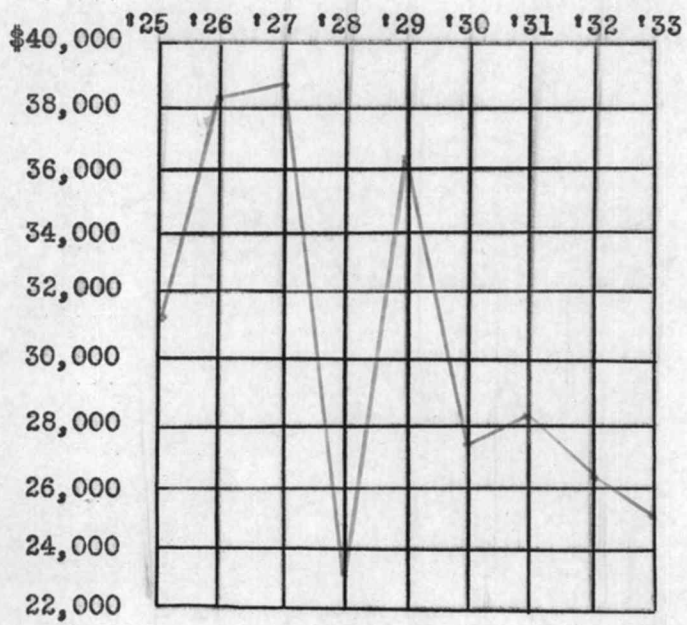


Figure 14.

Value of Production in the Rural High Schools

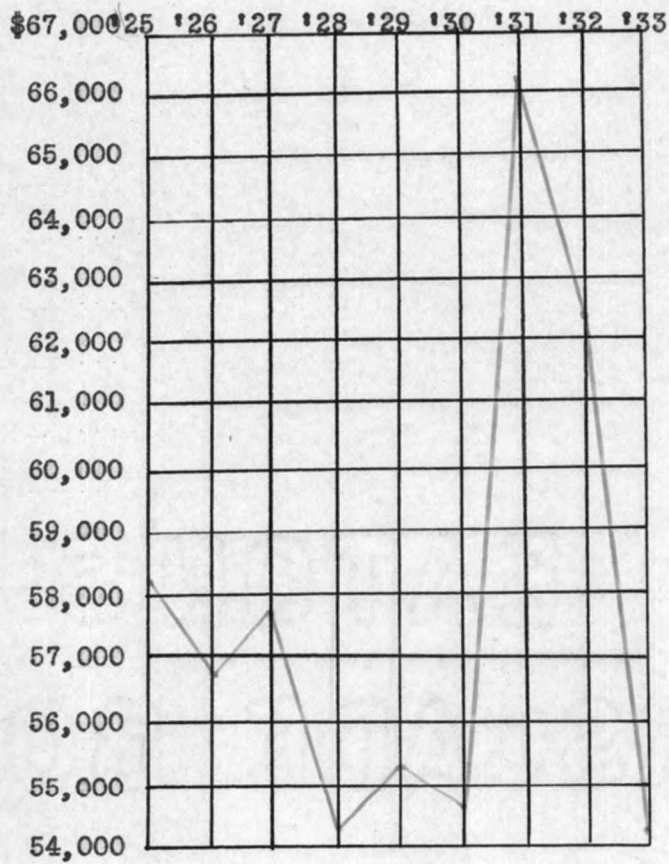


Figure 15.

Value of Production in the  
Settlement Farm Schools.

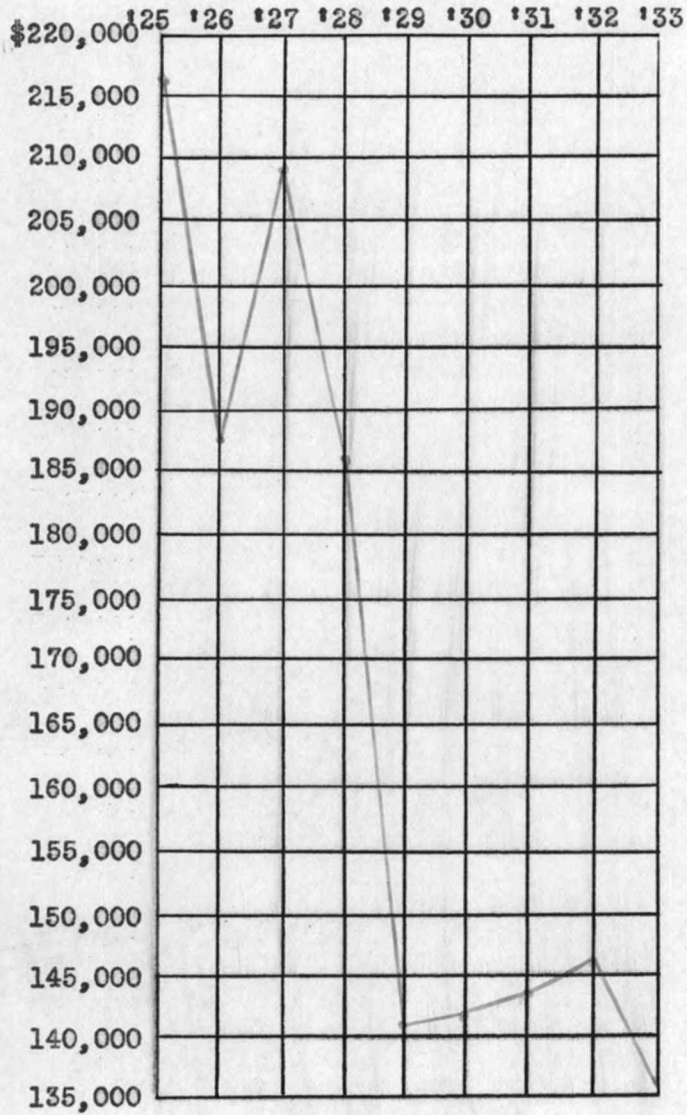


Figure 16.

Value of Production in the  
Agricultural Clubs.

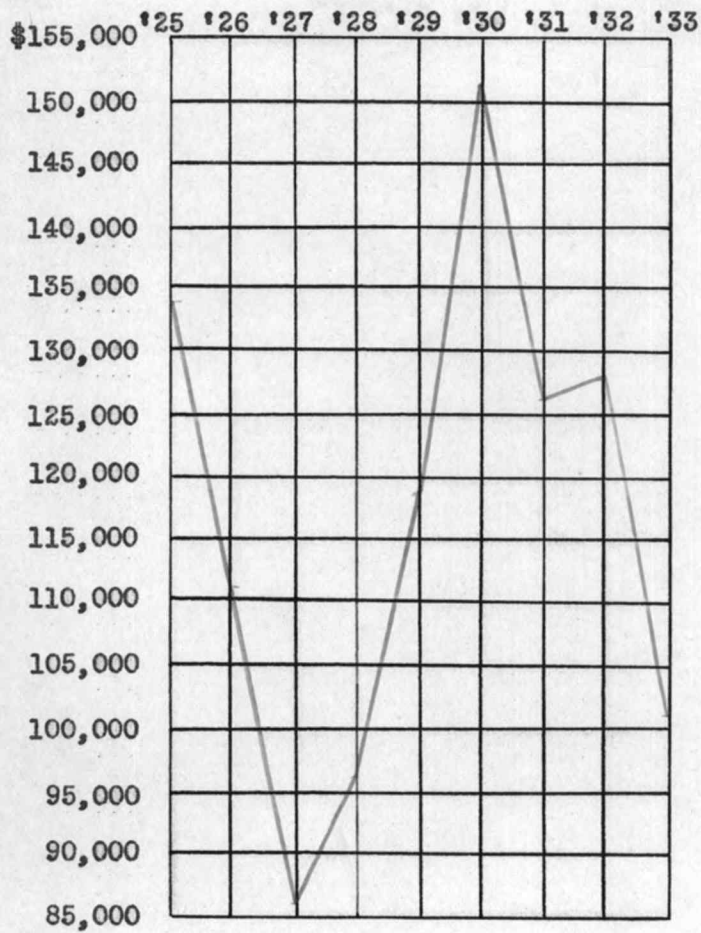


Figure 17.

Value of Production in the  
Provincial Trade Schools.

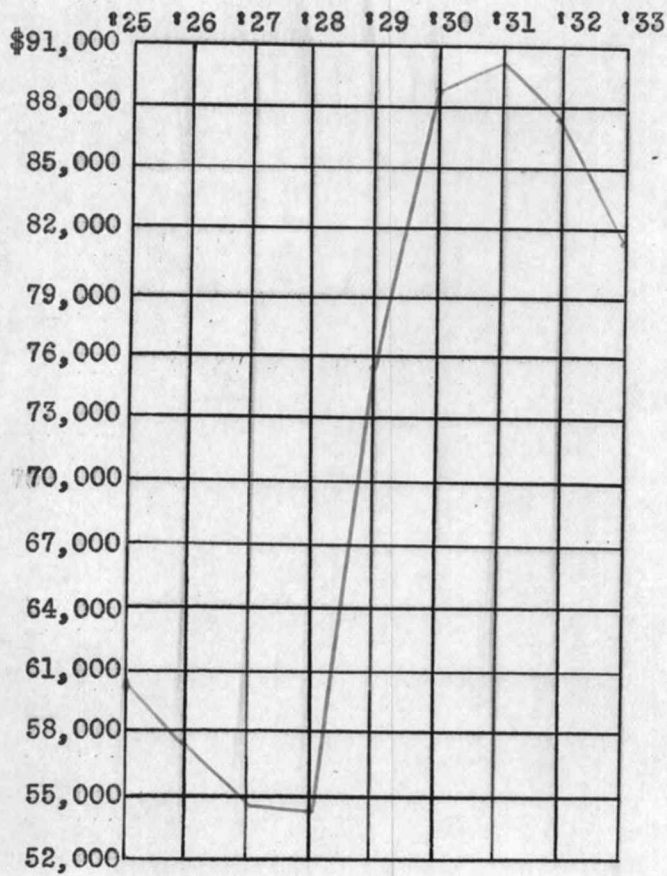


Figure 18.

Value of Production in the  
Municipal Trade Schools.