

State of Iowa
Board for Vocational Education
Des Moines

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A
TECHNIQUE
FOR A
VOCATIONAL EDUCATION
SURVEY
OF A
LOCAL COMMUNITY

— oOo —

By

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Foreword

This bulletin consists of a suggested technique for making a vocational education survey of a local community. It also contains a brief statement relative to the degree to which staff members of the state board may assist in conducting such a survey. This bulletin is issued by the state board for vocational education for use by local school officials who desire to study the occupational training needs of their community. It is the belief of the state board that the data to be secured in the use of this and similar surveys are essential in the development of well-planned vocational education programs.

This material was prepared by Mr. P. G. Frasier, research specialist of the state board for vocational education.

F. E. Moore, Director
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UNIVERSITY
OF VIRGINIA

Preface

If vocational education is to be basically sound, it must be founded on educational planning which takes into consideration the need for trained workers in a community and to what extent these vocational needs are already being met by existing agencies.

Vocational programs in the past have either been based on observation, personal opinion rather than facts, or facts brought out by a costly survey of the occupations and educational facilities in a community. Few communities, especially in a state where small cities and towns predominate, can financially afford this type of survey.

In developing this technique for a vocational survey attention has been given to the fact that the survey must be broad enough and go deep enough to uncover the essential data, but with the expenditure of a minimum amount of time and money. To that end, authentic published data are used extensively, augmented by facts collected by personal contact when supplementary data are necessary.

P. G. Frasier
Research Specialist

Preface

(Revised Edition)

This revision of a "Technique for a Vocational Survey of Local Communities" has been undertaken in an attempt to make the technique more usable in local situations. To that end the technique has been expanded to include devices for compiling and tabulating as well as for collecting data. As an added feature an outline for the presentation of data in each chapter has also been included.

In presenting this revised edition of the technique it is hoped that sufficient instructions and devices have been included to enable teachers and directors of vocational education in local communities to initiate and carry out a complete survey of their local communities without the assistance of experts from outside the community.

Attention is called to the fact that although this technique was developed primarily for use in surveying cities which have had a population of 25,000 or more inhabitants for two census periods, it may be used very satisfactorily in smaller cities. In the smaller cities only a limited amount of published data are available and, consequently, emphasis will need to be placed on data collected in the local community.

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A VOCATIONAL EDUCATION SURVEY

CHAPTER I.

Introduction

New Problems and Responsibilities of Education

During the present century the problems and responsibilities of public education have increased severalfold. In the past the school has been considered as a thing by itself in the community, an institution unaffected by other institutions or agencies. The emphasis in education was placed upon preparation for leisure, that is, for life's activities outside the domain of vocation. Thousands were prepared for a leisure they could not enjoy because of lack of proper vocational qualifications. The content of education was derived largely from the past and a foreign concept of the needs of men and women in an American democracy of the twentieth century.

The social institutions, especially the schools, have not kept pace with commercial and industrial development. Science and invention, the two main causes of most economic changes, have resulted in a never-ending stream of new devices, tools, machines, precision instruments, methods, physical and chemical processes and materials, which are used in the production of old and new commodities. Technological progress has produced changes in transportation, trade, and in a wide variety of service occupations.

Technological progress is continually changing the character of jobs and occupations in most lines of employment. New occupations and processes arise to supplement old ones, corresponding changes take place in the degree of skill and knowledge demanded by the occupation. As a result the usable content of skill and knowledge is not only changing in character but increasing in amount and complexity. In all occupations except the unskilled, the technical knowledge content is increasing as compared with muscular strength and manual ability.

As a result of technological advancement very few occupations remain unchanged. Most of them have been split into process jobs, each of which has been erected into a vocation by itself. These changes in occupations have set limits on incidental discovery of requirements and possibilities of training. In the larger towns boys and girls grow up in total ignorance of the qualifications most occupations demand or the opportunities they offer.

A city includes hundreds of occupations, but the city youth in his daily life is shut off from any effectual experience of the greater number of them. Industries are closed to him in the most part as an observer, and still more so as a participator. He is kept out of the factory, the office, away from the construction job and the railroad yard--most of the sites of production activity. What he learns of the world of work and its workers is haphazard and exceedingly small.

The economic and sociological changes, coupled with an economic depression of unprecedented extent, have closed employment opportunities to youth and have caused many to remain in school. The average age of entrance into employment has been pushed upward. Increasing specialization in industrial processes and continually changing methods of production have created demands for specially trained workers. The schools have become the major social agency for preparing youth for entrance into gainful employment, but the deficiencies of the schools in their performance of this function are great.

Education must realize its proper place in the new scheme of things. No education is complete without adequate training for a vocation that will equip the boy or girl or adolescent to meet the requirements of the new dispensation. Education should enable the individual to choose wisely and with least waste the occupation in which he can serve most efficiently and happily. It should enable the individual to enter and pursue the chosen occupation with qualifications for fullest satisfaction to himself and service to the community.

The schools also have certain obligations to the community by which they are supported. The community has set the schools up to serve a certain social purpose. It is important to the community that the schools produce not only individuals capable of bearing their share of the economic load, but in the matter of occupational adjustment attention should be given to the relationship which exists between the kind of vocational abilities possessed by the individual in the community and the number and distribution of vocational opportunities in the community.

A school which gives major attention in its curriculum to the preparation of a large proportion of its youth for college and gives no attention to the demand for skilled workers in the community, cannot be said to be serving the needs of the community. From the standpoint of the community it is essential that workers be prepared to do the many and varied tasks which need to be done. From the standpoint of the individual the making of a livelihood is conditioned upon the ability of the individual to find opportunities for gainful employment in a worthy occupation.

Since in this age of economic interdependence the welfare of the community rests upon the maintenance of balance in the numbers in the different occupational groups, and since the schools are maintained in the interests of society, it would seem that the schools should be vitally concerned with the problem of effecting some kind of numerical adjustment between workers and jobs. Yet, on every hand are found evidences of serious and far-reaching maladjustments. There is reason for the increasing concern with the revamping of traditional educational and training patterns as a means of enhancing the human values of modern life.

Educational Planning

From the standpoint of the need for educational planning there is a significant difference between vocational and general education. General education schools and courses are designed to meet the needs of individuals in the community for academic education. The schools are open to any one who may desire to take advantage of the opportunities offered, the only restriction upon admission to classes and courses being found in the requirement that individuals shall have satisfactorily met certain academic prerequisites.

Although this policy may be considered entirely proper so far as general education is concerned, carried over into the field of vocational education, however, it introduces difficulties. Vocational education is primarily an economic service, and as such, responds to the law of supply and demand. If vocational courses are established in a community without attention being given to the needs for trained workers in the various occupational areas in the community, an undesirable economic situation will inevitably result.

If a program of vocational education in a community is to be basically sound it must be founded on educational planning which takes into consideration the occupational opportunities for gainful employment which are available in that community. This necessitates a very careful survey of the community preceding the organization of a program of vocational education or an expansion of the existing program.

Need for a Simple Technique for a Vocational Survey

Public school administrators are aware of the need for vocational surveys in their local communities, but are hesitant because of the fact that surveys which have been conducted in the past required an extensive financial outlay and the employment of a staff of experts from sources outside the community. At the close of the survey when the official staff left the community, they took with them the most valuable information, that which was secured by personal contact with the various agencies of the community, and left only that which could be statistically treated and presented on paper. No persons were left in the community who were sufficiently familiar with the survey to carry out the recommendations which were based on findings.

In this period of economic depression and resulting curtailed school finances, few schools are able to expend the amount of money necessary to make a formal survey of their community to determine the need for vocational education. However, the presence of a large proportion of pupils in the secondary schools who do not intend to continue their education beyond the high school makes such educational planning necessary. To assist in solving this problem the technique presented in this bulletin has been prepared.

This technique was designed for the use of individuals in the local community, and its application does not require the services of experts. The technique includes all devices which are necessary for the collection, compilation and tabulation of data, and includes instructions for the use of these devices and for writing the narrative. Although an attempt has been made to include all studies which are required to show the need for vocational education in the local community, other studies may be added to meet local needs.

The Survey

Guiding Principles

In making available this technique for a vocational education survey of a local community attention has been given to the following guiding principles:

1. The technique should be complete and specific so that it can be administered by local school and community personnel without the aid of a staff of experts.
2. The survey should be broad enough and go deep enough to uncover all essential facts.
3. The survey should require a minimum expenditure of time and money.
4. Available, authentic, published data should be used to reduce the necessity of collecting data in the local community.
5. Available data should be supplemented by data collected in the local community where needed.
6. The survey should require the active participation of members of the local teaching staff and of the community, so that a corps of trained workers may be left in the community to carry out the findings of the survey and to organize the program of vocational education.

Purpose of the Survey

The purpose of a vocational survey is to provide a program of vocational education and prevocational instruction for a community, based on findings relative to the needs for vocational training and the extent to which present educational and training facilities are supplying these needs in the local community. The survey committee should be instructed to formulate a scheme of vocational courses, and to indicate specifically in what way the practical arts courses--agriculture, commerce, home economics and industrial arts--now being given in the schools, should be modified or expanded to give them value as prevocational training.

The purpose of the survey is to make recommendations concerning the following:

1. The vocational classes, courses or schools which are required to meet the training needs of boys and girls who are planning to enter gainful employment in the local community
2. The vocational courses or classes which are required to meet the needs of out-of-school youth in solving the problems of their occupational adjustment
3. The vocational courses or classes which are required for the extension training of men and women who are already engaged as gainful workers in the community
4. Necessary or desirable reorganization of the practical arts courses to meet the needs for prevocational training and vocational guidance

Studies Included in the Survey

In order to determine the need for a vocational program in a community it is necessary to deal with two types of data: (1) the facts that are needed to outline an efficient program of vocational education, and (2) facts concerning the extent, if at all, the vocational needs of the community are already being met by existing agencies. To secure these required data the survey should include the following studies:

1. A study of the composition and characteristics of the population
2. A study of the changing occupational pattern of the community
3. A study of the census distribution of gainful workers by industries, occupations and levels of employment
4. A study of specific occupational areas
5. An inventory of the schools
6. A study of the educational and occupational status of youth

Outline of the Survey

I. A Study of the Population

- A. The growth of the population
- B. Composition of the population
- C. Age distribution of the population

II. A Study of the Occupations

A. Occupational trends

1. Changes in the industrial pattern of the community
2. Changes in the occupational pattern of the community
3. Changes in the social-economic pattern of the community
4. Workers in the population
5. Age and sex distribution of gainful workers

B. Occupational distribution

1. Industrial distribution of gainful workers
2. Occupational distribution of gainful workers
3. Distribution of gainful workers by social-economic levels
4. Selection of occupational areas to be studied
5. Analyses of selected occupational areas

C. Employers' occupational survey

1. Selection and classification of firms to be contacted
2. Personal contact survey of selected firms
 - a. Training program
 - (1) Organized training program
 - (2) Written plan
 - (3) Manipulative and related training
 - (4) Instructor
 - (5) Pay roll jobs included
 - b. School cooperation
 - (1) Can schools cooperate
 - (2) Pay roll jobs included
 - c. Employment information
 - (1) Levels of employment
 - (a) Age and sex
 - (b) Turnover
 - (c) Beginning jobs

(2) Pay roll jobs

- (a) Workers by sex
- (b) Degree of skill
- (c) Length of training period
- (d) Number in training
- (e) School cooperation

III. School Inventory

- A. Educational facilities in the community
- B. School population and attendance
- C. Enrollment trends
- D. Holding power of the schools
- E. Age-grade distribution
- F. Curriculum trends

- 1. Academic curriculum
- 2. Practical curriculum

- a. Agriculture
- b. Commerce
- c. Home economics
- d. Industrial arts

- 3. Vocational subjects

- a. Day school

- (1) Agriculture
- (2) Distributive
- (3) Homemaking
- (4) Trade and industrial

- b. Extension classes

- (1) Agriculture
- (2) Distributive
- (3) Homemaking
- (4) Trade and industrial

IV. Youth Surveys

- A. In-school

- 1. Identification information
- 2. Educational information

- a. Grade in which enrolled
- b. Educational plans

- c. Subject preference
- d. Attitude of secondary school pupils concerning attending a central vocational school

3. Occupational information

- a. Out-of-school job
- b. Place and type of work
- c. Occupational choice
- d. Fathers' occupation

B. Out-of-school youth survey

- 1. Identification information
- 2. Educational information
 - a. School grade or college year completed
 - b. Age at time of quitting school
 - c. Reason for quitting school
 - d. Vocational training since leaving school

3. Occupational information

- a. Occupation prepared for by vocational training
- b. Occupation prepared for by vocational experience
- c. Present occupation
- d. Type and place of employment
- e. Occupational choice
- f. Period of unemployment
- g. Number of positions or jobs held

V. Suggested Changes in the Present Program of Practical Education, which is Basic as Prevocational Training for Vocational Courses

VI. Recommended Program of Vocational Education

Procedure in Conducting the Survey

The following steps in the procedure of conducting the survey are recommended:

- 1. Draw up a working agreement between the school and the survey committee
- 2. Organize a general survey committee
- 3. Determine the studies to be included in the survey
- 4. Outline each study included in the survey

5. Appoint a special committee for each study
6. Collect the data
7. Compile the data
8. Tabulate the data
9. Present the data in written form
10. Summarize the data
11. Determine implications for vocational education
12. Draw conclusions based on the findings of all studies
13. Make recommendations for a program of vocational education
14. Submit recommendations to a committee of practical education and vocational education specialists for suggestions and criticisms
15. Submit recommendations to local school authorities for final approval
16. Set up a program to conform to recommendations

Method of Conducting the Survey

Under the plan adopted by the state board for vocational education, no survey is undertaken in a local community unless the initiative comes from the local community, and unless the work is carried on jointly by the local community and the state board. It is also a part of the plan to use, as far as possible, local teachers and school authorities in making the survey so that trained workers may be left in the community on the job after the survey has been completed.

Although the survey should be under the direction of a representative of the state board for vocational education, the responsibility for carrying out the work of the survey should be left in the hands of local survey committees appointed by the superintendent of schools or the board of education. The general survey committee should include in its membership men and women qualified to serve as subcommittee chairmen for the committees suggested in the following paragraphs.

Since the survey divides itself quite naturally into five studies, each of which deals with a different type of data, it is suggested that five subcommittees be appointed, each to be assigned to one of the five studies included in the survey: (1) population (2) occupations from published data (3) occupations by personal contact (4) the school inventory, and (5) the youth survey. The work of each subcommittee should be coordinated under the direct supervision of the general survey committee and the director of the survey.

For identification purposes the subcommittees may be assigned as follows:

Committee A. A study of population growth trends

Committee B. A study of occupational distribution and trends from published data

Committee C. A study of the occupations through the employers' occupational survey

Committee D. A study of the schools

Committee E. A study of the status of in-school and out-of-school youth

Each committee should be charged with the responsibility for collecting, compiling, tabulating and presenting the data for their study, and for assisting the general survey committee in the compilation of the final report.

Organization of the Technique

In presenting this technique for a vocational survey attention is called to the plan of organization which is used. The technique is divided into six chapters, each of which, except Chapter I, deals with a specific phase of the study. This plan of organization was used so that a section or sections of this survey might be assigned to subcommittees, as indicated above, and contains all of the devices and instructions required by the subcommittees in performing the duties which have been assigned to them. Three types of devices are included in each chapter.

Devices for Collecting Data

The first type of device presented in each chapter was designed for the collection of data and is numbered serially through the entire technique. These devices are Forms 1-29. The source of data which are to be collected is indicated at the bottom of each form. In some cases, however, forms have been developed to serve a dual purpose--collection and compilation of data. This was done for the purpose of reducing the number of forms. In cases where dual purpose forms are used, columns which are used for the compilation of data only are marked with an asterisk (*).

Devices for Compiling Data

The second type of device, Work Sheets A to H, was developed for the compilation of data only, and is used in all cases where data are not collected and compiled on the same form.

Devices for Tabulating Data

The third type of form (Table) was developed for the tabulation of data preparatory to its presentation in the study. Tables are numbered according to the chapters in which they will appear in the

final draft of the written report; thus all tables included in the Table V series will be presented in Chapter V of the report, etc. It is, of course, evident that all tables should be numbered serially in the final report.

Plan for Presenting Data

Included in each chapter are suggestions for the topical treatment of material in the written report. These topics should be considered as suggestive only, and should be varied to suit the specific study. It is further suggested that each chapter be summarized, and implications for vocational education be pointed out.

After all chapters have been prepared for presentation in written form, it then becomes the duty of the general survey committee in cooperation with an advisory committee, composed of teachers of practical and vocational subjects and specialists in vocational education, to study the report very carefully, draw conclusions and make recommendations. These recommendations should be submitted to school authorities for final approval before the report is published.

Adaptation of Technique

Although this technique was designed primarily for the purpose of conducting a vocational survey in a community which had maintained a population of 25,000 or more inhabitants for a period of at least two decennial periods, it may be used with success in smaller communities. In the smaller communities data are not available for tracing the changes in the occupational pattern and, therefore, the employers' occupational survey will need to be given greater emphasis.

So that specific references might be given to show the sources of data, references are made to census data which are now available. As future census data become available they should be used to replace the data to which reference is made in this technique. For example, as soon as 1940 census data are available they should be used to replace 1930 data, and in trend studies the span of years should be adjusted also.

Although references are made to Iowa data, data for other states will be found in tables carrying the same numbers. These tables will be found on different pages in the census report.

CHAPTER II.

Population

Collecting the Data

The data concerning composition, age distribution and growth of the population supply a very valuable background for the study of the needs for vocational education in a community. The composition of the population in many cases indicates the type of occupation which is prevalent in the local community; that is to say, a large proportion of negroes or of members of other racial groups, especially southern Europeans or Mexicans, would undoubtedly suggest an unskilled labor situation.

Knowledge of the age distribution of the population is of importance because this distribution indicates the present and potential supply of gainful workers in the community and the future enrollment in the various grades of the school.

The trends of population growth are important in educational planning. In a population which exhibits aggressive growth trends, a sufficient supply of trained workers is needed not only to make replacements but also to supply the need for trained workers due to industrial and commercial expansion. In a static population the need for trained workers is limited to replacement needs only, while in a regressive population the need for trained workers is usually diminishing and, consequently, fewer workers need be trained than are required for replacements.

In collecting data for this study of the survey only these three factors--composition, age distribution and growth of the population are given attention.

Collect the data requested in Form 1. Data are available in the census reports in the form in which they are to be reported.

Obtain the information requested on Form 2 from the various sources which are indicated on this form.

Record data in the manner requested on Form 3. Percentage figures are not available for column 2, "City"; consequently, figures must be entered in column 1 and percentages figured.

POPULATION

Form 1

Population Growth Trends.

Year	City Population	Increase in Population				
		Period	City		Iowa	U. S.
			Number	Per Cent	Per Cent	Per Cent
		1860-1930				
<u>1/</u> 1930		1920-1930				
1920		1910-1920				
1910		1900-1910				
1900		1890-1900				
1890		1880-1890				
1880		1870-1880				
1870		1860-1870				
1860						

1/ Use 1940 census figures if available. Span of years will depend upon available data for city.

Source: United States Census of Population, Vol. 1., 1930.
 United States: Population - U. S. Summary, Table 2, p. 6.
 Iowa: Iowa - Population, Table 1, p. 359.
 City: Iowa - Population, Table 2, p. 360.

Note: If it is desired to make comparisons of population growth of the city being studied with other cities in the area, a similar form may also be used for collecting such data.

POPULATION

Form 2

Composition of the Population.

Year and Area	All Classes			Native Whites		Foreign-born Whites		Negroes	
	Total	Male	Female	Male	Female	Male	Female	Male	Female
United States 1930 <u>1/</u> 1920									
Iowa 1930 <u>1/</u> 1920									
City 1930 <u>1/</u> 1920									

1/ If 1940 census is available it is suggested that 1940 and 1930 census data be used.

Source: United States Census of Population

1930: Vol. III, Part 1.

United States: Population - U. S. Summary, Table 20, p. 14.

Iowa: Population - Iowa, Table 3, p. 748.

City: Population - Iowa, Table 12, pp. 765-66.

1920: United States and Iowa same as above.

City: Vol. III, Population - Iowa, Table 8, pp. 318-19.

POPULATION

Form 3

Age Distribution of the Population.

Age Periods <u>2/</u>	1930 <u>1/</u>				1920 <u>1/</u>			
	City		Iowa	U. S.	City		Iowa	U. S.
	Number	Per Cent*	Per Cent	Per Cent	Number	Per Cent*	Per Cent	Per Cent
All Ages	<u>3/</u>	100.0	100.0	100.0	<u>3/</u>	100.0	100.0	100.0
Under 5 years								
5-9 years								
10-14 years								
15-19 years								
20-24 years								
25-34 years								
35-44 years								
45-64 years								
65-74 years								
75 years and over								

1/ If 1940 census is available when survey is made it is suggested that 1940 and 1930 data be used.

2/ Age periods will need to be varied to suit available data. Classifications were restricted prior to 1930.

3/ Percentage distribution not available for cities; the number in each age group should be entered and percentages figured.

Source: United States Census of Population

1930: Vol. III, Part 1.

United States: Population - U. S. Summary, Table 20, p. 14.

Iowa: Population - Iowa, Table 3, p. 748.

City: Population - Iowa, Table 12, pp. 765-66.

1920: United States and Iowa same as above.

City: Vol. III, Population - Iowa, Table 8, pp. 318-19.

POPULATION

Compiling and Tabulating Data

Data collected on Forms 1, 2 and 3 should be transferred to Tables II-A, B and C, and other data which are requested in these tables should be determined from the figures which are transferred.

Table II-A. Population Growth Trends--Form 1

Data in Form 1 were collected in the form in which they will be tabulated. Therefore, simply reproduce Form 1 as Table II-A.

Table II-B. Composition of the Population--Form 2

Data collected and presented in Form 2 were in numbers. Change this numerical distribution to percentage distribution by dividing the number in each horizontal line by the number representing the total population in the same line, and record the per cent in Table II-B. Attention should be called to the fact that these percentages will not necessarily account for 100 per cent of the population, because certain racial groups are not included in the figures.

Table II-C. Age Distribution of the Population--Form 3

Determine the percentage distribution of gainful workers for the city. Transfer these percentages to Table II-C. Combine the figures in the age groups to form the distribution of the population in the larger age groups, and report as indicated in the bottom section of the table.

Presenting the Data

Growth of the Population

Composition of the Population

Age Distribution of the Population

Summary

Implications for Vocational Education

POPULATION

Table II-B. Composition of the Population.

(In per cent)

Year and Area	All Classes		Native Whites		Foreign-born Whites		Negroes	
	Male	Female	Male	Female	Male	Female	Male	Female
United States								
1930								
1920								
Iowa								
1930								
1920								
_____ <u>1/</u>								
1930								
1920								

1/ City in which survey is being conducted.

Source: Form 2.

Table II-C. Age Distribution of the Population.

Age Groups	1930			1920		
	<u>1/</u>	Iowa	U. S.	<u>1/</u>	Iowa	U. S.
All Ages	100.0	100.0	100.0	100.0	100.0	100.0
Under 5						
5- 9						
10-14						
15-19						
20-24						
25-34						
35-44						
45-64						
65 and over						
Unknown						
Under 20						
20-44						
45-64						
65 and over						
Unknown						

1/ City in which survey is being conducted.

Source: Form 3.

CHAPTER III.

OCCUPATIONAL DISTRIBUTION AND TRENDS

Occupational Statistics

A study of the changes in the occupational pattern of a community is an essential part of a survey to determine the needs for vocational education in that community. Four types of data should be examined to determine the trends which have taken place during a period of one or more decennial periods. These data relate to:

1. The industrial distribution of gainful workers
2. The occupational distribution of gainful workers
3. The proportion of the population gainfully employed
4. The age distribution of gainful workers

In discussing these trends it is essential that the reader have a clear understanding of the difference between industrial and occupational classifications of gainful workers. In the industrial classification workers are grouped by industries. Each industry is treated as a separate unit and all workers in the industry are classified thereunder, irrespective of the occupation they pursue whether productive, commercial, technical, professional or clerical. These industries in turn are grouped under nine general classifications--agriculture, forestry and fishing, manufacturing, etc.

Where workers are classified by occupations, all workers in specific occupations are grouped together without regard to the different industries in which the occupations are pursued and each occupation, except clerical, is classified in that part of the industrial field in which the occupation is most commonly found.

For example, all electricians are grouped together and classified under "Manufacturing and Mechanical Pursuits", though electricians are employed in almost every industry. Clerical occupations, which can not be said to be more common in one part of the industrial field than another, are made a separate class.

From the foregoing it is quite evident that the number of workers in the respective general divisions in the industrial and occupational classifications will not be the same. Also, since the industrial figures in the census were compiled from a preliminary count some errors may be evident when the two classifications are compared.

Collecting the Data

To facilitate the collection of data in this study of occupational trends, the following instructions are given:

1. Industrial Trends--Form 4

Step 1. Transfer the data concerning the number of gainful workers from the census report to the appropriate column in Form 4.

II. Industrial Distribution--Form 5

Step 1. Collect the information requested in Form 5.

III. Occupational Trends--Forms 6, 7 and 8

Step 1. Prepare three sets of this blank.

Step 2. Number these blanks as follows: Form 6--All Gainful Workers, Form 7--Male Gainful Workers, and Form 8--Female Gainful Workers.

Step 3. Transfer data from census report to these forms. Attention should be called to the fact that occupations are classified in Forms 6, 7 and 8 by social-economic levels and occupational divisions, while data in the census reports are classified by occupations and census occupational divisions. Thus a reclassification of these data is necessary. In transferring these data select the occupation to be dealt with, secure the figures from the census report and enter them in the appropriate column in the form.

Step 4. In 1910 census figures a surplus of skilled and semi-skilled workers in manufacturing and mechanical pursuits was reported in certain reports. An explanation of this duplicate enumeration of workers will be found in the census report, Occupational Statistics, Vol. IV., p. 21, 1910. This excess should be removed from the study.

Step 5. In presenting the data in Forms 6, 7 and 8 it is necessary to transfer certain occupations from one occupational division to another to make 1910 and 1930 census figures comparable. Special care should be taken in making these transfers to insure accuracy, and totals for the occupational divisions should be thoroughly checked.

IV. Gainful Workers in the Population--Form 9

Step 1. Transfer data from census report to Form 9.

V. Age Distribution of Gainful Workers--Form 10

Step 1. Transfer data from census report to Form 10.

OCCUPATIONAL DISTRIBUTION AND TRENDS

Form 4

Industrial Work Sheet A

Industrial Trends.

NOTE: TO BE USED ONLY IF 1940 CENSUS DATA ARE AVAILABLE.

Industry Groups	1940		1930		1930-1940 Per Cent*	
	Number	Per Cent*	Number	Per Cent*	Gain or Loss <u>1/</u>	Change <u>2/</u>
All Industries		100.0		100.0		
Agriculture						
Forestry and fishing						
Coal mines						
Other extraction of minerals						
Building industry						
Chemical and allied industries						
Clay, glass and stone industries						
Clothing industries						
Bakeries						
Slaughter and packing houses						
Other food and allied industries						
Automobile factories and repair shops						
Blast furnaces and steel rolling mills						
Other iron and steel industries						
Metal industries, except iron and steel						
Lumber and furniture industries						
Electrical machinery and supply factories						
Independent hand trades						
Other manufacturing industries						
Paper, printing & allied industries						
Construction and maintenance of streets, etc.						
Garages, greasing stations, etc.						
Postal service						
Steam and street railroads						
Telegraph and telephone						
Other transportation & communication						

Industrial Work Sheet A (Continued)

Industry Groups	1940		1930		1930-1940 Per Cent*	
	Number	Per Cent*	Number	Per Cent*	Gain or Loss <u>1/</u>	Change <u>2/</u>
Banking and brokerage						
Insurance and real estate						
Automobile agencies and filling stations						
Wholesale and retail trade, except automobiles						
Other trade industries						
Public service (not elsewhere classi- fied)						
Recreation and amusement						
Other professional and semiprofes- sional service						
Hotels, restaurants, boarding houses						
Laundries and cleaning and pressing shops						
Other domestic and personal service						
Industry not specified						

1/ Gain or loss in percentage of all gainfully occupied, 1930-1940.

2/ Percentage rate of increase or decrease in numbers, 1930-1940.

Source: United States Census of Population, Vol. III, Part I., 1930, Table 20, pp. 789-96.

OCCUPATIONAL DISTRIBUTION AND TRENDS

Form 5

Industrial Work Sheet B

Industrial Distribution.

Industry Groups	Total		Males		Females	
	Number	Per Cent*	Number	Per Cent*	Number	Per Cent*
All Industries		100.0		100.0		100.0
Agriculture						
Forestry and fishing						
Coal mines						
Other extraction of minerals						
Building industry						
Chemical and allied industries						
Clay, glass and stone industries						
Clothing industries						
Bakeries						
Slaughter and packing houses						
Other food and allied industries						
Automobile factories & repair shops						
Blast furnaces and steel rolling mills						
Other iron and steel industries						
Metal industries, except iron and steel						
Lumber and furniture industries						
Paper, printing, and allied industries						
Electrical machinery and supply factories						
Independent hand trades						
Other manufacturing industries						
Construction and maintenance of streets, etc.						
Garages, greasing stations, etc.						
Postal service						
Steam and street railroads						
Telegraph and telephone						
Other transportation & communication						

Industrial Work Sheet B (Continued).

Industry Groups	Total		Males		Females	
	Number	Per Cent*	Number	Per Cent*	Number	Per Cent*
Banking and brokerage						
Insurance and real estate						
Automobile agencies and filling stations						
Wholesale and retail trade, except automobiles						
Other trade industries						
Public service (not elsewhere classified)						
Recreation and amusement						
Other professional and semiprofessional service						
Hotels, restaurants, boarding houses						
Laundries, cleaning and pressing shops						
Other domestic and personal service						
Industry not specified						

NOTE: USE DATA FROM LATEST CENSUS REPORT.

Source: United States Census of Population, Vol. III, Part I., 1930, Table 20, pp. 789-96.

Data concerning manufacturing which show the number of establishments, wage earners, wages, value of product and value added by manufacturing, can be found in the United States Census of Manufacturing, Vol. III, 1929, Table 2, Iowa, pp. 176-177. (For counties and cities of more than 10,000 population).

OCCUPATIONAL DISTRIBUTION AND TRENDS

Forms 6, 7 and 8

Occupational Work Sheet C

Occupational Trends.

Total _____ Males _____ Females _____

Occupational Divisions	1930		1910		1910 to 1930 Per Cent*	
	Number	Per Cent*	Number	Per Cent*	Gain or Loss <u>1/</u>	Change <u>2/</u>
Population 10 years old and over						
GAINFUL WORKERS						
All occupations		100.00		100.00		
<u>Agriculture</u>						
Proprietary Farmers (owners and tenants)-- includes gardeners; florists, fruit growers and nurserymen; stock raisers						
Manual workers Skilled Managers and foremen						
Unskilled Farm laborers--includes in 1910 and 1920 censuses, garden, greenhouse, orchard, etc., laborers; stock herders, drovers, feeders (1910); all "other agricultural pur- suits"						
<u>Forestry and Fishing</u>						
Forestry Proprietary Foresters, forest rangers and tim- ber cruisers, owners and managers of log and timber camps						
White-collar workers Inspectors, scalers and surveyors at log and timber camps						
Manual workers Skilled Foremen of log and timber camps						
Unskilled Teamsters and haulers, "other lumbermen", raftsmen and wood- choppers						

Occupational Work Sheet C (Continued)

Total _____ Males _____ Females _____

Occupational Divisions	1930		1910		1910 to 1930 Per Cent*	
	Number	Per Cent*	Number	Per Cent*	Gain or Loss <u>1/</u>	Change <u>2/</u>
Fishing Manual workers Semiskilled Fishermen and oystermen						
<u>Extraction of Minerals</u>						
Proprietary Operators, managers and officials Manual workers Skilled Foremen, overseers and inspectors Unskilled Coal mine operatives and "other operatives						
<u>Manufacturing and Mechanical Pursuits</u>						
Proprietary Builders and building contractors Officials in manufacturing; manufac- turers, managers and officials in manufacturing Manual workers Skilled Building and related trades Brick and stone masons Cabinetmakers Carpenters Electricians Painters, glaziers, varnishers, enamellers, etc. Paperhangers Plasterers and cement finishers Plumbers Roofers and slaters Sawyers Stonecutters Structural iron workers Tinsmiths and coppersmiths Machine and related trades Blacksmiths, forgemen and ham- mermen Boilermakers Engineers (stationary) Loom fixers Machinists, millwrights and toolmakers						

Occupational Work Sheet C (Continued)

Total _____ Males _____ Females _____

Occupational Divisions	1930		1910		1910 to 1930 Per Cent*	
	Number	Per Cent*	Number	Per Cent*	Gain or Loss <u>1/</u>	Change <u>2/</u>
Mechanics (n.o.s.)						
Molders, founders and casters						
Pattern and model makers						
Rollers and roll hands						
Printing trades						
Compositors, linotypers and type- setters						
Electrotypers, stereotypers and lithographers						
Engravers						
Pressmen and plate printers						
Shoemakers and cobblers (not in factory)						
Tailors and tailoresses						
Other miscellaneous trades						
Coopers						
Glass blowers						
Jewelers, watchmakers, goldsmiths and silversmiths						
Millers (grain, flour, feed, etc.)						
Piano and organ tuners						
Upholsterers						
Skilled occupations (not else- where classified; butchers and dressers, slaughterhouse, 1910)						
Foremen and overseers						
Semiskilled						
Dressmakers (not in factory)						
Milliners						
Apprentices to dressmakers and milliners						
Factory operatives						
Dyers						
Filers, grinders, buffers and polishers						
Operatives, building trades						
Operatives, factory						
Part in factory and part other						
Apprentices, building and hand trades						
Apprentices (n.o.s.)						
Bakers						
Oilers of machinery						
Unskilled						
Building & construction laborers (in 1910 designated as laborers, building and hand trades)						

Occupational Divisions	1930		1910		1910 to 1930 Per Cent*	
	Number	Per Cent*	Number	Per Cent*	Gain or Loss <u>1/</u>	Change <u>2/</u>
Factory Furnacemen, smelter men, heaters, puddlers, etc. Laborers (n.o.s.) Firemen (not locomotive or fire department)						
<u>Transportation and Communication</u>						
Water Transportation Proprietary Captains, mates and pilots Manual workers Semiskilled Boatmen, canalmen and lockkeepers Sailors and deck hands Unskilled Longshoremen and stevedores Laborers (water transportation), classified under "Other Trans- portation and Communication Pursuits"						
Road and Street Transportation Proprietary Garage owners, managers and offi- cials Owners and managers, truck, trans- fer and cab companies Livery stable keepers and managers Manual workers Skilled Bus conductors Foremen and inspectors of: Garages, greasing stations & automobile laundries Road and street building and repairing, classified under "Other Transportation and Communication Pursuits" Livery and transfer companies Semiskilled Chauffeurs, truck and tractor drivers Draymen, teamsters and carriage drivers Others--road & street building & repairing, "other occupations"						

Occupational Work Sheet C (Continued)

Total — Males — Females —

Occupational Divisions	1930		1910		1910 to 1930 Per Cent*	
	Number	Per Cent*	Number	Per Cent*	Gain or Loss <u>1/</u>	Change <u>2/</u>
Unskilled						
Laborers, road and street						
Laborers, garage, transfer com- panies, etc.						
Hostlers and stable hands						
Railway, Steam and Street						
Proprietary						
Officials and superintendents						
Conductors on steam railroads						
White-collar workers						
Baggagemen and freight agents						
Ticket and station agents						
Agents, express companies						
Express messengers and railway mail clerks						
Manual workers						
Skilled						
Conductors on street railroads						
Foremen and overseers on railroads						
Locomotive engineers and firemen						
Inspectors, steam and street rail- roads						
Semiskilled						
Boiler washers and engine hostlers						
Brakemen, motormen and switchmen on steam and street railways						
Apprentices						
Other occupations, railways						
Unskilled						
Laborers, steam and street rail- roads						
Communication Agencies						
Proprietary						
Proprietors, managers and officials, telephone and telegraph companies, listed under "Other Transportation and Communication Pursuits"						
White-collar workers						
Mail carriers						
Telegraph messengers and operators						
Radio operators						
Telephone operators						

Occupational Work Sheet C (Continued)

Total _____ Males _____ Females _____

Occupational Divisions	1930		1910		1910 to 1930 Per Cent*	
	Number	Per Cent*	Number	Per Cent*	Gain or Loss <u>1/</u>	Change <u>2/</u>
Manual workers						
Skilled						
Foremen and inspectors, telegraph and telephone, listed under "Other Transportation and Communication Pursuits"						
Semiskilled						
Telegraph and telephone linemen						
Apprentices						
Other occupations						
Unskilled						
Laborers (n.o.s.), telegraph and telephone						
Other Transportation and Communication Pursuits, including Air Transportation						
Proprietary						
Proprietors, managers and officials (n.o.s.), air transportation and "other transportation and communication pursuits"						
Manual workers						
Skilled						
Aviators (not classified separately for 1910)						
Foremen and inspectors, air transportation, water transportation, and "other transportation and communication pursuits"						
Semiskilled						
Apprentices						
Other occupations, "other transportation and communication pursuits"						
Unskilled						
Laborers (n.o.s.), air transportation, express companies, pipe lines and "other transportation and communication pursuits"						
Trade						
Proprietary						
Bankers, brokers and money lenders						
Retail dealers						
Wholesale dealers, importers and exporters						

Occupational Work Sheet C (Continued)

Total ——— Males ——— Females ———

Occupational Divisions	1930		1910		1910 to 1930 Per Cent*	
	Number	Per Cent*	Number	Per Cent*	Gain or Loss <u>1/</u>	Change <u>2/</u>
Undertakers						
Other proprietors and officials, (n.o.s.), trade						
White-collar workers						
"Clerks" in stores						
Commercial travelers						
Salesmen or saleswomen						
Insurance agents, managers and officials						
Real estate agents and officials						
Decorators, drapers and window dressers						
Inspectors, gaugers and samplers, trade						
Newsboys						
Manual workers						
Skilled						
Floorwalkers, foremen & overseers						
Semiskilled						
Deliverymen for bakeries and stores						
Others--apprentices to wholesale & retail trade; "other pursuits", trade						
Unskilled						
Laborers, porters & helpers in stores						
Laborers, coal and lumber yards, warehouses, etc.						
Public Service						
Proprietary						
City and county officials and inspectors						
State and U. S. officials and inspectors (includes U. S. post- masters classified under transpor- tation and communication, 1930)						
Manual workers						
Skilled						
Firemen, fire department						
Policemen						
Sheriffs, marshals, detectives, truant officers, etc.						
Semiskilled						
Guards, watchmen and doorkeepers						
Others--"other public service pur- suits"						

Occupational Work Sheet C (Continued)

Total ——— Males ——— Females ———

Occupational Divisions	1930		1910		1910 to 1930 Per Cent*	
	Number	Per Cent*	Number	Per Cent*	Gain or Loss <u>1/</u>	Change <u>2/</u>
Unskilled Laborers, public service Soldiers, sailors and marines (not classified as to social-economic level)						
Professional Service						
Professional persons						
1. Education						
College presidents and pro- fessors						
Librarians						
Teachers--includes school super- intendents, supervisors, prin- cipals, instructors, Y.M.C.A., etc. Does not include art and music teachers						
2. Health						
Chiropractors and healers						
Dentists						
Physicians, surgeons and osteo- paths						
Trained nurses						
Veterinary surgeons						
3. Art and recreation						
Actors and showmen						
Artists and teachers of art						
Authors, editors and reporters						
Musicians and teachers of music						
4. Business						
Architects						
Designers, draftsmen and in- ventors						
Chemists, assayers and metal- lurgists						
Technical engineers--includes civil engineers and surveyors, electrical engineers, mechan- ical engineers and mining engineers						
Photography						
5. Law						
Lawyers, judges and justices						
6. Religion						
Clergymen						
Religious and social workers						

Occupational Work Sheet C (Continued)

Total _____ Males _____ Females _____

Occupational Divisions	1930		1910		1910 to 1930 Per Cent*	
	Number	Per Cent*	Number	Per Cent*	Gain or Loss <u>1/</u>	Change <u>2/</u>
7. Not classified--includes census headings under "other professional pursuits" that are not classified elsewhere in the table; county agents, farm demonstrators, etc.						
Proprietary						
Billiard room, dance hall, etc. keepers (classified under domestic and personal service, 1910)						
Keepers of charitable and penal institutions						
Keepers of pleasure resorts, race tracks, etc.						
Theatrical owners, managers and officials						
Directors, managers and officials of motion picture production						
Radio announcers, directors, managers						
White-collar workers						
Abstracters, notaries and justices of the peace						
Officials of lodges, societies, etc.						
Others--apprentices to architects, designers and draftsmen, and to other professional persons; technicians and laboratory assistants; other professional attendants and helpers						
Manual workers						
Semiskilled						
"Other semiprofessional occupations" attendants in pool rooms, bowling alleys, golf clubs, etc., helpers in motion picture production; theater ushers; turfmen, sportsmen, fortune tellers, etc.						
Unskilled						
Stage hands and circus helpers						
Laborers, professional service						
Domestic and Personal Service						
Proprietary						
Hotel keepers and managers						
Laundry owners, officials and managers						

Occupational Work Sheet C (Continued)

Total ——— Males ——— Females ———

Occupational Divisions	1930		1910		1910 to 1930 Per Cent*	
	Number	Per Cent*	Number	Per Cent*	Gain or Loss <u>1/</u>	Change <u>2/</u>
Restaurant, cafe and lunch-room keepers						
Saloon keepers						
Cleaning, dyeing and pressing shop owners, proprietors, managers and officials						
Manual workers						
Skilled						
Foremen and overseers in cleaning, dyeing, pressing shops, and in laundries						
Cooks						
Semiskilled						
Personal service						
Janitors and sextons						
Servants						
Waiters or waitresses						
Others						
Barbers, hairdressers, manicur- ists, etc.						
Bartenders						
Boarding and lodging-house keepers						
Housekeepers and stewards						
Deliverymen and "other operatives" in laundries and cleaning, dye- ing and pressing shops; reno- vators and cleaners						
Nurses (not trained)						
Other pursuits (n.o.s.)						
Unskilled						
Personal service						
Bootblacks						
Charwomen and cleaners						
Elevator tenders						
Launderers or laundresses (not laundry operatives)						
Porters (except in stores)						
Laborers, domestic and personal service						
Clerical Occupations						
White-collar workers						
Agents, collectors and credit men-- includes "advertising agents", who were classified under trade, 1930;						

Occupational Work Sheet C (Continued)

Total _____ Males _____ Females _____

Occupational Divisions	1930		1910		1910 to 1930 Per Cent*	
	Number	Per Cent*	Number	Per Cent*	Gain or Loss <u>1/</u>	Change <u>2/</u>
agents (n.o.s.); and purchasing agents (except for railroads) Bookkeepers, cashiers, accountants and auditors Clerks (except "clerks" in stores)-- includes office appliance operators, shipping clerks and weighers Messenger, errand and office boys and girls Stenographers and typists						

1/ Gain or loss in percentage of all gainfully occupied, 1910-1930.

2/ Percentage rate of increase or decrease in numbers, 1910-1930.

(n.o.s.) Not otherwise specified.

Source: United States Census, Occupational Statistics, Vol. IV.

1930: Either Table 4, pp. 529-33 or Table 5, pp. 534-36

1910: Either Table 3, pp. 152-207 or Table 4, pp. 208-291

Note: If 1940 census is available, use 1940 and 1920 data.

Number forms as follows: Form 6--Distribution of All Gainful Workers,
Form 7--Male Gainful Workers and Form 8--Female Gainful Workers.

OCCUPATIONAL DISTRIBUTION AND TRENDS

Form 9

Gainful Workers in the Population.

Item	1930			1920		
	10-19 Years	20-44 Years	45 yrs. & Over	10-19 Years	20-44 Years	45 yrs. & Over
			MALES			
Total population <u>1</u> / Number of gainful workers Gainful workers per cent of popula- tion	*	*	*	*	*	*
			FEMALES			
Total population <u>1</u> / Number of gainful workers Gainful workers per cent of popula- tion	*	*	*	*	*	*

1/ Use data from Form 3.

Source: United States Census, Occupational Statistics

1930: Vol. IV., Population - Occupations - Iowa - Table 10, p. 539.

1920: Vol. IV., Population - Occupations -

Cities of 100,000 inhabitants or more, Males - Table 19,
pp. 452-453, Females - Table 20, pp. 454-455.Cities of 25,000 to 100,000 inhabitants, Males and Females -
Table 23, pp. 466-472.

OCCUPATIONAL DISTRIBUTION AND TRENDS

Form 10

Age Distribution of Gainful Workers.

Age Groups	Number of Workers					
	1930			1920		
	Total	Male	Female	Total	Male	Female
Total						
10-13 years						
14-15 years						
16-17 years						
18-19 years						
20-24 years						
25-44 years						
45-64 years						
65 and over						
Unknown						
	Number of Workers in Per Cent					
Total	100.0*	100.0*	100.0*	100.0*	100.0*	100.0*
10-13 years						
14-15 years						
16-17 years						
18-19 years						
20-24 years						
25-44 years						
45-64 years						
65 and over						
Unknown						

Source: United States Census, Occupational Statistics

1930: Vol. IV., Table 10, p. 539.

1920: Vol. IV., Cities of 100,000 inhabitants or more,
Males - Table 19, pp. 452-453, Females -
Table 20, pp. 454-455.Cities of 25,000 to 100,000 inhabitants,
Males and Females - Table 23, pp. 466-472.

OCCUPATIONAL DISTRIBUTION AND TRENDS

Compiling the Data

The compilation of data relating to occupational trends is accomplished on the data collecting blank in the following manner:

I. Industrial Trends. Industrial Work Sheet A (Form 4)

- Step 1. Check the figures in the number column to see that they conform with totals.
- Step 2. Use the total number of workers in each number column as the base figure in determining percentage distribution for that column.
- Step 3. Determine the proportionate distribution of gainful workers in each number column by dividing the number of workers in each industrial group by the total number of workers. Carry the division to at least one decimal place.
- Step 4. Check the figures in the per cent column to determine accuracy. Slight adjustment may be necessary in certain figures.
- Step 5. Determine the difference between the figures in the per cent column of the two decennial periods for each industrial group, and report in column 5. This figure will be positive if the 1940 number is greater than the 1930 number, and negative if the opposite relationship is true.
- Step 6. The total of all negative figures in this column should equal the total of all positive figures.
- Step 7. To secure figures for column 6, use the figures from the 1930 column as the base figures. Determine the numerical difference between the figures in the 1940 and 1930 columns, and divide by the number in the 1930 column. If the number in the 1940 column exceeds the number in the 1930 column the result is positive; if the opposite is true the result is negative.

II. Industrial Distribution. Industrial Work Sheet B (Form 5)

- Step 1. Check the figures in the number column to see that they agree with totals.

Step 2. Using the total number of workers at the head of the column as the base figure, determine the percentage distribution of gainful workers for each industrial group in the total column.

Step 3. Repeat the above step for male and female workers.

Step 4. Check the percentage columns to see that each equals 100 per cent.

III. Occupational Trends. Occupational Work Sheet C (Forms 6, 7 and 8)

Step 1. Check the figures in the number columns for accuracy.

Step 2. Using the total number of workers in each column as the base number, determine the percentage of workers in each occupational division. Carry all calculations to at least two decimal places. The sum of these ten figures should be exactly 100 per cent. Make adjustments to secure proper totals where necessary.

Step 3. Select one occupational division and determine the percentage of the total number of workers in each occupational level--professional, proprietary, white-collar and manual workers. Check these figures against the total for the occupational division.

Step 4. When these figures have been determined, pass on to the next occupational division and repeat the process.

Step 5. In each occupational division determine the proportion of all gainful workers who are skilled, semiskilled and unskilled workers in that division. Check these figures against the total for all manual workers in this division.

Step 6. When these figures have been determined, pass on to the next occupational division and so on.

Step 7. Select one occupational level in an occupational division and determine the proportion of all gainful workers who are engaged in each occupation in that level. Check these figures against the total for that occupational level in that division.

Step 8. Proceed with the next social-economic level until all levels in all occupational divisions have been figured.

Step 9. Recheck all figures. Check occupations against social-economic levels, social-economic levels against occupational divisions, and occupational divisions against 100 per cent. Also check totals for all social-economic levels against 100 per cent.

Step 10. To secure figures for column 5 take the difference between figures in column 2 and column 4. If figures in column 4 are less than those in column 2 the resulting figure in column 5 is positive; if the opposite is true the figure is negative.

Step 11. Check negative and positive figures in column 5 to insure accuracy.

Step 12. To secure figures for column 6 determine the difference between figures in column 1 and column 3 and divide by the figure in column 3. If the figure in column 1 exceeds the figure in column 3 the resulting figure in column 6 will be positive; if the opposite is true the figure will be negative.

IV. Trends in Proportion of Gainful Workers in the Population--
Form 9.

Step 1. Divide the number of gainful workers reported in each age group by the total population in that age group, and record the resulting per cent.

V. Trends in the Age Distribution of Gainful Workers--Form 10

Step 1. From the figures presented in the upper half of the form determine the percentage distribution of gainful workers by age groups for each group of workers, and tabulate the resulting data in the lower part of the form.

OCCUPATIONAL TRENDS

Tabulating the Data

All occupational data have been treated collectively so far in the study. However, at this point occupational trends data should be separated from occupational distribution data, and each treated and presented separately in the study.

Although all of the data compiled in Forms 4, 6, 7 and 8 are essential to the survey, in that these forms carry the data which show the trends in gainful employment by specific industries and occupations, it is impossible to present and discuss all of these data in the body of the report without making the report too voluminous for ready use. Because of the importance of these data, however, it is suggested that they be presented in their original form in the appendix of the study.

Data concerning the changes in the industrial pattern of the community, compiled in Form 4, are reported in Table III-A. This table contains only the totals for the eight industrial groups and is compiled from figures presented in that form. To facilitate the analysis of trends by industrial groups it is suggested that the table contain totals for the production, distributive and service industries. These figures can be determined after other figures are entered in the table.

Data which show the changes in the occupational pattern of the community, compiled in Form 6, are reported in Table III-B. Only the totals for each occupational division are transferred to this table. Data are also grouped to show totals for production, distributive and service occupations groups.

Data which are presented in Table III-C are compiled from data in Form 6. To compile these data it will be necessary to total the figures for each level of employment in all occupational divisions for each decennial period. Attention should be called to the fact that figures presented in columns 5 and 6 cannot be transferred from Form 6 and, therefore, must be determined after all other figures are placed in this table.

Table III-D reports the data exactly as they were compiled in Form 9.

Transfer the data from Form 10 to Table III-E and determine the increases or decreases for each age group, and for each group of workers.

OCCUPATIONAL TRENDS

Table III-A. Changes in the Industrial Pattern of
 _____, 1930 to 1940.

Industry Groups	1940		1930		1930 to 1940 Per Cent	
	Number	Per Cent	Number	Per Cent	Gain or Loss	Change
All Industries		100.00		100.00		
<u>Production Industries</u>						
Agriculture and allied industries						
Extraction of minerals						
Manufacturing and mechanical industries						
<u>Distributive Industries</u>						
Transportation and communication						
Trade						
<u>Service Industries</u>						
Public service						
Professional service						
Domestic and personal service						
Industry Not Classified						

NOTE: THIS TABLE CANNOT BE USED UNLESS 1940 CENSUS DATA ARE AVAILABLE.

Source: Form 4.

OCCUPATIONAL TRENDS

Table III-B. Changes in the Occupational Pattern of
 _____, Iowa, 1910-30.

Occupational Divisions	1930		1910		1910 to 1930 Per Cent	
	Number	Per Cent	Number	Per Cent	Gain or Loss	Change
All Occupations		100.00		100.00		
<u>Production Occupations</u>						
Agriculture and allied occupations						
Extraction of minerals						
Manufacturing and mechanical pursuits						
<u>Distributive Occupations</u>						
Transportation and communication						
Trade						
<u>Service Occupations</u>						
Public service						
Professional service						
Domestic and personal service						
Clerical service						

Source: Form 6.

Table III-C. Changes in the Occupational Pattern of
 _____, Iowa, by Social-Economic Levels, 1910-30.

Social-Economic Levels	1930		1910		1910 to 1930 Per Cent	
	Number	Per Cent	Number	Per Cent	Gain or Loss	Change
All Levels		100.00		100.00		
Professional persons						
Proprietary persons						
White-collar workers						
Manual workers						
Skilled						
Semiskilled						
Unskilled						
Soldiers, sailors and marines						

Source: Form 6.

OCCUPATIONAL TRENDS

Table III-E. Age Distribution of Gainful Workers in _____, Iowa, 1920 and 1930.

Age Groups	Number of Workers								
	Total			Males			Females		
	1930	1920	Increase or Decrease	1930	1920	Increase or Decrease	1930	1920	Increase or Decrease
All Ages									
10-13 years									
14-15 years									
16-17 years									
18-19 years									
20-24 years									
25-34 years									
35-64 years									
65 years and over									
Unknown									

Percentage Distribution

All Ages	100.0	100.0		100.0	100.0		100.0	100.0	
10-13 years									
14-15 years									
16-17 years									
18-19 years									
20-24 years									
25-34 years									
35-64 years									
65 and over									
Unknown									

Source: Form 10

OCCUPATIONAL TRENDS

Presenting the Data

Industrial and Occupational Classifications Defined

Changes in the Industrial Pattern of the Community (Table III-A)

Production Industries
Distributive Industries
Service Industries

Changes in the Occupational Pattern of the Community (Table III-B)

Production Occupations
Distributive Occupations
Service Occupations

Occupational Trends by Social-Economic Levels (Table III-C)

Professional Persons
Proprietary Persons
White-Collar Workers
Manual Workers
 Skilled and Foremen
 Semiskilled
 Unskilled

Trends in the Proportion of the Population Who Are Gainful Workers
(Table III-D)

Trends in the Age Distribution of Gainful Workers (Table III-E)

Summary

Implications for Vocational Education

OCCUPATIONAL DISTRIBUTION

Tabulating the Data

Data concerning the occupational distribution of gainful workers which have been made available in the appendix as source material for vocational guidance are presented in the body of the study for the purpose of locating potential training areas for further study. Tables which have been prepared for presenting these data will be found in the following pages.

Table IV-A. Data presented in this table are taken from Form 5 exactly as tabulated in that form. Therefore, repeat the form and change the number.

Table IV-B. This table shows the occupational distribution of gainful workers over ten years of age by sex, and is compiled from data in Forms 6, 7 and 8. Transfer the figures which show the percentage distribution of gainful workers in each occupational division, and determine the totals for the three industrial groups--production occupations, distributive occupations and service occupations.

Table IV-C. This table shows the distribution of workers by sex and social-economic levels, and data are taken from Forms 6, 7 and 8. Compile the data from these forms, transfer the data to the table and determine the percentage distribution of gainful workers in each level of employment by sex and total.

Table IV-D. This table was developed primarily for the purpose of locating potential training areas which should be given further study. The data should be compiled from Forms 7 and 8 and transferred to this table. After the data are recorded in this table a careful study should be made of each area, that is, of each group of figures presented for each occupational division and social-economic level.

The rejection of areas for further study is determined by the level of employment and number of workers. For example, all professional workers may be eliminated because this level is not included in a vocational education program as defined in this study. Unskilled workers as a class may be eliminated because few occupations at this level have training content.

Other areas such as forestry and fishing, extraction of minerals, and in most urban areas, agriculture, may be eliminated because too few workers are engaged at a given level of employment to make a vocational training program possible. Areas in other occupational divisions and social-economic levels may be eliminated for the same reason. A line should be drawn under the entries in the columns which have not been eliminated, and these areas should be further analyzed.

OCCUPATIONAL DISTRIBUTION

Table IV-B. Occupational Distribution of Gainful Workers Ten Years of Age and Over by Sex for _____, Iowa, 1930.

Occupational Divisions	Total	Per Cent	Male	Per Cent	Female	Per Cent
Total		100.00		100.00		100.00
<u>Production Occupations</u>						
Agriculture and allied occupations						
Extraction of minerals						
Manufacturing & mechanical pursuits						
<u>Distributive Occupations</u>						
Transportation and communication						
Trade						
<u>Service Occupations</u>						
Public service						
Professional service						
Domestic and personal service						
Clerical service						

Source: Forms 6, 7 and 8.

Table IV-C. Distribution of Workers by Sex and Social-Economic Levels for _____, Iowa, 1930.

Social-Economic Levels	Total	Per Cent	Male	Per Cent	Female	Per Cent
All Levels		100.00		100.00		100.00
Professional persons						
Proprietary persons						
White-collar workers						
Manual workers						
Skilled						
Semiskilled						
Unskilled						
Soldiers, sailors and marines						

Source: Forms 6, 7 and 8.

OCCUPATIONAL DISTRIBUTION

Table IV-D. Distribution of Workers by Occupational Divisions and Social-Economic Levels, _____, Iowa, 1930.

Occupational Divisions	Professional Persons		Proprietary Persons		White-Collar Workers		Manual Workers					
	Male	Female	Male	Female	Male	Female	Skilled		Semiskilled		Unskilled	
							Male	Female	Male	Female	Male	Female
Total												
Agriculture												
Forestry and fishing												
Extraction of minerals												
Manufacturing and mechanical pursuits												
Transportation and communication												
Trade												
Public service*												
Professional service												
Domestic and personal service												
Clerical service												

*Does not include soldiers, sailors and marines who are not classified as to any social-economic level.

Note: Underline figures to indicate occupational groups selected for further study.

Source: Forms 7 and 8.

OCCUPATIONAL DISTRIBUTION

The remaining tables in this chapter will depend upon the areas selected for further study. A table should be used to present the data for each selected area. To illustrate, if male skilled workers in manufacturing and mechanical pursuits are selected for further study, a table should be presented which will show the distribution of male skilled workers in that area as follows:

Table IV-E. Distribution of Male Skilled Workers in Manufacturing and Mechanical Pursuits, _____, Iowa, 1930.

Occupation	Number	Per Cent
All Skilled Workers <u>1/</u>		
<u>Manufacturing and Mechanical Pursuits</u>		
Building and related trades		
Brick and stone masons		
Carpenters		
Etc.		

1/ Use data from Table IV-C.

Source: Form 7.

In cases where male and female workers in the same social-economic level of the same occupational division are selected for further study, data should be presented in the following manner:

Table IV-F. Distribution of White-Collar Workers in Trade Occupations, _____, Iowa, 1930.

Occupation	Male	Per Cent	Female	Per Cent
All White-Collar Workers <u>1/</u>				
<u>Trade Occupations</u>				
Clerks (in stores)				
Commercial travelers				
Etc.				

1/ Use data from Table IV-C.

Source: Forms 7 and 8.

Data concerning other selected areas should be presented in similar tables.

OCCUPATIONAL DISTRIBUTION

Presenting the Data

Industrial Distribution of Gainful Workers (Table IV-A)

- Production Industries
- Distributive Industries
- Service Industries

Occupational Distribution of Gainful Workers (Table IV-B)

- Production Occupations
- Distributive Occupations
- Service Occupations

Occupational Distribution by Levels of Employment (Table IV-C)

- Professional Persons
- Proprietary Persons
- White-Collar Workers
- Manual Workers
 - Skilled and Foremen
 - Semiskilled
 - Unskilled

Occupational Opportunities for Gainful Employment

Locating Potential Training Areas (Table IV-D)

Analyses of Potential Training Areas (Tables IV-E, F, etc.)

(Exact heading will depend upon selected areas)

Proprietary Persons

- Agriculture
- Manufacturing and Mechanical Pursuits
- Transportation and Communication
- Trade

White-Collar Workers

- Transportation and Communication
- Trade
- Clerical Service

Skilled Workers

- Manufacturing and Mechanical Pursuits
 - Building and Related Trades
 - Machine and Related Trades
 - Printing Trades
 - Miscellaneous Hand Trades
 - Foremen and Overseers

- Transportation and Communication
- Public Service
- Semiskilled Workers
- Manufacturing and Mechanical Pursuits
- Transportation and Communication
- Public Service
- Domestic and Personal Service

Summary

Implications for Vocational Education

Collecting the Data

Step 1. Arrange for a meeting with the members of advisory boards, committee members and local school administrators. Present the plan for the survey and secure their cooperation.

Step 2. Prepare a contact list of local commercial, industrial and service establishments (see Form 1).

Step 3. Eliminate from the list establishments which employ only a few workers.

Step 4. Transfer information from contact list to 3 x 5 file cards with blank spaces provided for the following items:

Address 1-5 (the table 0) room 4-1032

City San Francisco

State California

Line of business Printing

Contact person John Doe Title Manager

Block number 2/2/37 Date returned 2/24/37

Phone call 3/1/37 Personal call 3/23/37

Remarks

CHAPTER IV.

Employers' Occupational Survey

Need for Additional Occupational Data

So far in this study attention has been given to data taken from authentic published reports which relate to occupational trends and occupational distribution of gainful workers in the community. Two very important limitations are placed on these data. First, available published data were collected and reported some years ago, and although they supply a very valuable background they do not necessarily represent the present situation. Second, census data are limited to a restricted classification of occupations, and no data are available concerning several points which are valuable in a study of this kind.

To supplement these data it is necessary to include in this survey a study of the employment and training situation as it actually exists today. To secure these data it is necessary to go directly to the employers in the local community. This chapter of the survey, therefore, is given to a personal contact study of employment in the many industrial, commercial and service establishments in the community. Instructions and devices for making such a study are included in the following pages of this chapter.

Collecting the Data

Step 1. Arrange for a meeting with the chamber of commerce bureau heads, committee chairmen and local school administrators. Present the plan for the survey and secure their cooperation.

Step 2. Prepare a contact list of local commercial, industrial and service establishments (see Form 11).

Step 3. Eliminate from the list establishments which employ only a few workers.

Step 4. Transfer information from contact list to 3 x 5 file cards with blank spaces provided for the following data:

Section II-A-5 (See Code A) Phone 4-1032
Firm Name Loe Food Market
Address 3207 Main Street
Line of Business Grocery Store
Contact Official John Loe Title Manager

USE DATE STAMP

Blank Mailed 2/7/39 Blank Returned 2/24/39
Phone Call 2/17/39 Personal Call 2/24/39

Remarks:

Step 5. Arrange the cards alphabetically by firm name, classified according to industrial groups and types of establishments (see classification of establishments, Code A).

Step 6. Prepare employers' occupational survey blanks (Forms 12, 12a and 12b) and letter of transmittal. It is suggested that for best results these forms should be printed.

Step 7. Mail blanks to employers including a letter of transmittal and self-addressed stamped envelope.

Step 8. Record date of transmittal and return on file card.

Step 9. One week after mailing first letter send a follow-up letter to all establishments which have not returned blanks.

Step 10. At the end of the second week after mailing the first letter, get in touch with the firm by personal contact and secure data if possible.

Step 11. Segregate the returns according to industrial groups and types of establishments, and retain the segregation while tabulating the data (see classification of establishments, Code A).

Step 12. Collect the data requested on Forms 13, 14 and 15 from the United States Census of Business, 1935, or later report if available.

EMPLOYERS' OCCUPATIONAL SURVEY

Classification of Establishments by Industry Groups
and Types of Establishments

Code A

- I. MANUFACTURING
- A. Building industries
 - B. Chemical and allied industries
 - C. Clay, glass and stone industries
 - D. Clothing industries
 - E. Bakeries
 - F. Slaughter and packing houses
 - G. Other food and allied industries
 - H. Automobile factories
 - I. Iron and steel industries
 - J. Other metal industries
 - K. Leather industries
 - L. Wood and furniture industries
 - M. Machinery & equipment industries
 - N. Electrical machinery and supplies
 - O. Railroad repair shops
 - P. Paper, printing and allied industries
 - Q. Independent hand trades
 - R. Other industries
- II. RETAIL DISTRIBUTION
- A. Food Stores
 - 1. Candy & confectionery stores
 - 2. Dairy products stores and milk dealers
 - 3. Delicatessen stores
 - 4. Fruit stores and vegetable markets
 - 5. Grocery stores (without meats)
 - 6. Combination stores (groceries and meats)
 - 7. Meat markets (including seafood)
 - 8. Bakeries and caterers
 - 9. Other food stores
 - B. General Merchandise Group
 - 1. Dry goods and general merchandise stores
 - 2. Department stores
 - 3. Variety, five and ten, to-a-dollar stores
 - C. Apparel Group
 - 1. Men's furnishings stores
 - 2. Men's clothing--furnishings stores
 - 3. Family clothing stores
 - 4. Women's ready-to-wear stores
 - 5. Furriers and fur shops
 - 6. Millinery stores
 - 7. Custom tailors
 - 8. Accessories--other apparel stores
 - 9. Shoe stores
 - D. Automotive Group
 - 1. Motor-vehicle dealers (new)
 - 2. Used-car dealers
 - 3. Auto accessories--tire dealers
 - 4. Garages
 - 5. Other automotive
 - E. Filling Stations
 - F. Furniture-Household Group
 - 1. Furniture stores
 - 2. Floorcoverings--drapery stores
 - 3. Household appliance--radio stores
 - 4. Radio dealers
 - 5. Other home furnishings stores
 - G. Lumber-Building-Hardware Group
 - 1. Lumber and building--material
 - 2. Hardware stores
 - 3. Hardware and farm implements
 - 4. Heating and plumbing equipment
 - 5. Paint, glass, wall-paper stores
 - 6. Electrical supply stores
 - H. Eating and Drinking Places
 - 1. Restaurants--cafeterias--lunch rooms
 - 2. Lunch counters, refreshment stands
 - 3. Drinking places
 - I. Drug Stores
 - 1. Drug stores with fountain
 - 2. Drug stores without fountain
 - J. Other Retail Stores
 - 1. Cigar stores and cigar stands
 - 2. Florists
 - 3. Fuel and ice dealers
 - 4. Hay, grain and feed stores
 - 5. Farm and garden supply stores
 - 6. Jewelry stores
 - 7. News dealers
 - 8. Beer & liquor stores (packaged)
 - 9. Other classifications
 - K. Second-Hand Stores

EMPLOYERS' OCCUPATIONAL SURVEY

Code A (Continued)

III. WHOLESALE DISTRIBUTION

- A. Amusement and sporting goods
- B. Automotive
- C. Beers, wines and liquors
- D. Chemicals and paints
- E. Coal and coke
- F. Electrical goods
- G. Farm products - consumer goods
- H. Farm supplies
- I. Groceries (full line)
- J. Groceries (specialty lines)
- K. Machinery, equipment and supplies
- L. Petroleum and its products
- M. Waste materials
- N. All other

IV. SERVICE DISTRIBUTION

- A. Personal Services
 - 1. Barber shops
 - 2. Beauty parlors
 - 3. Cleaning, dyeing, pressing, alteration and repair shops
 - 4. Funeral directors, embalmers and crematories
 - 5. Laundries (not including power laundries)
 - 6. Photographic studios
 - 7. Shoe repair shops and shoe shine parlors (including hat cleaning)
 - 8. Other personal services
- B. Business Services
 - 1. Adjustment and credit bureaus, and collection agencies
 - 2. Sign painting shops
 - 3. Window cleaning service
 - 4. Other business services
- C. Repair Services and Custom Industries
 - 1. Automotive repairs and services (excluding general repair garages)
 - a. Automobile radiator shops
 - b. Automobile storage garages
 - c. Automobile top and body repair shops

- d. Parking lots
- e. Tire repair shops
- f. Other automotive repairs
- 2. Other repair services (except apparel and shoes)
 - a. Blacksmith shops
 - b. Electrical appliance repair shops
 - c. Locksmith and gunsmith shops
 - d. Radio repair shops
 - e. Upholstery and furniture repair shops
 - f. Watch, clock and jewelry repair shops
 - g. Other repair services
- 3. Custom industries
 - a. Printing and publishing shops
 - b. Tinsmith shops
 - c. Other industries
- D. Miscellaneous Services

V. OTHER INDUSTRIES

- A. Banks and investment companies
- B. Real estate and insurance companies
- C. Hotels and restaurants
- D. Hospitals
- E. Doctors', dentists' and lawyers' offices
- F. Public service offices
 - 1. Federal offices
 - 2. County offices
 - 3. City offices
 - 4. Police department
 - 5. Fire department
- G. Public utilities
- H. Theaters
- I. Transportation and communication
- J. Other industries

EMPLOYERS' OCCUPATIONAL SURVEY

Form 12

Name of Firm _____ Address _____

Kind of Business _____

Name of Person Reporting _____ Title _____

I. TRAINING PROGRAM:

- a. Do you have an organized training program in your establishment?
 Yes _____ No _____

II. IF YOU HAVE AN ORGANIZED TRAINING PROGRAM:

- a. Does it include a written plan of instruction? Yes _____ No _____
 b. Does training cover manipulative and related subjects _____,
 manipulative only _____, related only _____?
 c. Who trains the workers? Instructor _____, foreman _____,
 others (specify) _____
 d. What pay roll jobs are included in the training program?

III. PUBLIC SCHOOL COOPERATION IN VOCATIONAL TRAINING:

- a. In your opinion, can the public schools cooperate with business and
 industry in the vocational training of workers? Yes _____ No _____
 b. What pay roll jobs in your establishment should be included in such a
 program? _____

IV. EMPLOYMENT INFORMATION:

- a. Please report on the first blank approximate information concerning the
 distribution of employees in your establishment by type or level
 of employment.
 b. Please report on the second form the distribution of workers in your
 establishment by pay roll jobs.

V. REMARKS:

EMPLOYERS' OCCUPATIONAL SURVEY

Form 12a

Description of business _____

(Retail general merchandise, wholesale grocers, manufacturing wood products, radio service, automobile sales, service and repair, etc.)

NOTE: Please report number of workers normally employed at each level. In all cases when in doubt as to classification, report in blanks at bottom of form. "M" and "F" refer to males and females.

Occupational Levels	Number of Employees								Turnover		Beginning Jobs	
	Under 25 years of age		25-55 years of age		Over 55 years of age		Total employees all ages		Labor turnover last 12 months	Beginning jobs filled last 12 months		
	M	F	M	F	M	F	M	F				
Executive and salaried officials												
Office and clerical workers												
Selling employees												
Waiters and Waitresses												
Operative employees												
Warehouse and stockroom												
Foremen and overseers												
Skilled workers												
Semiskilled workers												
Apprentices												
Helpers												
Laborers												

Remarks:

EMPLOYERS' OCCUPATIONAL SURVEY

Form 13

Retail Trade.

Kinds of Business	Number of Stores	Sales (add 000)	Pro-prietors	Em- ployees*	Total Pay Roll* (add 000)
Total					
<u>Food stores</u>					
Candy and confectionery stores					
Dairy products stores and milk dealers					
Delicatessen stores					
Fruit stores and vegetable markets					
Grocery stores (without meats)					
Combination stores (groceries and meats)					
Meat markets (including seafood)					
Bakeries and caterers					
Other food stores					
<u>General stores (with food)</u>					
<u>General merchandise group</u>					
Dry goods and general merchandise stores					
Department stores					
Variety, five and ten, to-a-dollar stores					
<u>Apparel group</u>					
Men's furnishings stores					
Men's clothing--furnishings stores					
Family clothing stores					
Women's ready-to-wear stores					
Furriers and fur shops					
Millinery stores					
Custom tailors					
Accessories--other apparel stores					
Shoe stores					
<u>Automotive group</u>					
Motor-vehicle dealers (new)					
Used-car dealers					
Auto accessories - tire dealers					
Garages					
Other automotive					

Form 13 (Continued)

Kinds of Business	Number of Stores	Sales (add 000)	Pro-prietors	Em- ployees*	Total Pay Roll* (add 000)
<u>Filling stations</u>					
<u>Furniture-household group</u>					
Furniture stores					
Floorcoverings--drapery stores					
Household appliance--radio stores					
Radio dealers					
Other home furnishings stores					
<u>Lumber-building-hardware group</u>					
Lumber and building--material					
Hardware stores					
Hardware and farm implements					
Heating and plumbing equipment					
Paint, glass, wall-paper stores					
Electrical supply stores					
<u>Eating and drinking places</u>					
Restaurants--cafeterias--lunch rooms					
Lunch counters, refreshment stands					
Drinking places					
<u>Drug Stores</u>					
Drug stores with fountain					
Drug stores without fountain					
<u>Other retail stores</u>					
Cigar stores and cigar stands					
Florists					
Fuel and ice dealers					
Hay, grain and feed stores					
Farm and garden supply stores					
Jewelry stores					
News dealers					
Beer and liquor stores (packaged)					
Other classifications					
<u>Second-hand stores</u>					

*Pay roll includes no compensation for proprietors of unincorporated businesses. Number of employees includes full-time and part-time.

Source: U. S. Census of Business, Retail Distribution, Vol. II., 1935.
 Cities of more than 50,000 population, pp. 114-179.
 Cities of 10,000 to 50,000 population, pp. 180-234.

Note: Use latest available census figures.

EMPLOYERS' OCCUPATIONAL SURVEY

Form 14

Wholesale Trade.

Kinds of Business	Estab- lish- ments	Net Sales (add 000)	Pro- priators	Em- ployees	Total Pay Roll* (add 000)
Total					
Full-Service and Limited-Function Wholesalers					
Amusement and sporting goods					
Automotive					
Beers, wines and liquors					
Chemicals and paints					
Coal and coke					
Electrical goods					
Farm products - consumer goods					
Farm supplies					
Groceries (full line)					
Groceries (specialty lines)					
Machinery, equipment and sup- plies					
Waste materials					
All other					
Manufacturers' Sales Branches (with Stocks)					
Automotive					
Groceries (specialty lines)					
Machinery, equipment and sup- plies					
All other					
Manufacturers' Sales Offices (without Stocks)					
Bulk Tank Stations					
Petroleum and its products					
Agents and Brokers					
Groceries (specialty lines)					
All other					

*Includes no compensation for proprietors and firm members of unincorporated businesses.

Source: U. S. Census of Business, Wholesale Distribution, Vol. III., 1935.

Cities of more than 50,000 population, pp. 3-78.

Cities of 20,000 to 50,000 population, pp. 81-98.

Counties and cities of more than 5,000 population, pp. 101-151.

Note: Use latest available figures.

EMPLOYERS' OCCUPATIONAL SURVEY

Form 15

Service Establishments.

Kinds of Business	Estab- lish- ments	Receipts (add 000)	Pro- priators	Em- ployees*	Total Pay Roll* (add 000)
Total					
<u>Personal Services</u>					
Barber shops Beauty parlors Cleaning, dyeing, pressing, alteration and repair shops Funeral directors, embalmers and crematories Laundries (not including power laundries) Photographic studios Shoe repair shops and shoe shine parlors (including hat cleaning) Other personal services					
<u>Business Services</u>					
Adjustment and credit bureaus and collection agencies Sign painting shops Window cleaning service Other business services					
<u>Repair Services and Custom Indus- tries</u>					
<u>Automotive repairs and services (excluding general repair garages)</u> Automobile radiator shops Automobile storage garages Automobile top and body repair shops Parking lots Tire repair shops Other automotive repairs <u>Other repair services (except apparel and shoes)</u> Blacksmith shops Electrical appliance repair shops					

Form 15 (Continued)

Kinds of Business	Estab- lish- ments	Receipts (add 000)	Pro- priators	Em- ployees*	Total Pay Roll* (add 000)
Locksmith and gunsmith shops					
Radio repair shops					
Upholstery and furniture repair shops					
Watch, clock and jewelry repair shops					
Other repair services					
Custom industries					
Printing and publishing shops					
Tinsmith shops					
Other industries					
Miscellaneous Services					

*Pay roll includes no compensation for proprietors and firm members of unincorporated businesses. Number of employees includes both full-time and part-time employees (average for the year).

Source: U. S. Census of Business, Service Establishments, Vol. II., 1935.
 Cities of 25,000 or more population, Iowa, pp. 144-45.
 Counties and cities of 2500 or more population, Iowa (Totals),
 pp. 72-73.

Note: Use latest available figures.

EMPLOYERS' OCCUPATIONAL SURVEY

Compiling the Data

Step 1. When the survey blanks are returned by employers they should be segregated into four industrial groups according to Code A, classification of establishments: (1) manufacturing (2) trade--retail and wholesale (3) service establishments, and (4) other establishments. Classification of blanks should then be made by types of establishments under each of the four heads.

Step 2. Prepare work sheets D, E and F for tabulating data.

Step 3. Select one of the four industrial groups and proceed with the tabulation of data from Form 12. If the manufacturing group has been selected, write the word "Manufacturing" at the top of work sheet D. The first type of establishment encountered in the manufacturing group is the Building Industries. Write the word "Building Industries" at the left of the form just under the heading and record the data from the first and subsequent building trades blanks. When the data for all building industries have been entered, draw a line and total the columns.

Next, enter the name of the second type of establishment and proceed as before. When all data on manufacturing establishments have been entered, draw a double line and strike a total for the entire industrial group. Data for the other three industrial groups should be recorded in the same manner.

In recording data relative to the training program, include only those firms which reported having an organized program of training. This applies to all questions answered in Section II, Form 12. Since no space is provided for reporting the pay roll jobs included in organized training programs, it is suggested that you make a list of all the different pay roll jobs.

Step 4. Tabulate the data from Form 12a on work sheet E. Select the industrial group to be tabulated; write the name of the industrial group, the type of establishment and the level of employment in the blanks provided at the top of the sheet, and proceed with entering the data from the various blanks in this type of establishment in the spaces provided for such data.

When the data from all blanks have been entered, total the column and proceed with the second level of employment. When all levels of employment in each type of establishment have been recorded for this industrial group, clip the summation sheets together and proceed with the remaining industrial groups in the same manner.

Step 5. Record data from Form 12b on work sheet F. Select the industrial group and type of establishment to be tabulated. After a careful study of these blanks set up an alphabetic list of the pay roll jobs in this type of establishment which were reported on the survey blanks. This list may be further improved by segregating office and clerical workers and manual workers and realphabetizing.

Enter the name of the industrial group and the type of establishment in the spaces provided at the top of the sheet. Under pay roll job enter the name of the first pay roll job. Next, transfer the data concerning this pay roll job from each of the survey blanks for the selected establishment. When data concerning this pay roll job have been tabulated, total the figures in each column. Do the same for each pay roll job in the alphabetic list. When all pay roll jobs in this type of establishment have been compiled, draw a double line and determine totals for all pay roll jobs in this type of establishment.

In the same manner tabulate the data on pay roll jobs for other types of establishments in this industrial group, and then for establishments in other industrial groups.

EMPLOYERS' OCCUPATIONAL SURVEY

Work Sheet E

Industrial Group _____

Type of Establishment _____

Level of Employment _____

Type of Establishment and Level of Employment	Number of Employees								Turn-over		Begin. Jobs			
	Total All Cases		Under 25 yrs. of age		25-55 years		Over 55 Years		Last 12 Mos.	M	F	Filled Last 12 Mos.	M	F
	M	F	M	F	M	F	M	F						

Source: Form 12a.

EMPLOYERS' OCCUPATIONAL SURVEY

Tabulating the Data

After all data from the employers' occupational survey have been compiled on work sheets D, E and F, the next step in the procedure is the tabulation of data in preparation for presenting same in the narrative of the study. A series of tables have been developed for this purpose and are presented in the following pages.

The first table in this series, Table V, summarizes the data from the employers' survey blank, Form 12, concerning organized training and school cooperation, which were compiled on work sheet D. Only the totals for work sheet D are reported in Table V, as indicated by the headings included in the left-hand column of this table. The exact headings will, of course, depend upon the industrial groups and types of establishments which are included in each survey.

The second type of table, consisting of a group of five tables (Tables V-A-1, 2, 3, 4 and 5), is presented primarily to bring into the study information from the United States Census reports which show the total number of workers in each of the industrial groups--manufacturing, trade, service and other industries--which are treated separately in the study. A comparison of these figures with figures collected in the employers' survey will give some idea of the proportion of the total field which was covered in the employers survey.

The third type of table, consisting of a group of four tables (Tables V-B-1, 2, 3 and 4) shows the occupational distribution of gainful workers in establishments included in the employers' occupational survey. These data were compiled from Form 12a in work sheet E, by industrial groups and types of establishments, and should be so presented in the four tables.

The headings at the top of this table indicate the substitute headings for the several tables, and will depend upon the different types of establishments included in the survey. These tabulations show the distribution of gainful workers by age, the extent of turnover, and the beginning jobs filled by types of establishments in each of the four industrial groups.

The fourth group of tables (Tables V-C-1, 2, 3 and 4) shows the distribution of gainful workers by levels of employment as to age, turnover, and beginning jobs filled in the four industrial groups, each in a separate table. These data are taken from Form 12a as compiled in work sheet E.

The fifth group of tables (Tables V-D-1, 2, 3 and 4) shows the distribution of gainful workers by types of establishments in each industrial group as to degree of skill required, length of the training period, number in training, and the attitude of employers concerning the cooperation of the school with business and industry in the training of workers for each type of establishment. These data, which are presented in a table for each industrial group, are compiled in work sheet F. In this table report only the totals for each type of establishment in each industrial group.

The sixth type of table (Tables V-E:M-1, 2, etc.), consisting of one table for each type of establishment included in the survey, shows the distribution of workers in each type of establishment by pay roll jobs according to sex, degree of skill required, length of the training period, number in training, and the attitude of employers concerning the cooperation of the school in training workers for employment in these pay roll jobs.

Since the V-E types of tables are to be presented in the appendix it is suggested that this identification be dropped and that a series of table numbers be adopted for each group of tables. For example, all tables which have to do with manufacturing should be identified by the letter "M", and the number following this letter should refer to the type of establishment in that group. Thus, tables which contain data concerning the distribution of workers by pay roll jobs in the building trades would be numbered M-1, chemical and allied industries M-2, and so on. The trade group would be identified by the letter "T", service by the letter "S" and other industries by the letter "O", and in every case each type of establishment should be identified by a number after the letter.

EMPLOYERS' OCCUPATIONAL SURVEY

Table V. Summary Concerning Organized Training and School Cooperation.

Type of Establishment*	No. of Estab.	Can Schools Cooperate in Training			Organized Training Program			Organized Training Program													
								Written Plan			Training Includes				Instructed by						
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Man	Rel	M&R	NA	I	F	I&F	E	M	O	NA
Total																					
Manufacturing																					
Trade																					
Retail																					
Wholesale																					
Service																					
Other Industries																					
Banks & investment																					
Real estate & ins.																					
Hotels & restaurants																					
Hospitals																					
Prof. offices																					
Public service																					
Public utilities																					
Theaters																					
Trans. & comm.																					
Other industries																					

*The list under this heading depends on establishments included in the survey.

NA--not ascertainable; Man--manipulative, Rel--related, M&R--manipulative and related; I--instructor, F--foreman, I&F--instructor and foreman, E--employer, M--manager or department head, O--other.

Source: Work Sheet D.

Table V-A-1. Distribution of Gainful Workers in the Production Industries, _____, Iowa, 1930.

Total number of industrial establishments in _____ City _____ = _____

Type of Industry	Total		Males		Females	
	Number	Per <u>1</u> / Cent	Number	Per <u>2</u> / Cent	Number	Per <u>3</u> / Cent
Total						
Building industries						
Chemical and allied industries						
Clay, glass and stone industries						
Clothing industries						
Bakeries						
Slaughter and packing houses						
Other food and allied industries						
Auto factories and repair shops						
Blast furnaces and steel mills						
Iron and steel industries						
Metal industries, except iron and steel						
Lumber and furniture industries						
Paper and printing industries						
Electrical machinery and supply industries						
Independent hand trades						
Other manufacturing industries						

1/ Per cent of all gainful workers. 2/ Per cent of all male gainful workers. 3/ Per cent of all female gainful workers.

Source: Form 5.

Table V-A-2: Reproduce Form 13.

Table V-A-3: Reproduce Form 14.

Table V-A-4. Reproduce Form 15.

Table V-A-5. Distribution of Gainful Workers in
Selected Industries, 1930.

Type of Establishment	Total		Males		Females	
	Number	Per <u>1</u> / Cent	Number	Per <u>2</u> / Cent	Number	Per <u>3</u> / Cent
Total						
Banks and investment companies						
Real estate and insurance companies						
Hotels and restaurants						
Other professional and recreational						
Public service						
Transportation & communication						

- 1/ Per cent of all gainful workers.
2/ Per cent of all male gainful workers.
3/ Per cent of all female gainful workers.

Source: Compiled from Form 5.

Table V-B. Distribution of Gainful Workers by Types of _____
Establishments, and by Sex and Age.

<p>1. Manufacturing</p> <p>2. Retail and Wholesale</p> <p>Food</p> <p>General merchandise</p> <p>Apparel</p> <p>Automotive</p> <p>Filling stations</p> <p>Furniture-household</p> <p>Lumber-bldg.-hardware</p> <p>Eating and drinking</p> <p>Drug stores</p> <p>Other stores</p>	<p>3. Service</p> <p>Personal</p> <p>Business</p> <p>Repair</p> <p>Custom ind.</p> <p>Misc. services</p>	<p>4. Other Industries</p> <p>Banks and investments</p> <p>Insurance & real estate</p> <p>Hotels and restaurants</p> <p>Hospitals</p> <p>Professional offices</p> <p>Public service</p> <p>Public utilities</p> <p>Theaters</p> <p>Transportation and communication</p> <p>Others</p>
--	--	---

NOTE: Summarize data in four tables by industrial groups. Types of business to be used in left-hand column shown above.

Type of Establishment	Number of Employees								Turn-over		Begin. Job	
	Total All Ages		Under 25 yrs. of age		25-55 years of age		Over 55 yrs. of age		Last 12 Mos.		Filled last 12 Mos.	
	M	F	M	F	M	F	M	F	M	F	M	F
Total												
Building industry												
Chemical, clay, glass and stone												
Clothing industries												
Bakeries												
Packing houses												
Other food & allied industries												
Iron and steel industries												
Other metal industries												
Wood and furniture industries												
Paper, printing & allied industries												
Electrical machinery and supplies												
Railroad repair shops												
Independent hand trades												
Other industries												

Source: Work Sheet E.

Table V-C. Distribution of Gainful Workers by Occupational Levels,
Sex and Age in _____ Establishments.

1. Manufacturing
2. Retail and Wholesale Trade
3. Service Establishments
4. Other Establishments

NOTE: Summarize data in four tables by industrial groups as indicated above. In each table omit occupational levels which are not found in the industrial group being tabulated.

Occupational Levels	Number of Employees								Turn-over		Begin. Jobs	
	Total All Ages		Under 25 yrs. of age		25-55 years of age		Over 55 yrs. of age		Last 12 Mos.		Filled last 12 Mos.	
	M	F	M	F	M	F	M	F	M	F	M	F
Total												
Executive & salaried officials												
Office and clerical workers												
Selling employees												
Waiters and waitresses												
Operative employees												
Warehouse & stockroom employees												
Foremen and overseers												
Skilled workers												
Semiskilled workers												
Apprentices												
Helpers												
Laborers												
Others												

Source: Work Sheet E.

Table V-D. Sex, Training and Degree of Skill Required in
 _____, Establishments.

1. Manufacturing
2. Retail and Wholesale
3. Service Establishments
4. Other Establishments

NOTE: Summarize data in four tables by industrial groups. Classify by establishments as in Tables V-A-1, 2, 3 and 4.

Type of Establishment*	Em- plovees		Degree of Skill Required			Length of Training Period in Months					Training		
	M	F	H	M	L	Under 12	12 to 24	24 to 36	36 to 48	Over 48	No. in Train- ing	School Coop.	
												Yes	No
Retail and Wholesale													
Food													
General merchandise													
Apparel													
Automotive													
Filling stations													
Furniture and household goods													
Lumber, building and hardware													
Eating and drinking													
Drugs													
Others													

*This list will depend on establishments included in the survey.

H--high, M--medium, and L--low.

Source: Work Sheet E.

Table V-E. Pay Roll Jobs
 (Mfg., trade, service, other)
 (Bldg. ind., food, personal, banks and investments)

- M--Manufacturing
 - M-1. Building industries
 - M-2. Chemical and allied industries
 - M-3. Clothing industries
 - M-4. Bakeries
 - And so on
- T--Trade, Retail and Wholesale
 - T-1. Food
 - T-2. General merchandise
 - T-3. Apparel
 - T-4. Automotive
 - And so on
- S--Service
 - S-1. Personal services
 - S-2. Business services
 - And so on
- O--Other Industries
 - O-1. Banks and investments
 - O-2. Real estate and insurance
 - And so on

NOTE: Prepare a table of distribution of workers by pay roll jobs for each type of establishment. These tables should be presented in the Appendix.

Pay Roll Job	Em- ployees		Degree or Skill Required			Length of Training Period in Months					Training		
	M	F	H	M	L	Under 12	12 to 24	24 to 36	36 to 48	Over 48	No. in Train- ing	School Coop.	
												Yes	No

H--high, M--medium, and L--low.

Source: Work Sheet F.

EMPLOYERS' OCCUPATIONAL SURVEY

Presenting the Data

In presenting the data from the employers' occupational survey it is suggested that the tables be organized so that all data relating to the same industrial group will be presented simultaneously; that is to say, all tables referring to manufacturing should be presented and treated as one group, followed by tables relating to trade, then service and finally the group which includes all other industries.

Because of the large number of tables which are necessary in presenting the findings of the employers' survey it is suggested that all tables relative to the occupational distribution of gainful workers by pay roll jobs (Tables V-E: M-1-2, etc.) be presented in the Appendix. The following outline for the presentation of material in this chapter should be considered tentative only, and should be varied to bring out the findings which are considered most important in each individual survey.

Plan for Presenting the Data

Purpose of the Survey

Scope of the Survey

Plan Used in Conducting the Survey

Survey Returns

Survey Findings

Training Program

Establishments which Have an Organized Training Program
(Table V)

Training Conducted According to Written Plan (Table V)

Type of Training Program (Table V)

Who Instructs Trainees (Table V)

Pay Roll Jobs Included in Organized Training Programs

School Cooperation in Vocational Training

Employers' Attitude Concerning School Cooperation (Table V)

Pay Roll Jobs which Should Be Included in a Training Program

Remarks of Employers Concerning Vocational Training

Occupational Findings

Manufacturing Industries

Census Distribution of Gainful Workers by Sex and Types
of Establishments (Table V-A-1)

Employers' Survey Findings

Distribution of Gainful Workers by Types of Indus-
tries, Age and Sex (Table V-B-1)

Labor Turnover and Beginning Jobs Filled Last Twelve Months by Types of Establishments and Sex (Table V-B-1)

Distribution of Gainful Workers by Levels of Employment, Age and Sex (Table V-C-1)

Labor Turnover and Beginning Jobs Filled Last Twelve Months by Levels of Employment and Sex (Table V-C-1)

Distribution of Workers by Pay Roll Jobs, Sex and Types of Establishments (Table V-D-1)

Training and Degree of Skill Required by Types of Establishments and Sex (Table V-D-1)

Number of Workers in Training Program by Types of Establishments and Sex (Table V-D-1)

Attitude of Employers Concerning School Cooperation in Training Program (Table V-D-1)

To Be Placed in Appendix

Distribution of Workers by Pay Roll Jobs (Tables V-E: M-1, 2, 3, etc.)

Trade Industries

Census of Business

Retail Distribution--Number of Establishments, Sales, Personnel and Pay Roll (Table V-A-2)

Wholesale Distribution--Number of Establishments, Net Sales, Personnel and Pay Roll (Table V-A-3)

Employers' Survey Findings

Distribution of Gainful Workers by Types of Establishments, Age and Sex (Table V-B-2)

Labor Turnover and Beginning Jobs Filled Last Twelve Months by Types of Establishments and Sex (Table V-B-2)

Distribution of Gainful Workers by Levels of Employment, Age and Sex (Table V-C-2)

Labor Turnover and Beginning Jobs Filled Last Twelve Months by Levels of Employment and Sex (Table V-C-2)

Distribution of Workers by Pay Roll Jobs, Sex and Types of Establishments (Table V-D-2)

Training and Degree of Skill Required by Types of Establishments and Sex (Table V-D-2)

Number of Workers in Training Program by Types of Establishments and Sex (Table V-D-2)

Attitude of Employers Concerning School Cooperation in Training Program (Table V-D-2)

To Be Placed in Appendix

Distribution of Workers by Pay Roll Jobs (Tables V-E: T-1, 2, 3, etc.)

Service Industries

Census of Business

Service Establishments--Number of Establishments, Receipts, Personnel and Pay Roll (Table V-A-4)

Employers' Survey Findings

Distribution of Gainful Workers by Types of Establishments, Age and Sex (Table V-B-3)

Labor Turnover and Beginning Jobs Filled Last Twelve Months by Types of Establishments and Sex (Table V-B-3)

Distribution of Gainful Workers by Levels of Employment, Age and Sex (Table V-C-3)

Labor Turnover and Beginning Jobs Filled Last Twelve Months by Levels of Employment and Sex (Table V-C-3)

Distribution of Workers by Pay Roll Jobs, Sex and Types of Establishments (Table V-D-3)

Training and Degree of Skill Required by Types of Establishments and Sex (Table V-D-3)

Number of Workers in Training Program by Types of Establishments and Sex (Table V-D-3)

Attitude of Employers Concerning School Cooperation in Training Program (Table V-D-3)

To Be Presented in Appendix

Distribution of Workers by Pay Roll Jobs (Tables V-E: S-1, 2, 3, etc.)

Other Industries

Census Distribution of Gainful Workers by Sex and Types of Industries (Table V-A-5)

Employers' Survey Findings

Distribution of Gainful Workers by Types of Industries, Age and Sex (Table V-B-4)

Labor Turnover and Beginning Jobs Filled Last Twelve Months by Types of Establishments and Sex (Table V-B-4)

Distribution of Gainful Workers by Levels of Employment, Age and Sex (Table V-C-4)

Labor Turnover and Beginning Jobs Filled Last Twelve Months by Levels of Employment and Sex (Table V-C-4)

Distribution of Workers by Pay Roll Jobs, Sex and Types of Establishments (Table V-D-4)

Training and Degree of Skill Required by Types of Establishments and Sex (Table V-D-4)

Number of Workers in Training Program by Types of Establishments and Sex (Table V-D-4)

Attitude of Employers Concerning School Cooperation in Training Program (Table V-D-4)

To Be Presented in Appendix

Distribution of Workers by Pay Roll Jobs (Tables V-E: O-1, 2, 3, etc.)

Summary

Implications for Vocational Education

CHAPTER V.

SCHOOL INVENTORY

Collecting the Data

In the survey of a community to determine the needs for vocational education it is necessary to have a rather clear picture of the educational facilities in the community, and the extent to which these facilities are contributing to the training of workers who are needed in the community. In collecting data for this study attention should also be given to the trends in school enrollment, holding power of the school, the age-grade distribution of pupils, curriculum trends, the practical subject offerings which are indicative of occupational areas, and the present program of vocational education in the schools.

Forms 16-27, inclusive, have been prepared for collecting data which are needed to give the essential information for this study. Data requested in Forms 16 to 20, 26 and 27 are self-explanatory. In entering data on Forms 21 to 25 attention is called to the fact that only subjects for which credit toward graduation is offered should be included. Class hours of enrollment should be reported rather than class enrollment or clock hours. This will make possible an accurate count of enrollment in classes which meet for a period of more or less than one class hour each day.

For example, 1000 pupils are enrolled in classes in a high school which has a six-period day. The maximum total enrollment in such a school would be 6000 class hours of enrollment. If 500 pupils were enrolled in English classes which met for one class hour each day, the number 500 should be written in the proper year column after the word "English". Also, if 300 pupils were enrolled in Civics which met for a class period every other day, 150 rather than 300 should be entered in the form. But if 300 pupils were enrolled in shop classes which met for a double period each day, the number 600 should be entered in the proper space on the form.

SCHOOL INVENTORY

Form 16

Educational Facilities.

Kind of Schools	Number of Schools	Grades Included	Approx. Enrollment
PUBLIC SCHOOLS			
Elementary schools			
Junior high schools			
Senior high schools			
Junior college			
Other schools or classes			
Vocational school			
All-day			
Part-time			
Evening			
Special schools			
PRIVATE AND CHURCH SCHOOLS			
BUSINESS SCHOOLS AND COLLEGES			
TRADE SCHOOLS			
OTHER SCHOOLS AND COLLEGES			

Note: Schools may be located in city directory or telephone directory.

Source: Secure data from schools.

SCHOOL INVENTORY

Form 17

Population and School Attendance.

Age Groups	1930			1910			1910-1930
	Total Pop.	School Attend.	Per Cent*	Total Pop.	School Attend.	Per Cent*	Per Cent Gain*
Total							
7-13 years							
14-15 years							
16-17 years							
18-20 years							

Source: United States Census, Population.

1930: Vol. III., Part 1, Cities of 10,000 population or more, Table 15, pp. 781-782.

1920: Vol. III., Cities of 10,000 or more population, Table 10, pp. 329-330.

SCHOOL INVENTORY

Form 18

School Enrollment, Grades 1 to 12 Inclusive, School Years 19__ to 19__.

Grades	School Years												
	<u>1</u> /												
Total													
First	—												
Second		—											
Third			—										
Fourth				—									
Fifth					—								
Sixth						—							
Seventh							—						
Eighth								—					
Ninth									—				
Tenth										—			
Eleventh											—		
Twelfth												—	

Graduates

Eighth
Twelfth

1/ Current year.

Note: Span of 12 years including current school year.

Date _____ School _____

Source: Records in the office of the superintendent of schools.

SCHOOL INVENTORY

Form 19

Tuition Pupils.

Year	Number of Tuition Pupils	
	Junior High	Senior High
Total		
1930		
1931		
1932		
1933		
1934		
1935		
1936		
1937		
1938		
1939		
1940		

Source: Data available in the superintendent's office.

SCHOOL INVENTORY

Form 20

Age-Grade Distribution of Pupils, Grades 1 to 12 Inclusive (Current School Year).

Grades	Age in Years																	
	Under 5	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Over 20
Total																		
First																		
Second																		
Third																		
Fourth																		
Fifth																		
Sixth																		
Seventh																		
Eighth																		
Ninth																		
Tenth																		
Eleventh																		
Twelfth																		

Source: Records in the office of the superintendent of schools.

Date _____

School _____

SCHOOL INVENTORY

Form 21

Trends in Subject Enrollment.

Department and Subject	Enrollment				19 - Per Cent Change*	Department and Subject	Enrollment				19 - Per Cent Change*	
	19 <u>1</u> / —	Per Cent*	19 —	Per Cent*			19 <u>1</u> / —	Per Cent*	19 —	Per Cent*		
Total Hours of Enrollment		100.0		100.0								
ACADEMIC AND MISCELLANEOUS						4. Social Science						
1. Languages						a. History						
a. English						b. Civics						
b. French						c. Economics						
c. German						d. Sociology						
d. Latin						e. _____						
e. Spanish						f. _____						
2. Science						5. Miscellaneous						
a. Chemistry						a. _____						
b. Physics						b. _____						
c. Biology						c. _____						
d. Botany						d. _____						
e. Zoology												
f. _____						PRACTICAL SUBJECTS						
3. Mathematics						1. Agriculture						
a. Arithmetic						2. Commercial						
b. Algebra						3. Home Economics						
c. Geometry						4. Industrial Arts						
d. Trigonometry												
e. _____						VOCATIONAL SUBJECTS						
f. _____						1. Agriculture						
						2. Distributive						
						3. Homemaking						
						4. Trade & Industrial						

1/ Current year. NOTE: Supply data for present school year and include a span of 10 years. Include only subjects for which credit toward graduation is given.

Source: Office of high school principal.

SCHOOL INVENTORY

Form 22

Enrollment in Commercial Courses in the Senior High Schools.

Commercial Subjects	Enrollment				19 - Per Cent Change*
	19__ ^{1/} Per Cent*	19__ ^{2/} Per Cent*	19__ ^{2/} Per Cent*	19__ ^{2/} Per Cent*	
Total Hours of Enrollment ^{3/}					
Typewriting					
Stenography					
Bookkeeping					
Office Practice					
Commercial English					
Commercial Law					
Commercial Geography					
Commercial Math					
Salesmanship					
Other Subjects					

^{1/} Current school year.^{2/} Span of ten years.^{3/} Same as commercial enrollment in Form 21.

NOTE: Record enrollment in regular credit subjects only.

Source: High school principal's office.

School _____

City _____

SCHOOL INVENTORY

Form 23

Enrollment in Home Economics Subjects

Home Economics Subjects	Enrollment				19 - Per Cent Change*
	19__ <u>1/</u> Per Cent*	19__ <u>2/</u> Per Cent*	19__ <u>2/</u> Per Cent*	19__ <u>2/</u> Per Cent*	
Total Hours of Enrollment <u>3/</u>					
Dietetics					
Clothing					
Food					
Home Management					
Household Sewing					
Other Subjects					

1/ Current school year.2/ Span of ten years.3/ Same as home economics enrollment in Form 21.

Note: Record enrollment in regular credit subjects only.

Source: High school principal's office.

School _____ City _____

SCHOOL INVENTORY

Form 24

Enrollment in Industrial Arts Classes in the Senior High Schools.

Industrial Arts Classes	Enrollment				19 - Per Cent Change*
	19__ ^{1/}	Per Cent*	19__ ^{2/}	Per Cent*	
Total Hours of Enrollment ^{3/}					
WOODWORK					
Cabinetmaking					
Carpentry					
Patternmaking					
METAL WORK					
Cold metal					
Forge					
Foundry					
Machine shop					
Acetylene welding					
Arc welding					
Sheet Metal					
MECHANICAL DRAFTING					
Machine drafting					
Architectural drafting					
PRINTING					
ELECTRICITY					
OTHER COURSES					

^{1/} Current school year. ^{2/} Span of ten years.^{3/} Same as industrial arts enrollment in Form 21.

Note: Record enrollment in regular credit subjects only.

Source: High school principal's office.

School _____ City _____

SCHOOL INVENTORY

Form 25

Enrollment in Day Vocational Courses in the Senior High School.

Vocational Courses	Enrollment				19 - Per Cent Change*
	19__ <u>1/</u> Per Cent*		19__ <u>2/</u> Per Cent*		
Total Hours of Enrollment <u>3/</u>					
Agriculture _____ _____					
Distributive Retail Selling Office Practice					
Homemaking _____ _____ _____					
Trade and Industrial _____ _____ _____ _____					

- 1/ Current school year.
- 2/ Span of ten years.
- 3/ Same as vocational enrollment in Form 21.

NOTE: Report on regularly organized day vocational courses in which school pupils are enrolled.

Source: Office of the high school principal or vocational director.

School _____ City _____

SCHOOL INVENTORY

Form 26

Enrollment in Vocational Extension Courses for Out-of-School Youth
and Adults.

Vocational Extension Courses	Enrollment	
	19__	<u>1/</u> 19__ <u>2/</u>
Agriculture _____ _____ _____		
Distributive _____ _____ _____		
Homemaking _____ _____ _____		
Trade and Industrial _____ _____ _____ _____ _____		

1/ Current school year.

2/ Span of ten years.

NOTE: Do not include any day school vocational classes.

Source: Office of the superintendent of schools or vocational
director.

School _____

City _____

SCHOOL INVENTORY

Form 27

Program of Practical Studies in Secondary Schools.

Grade	Commercial	Home Economics	Industrial Arts
JUNIOR HIGH SCHOOL			
7B			
7A			
8B			
8A			
9B			
9A			
SENIOR HIGH SCHOOL			
10B			
10A			
11B			
11A			
12B			
12A			

Source: Course of study, high school principal's office.

School _____

City _____

SCHOOL INVENTORY

Compiling the Data

Data collected in Forms 16, 18, 19, 20, 26 and 27 are in the form in which they are to be presented and, therefore, need not be compiled.

In Form 17 determine the proportion of the population in each group who are attending school by dividing the number attending school by the total population in that age group.

Data collected on Forms 21, 22, 23, 24 and 25 will be compiled in the following manner:

- Step 1. Check the figures in each form to determine accuracy.
- Step 2. Use the total hours of enrollment in all school subjects as the base figure in determining percentage distribution in all forms (21 to 25, inclusive).
- Step 3. Divide the enrollment figures for each subject and subject group by the total hours of enrollment to determine the percentage distribution of enrollment in all forms and columns.
- Step 4. Check totals for specific subjects against subject groups and subject groups against 100 per cent.
- Step 5. Determine the change in subject enrollment by finding the difference between figures in column 2 and column 4. The change is positive if figures in column 2 exceed figures in column 4, and negative if the opposite is true.

Data from Form 18 are also used to show the trends in school enrollment over a period of twelve years preceding the current school year. Transfer data from the first and last columns of Form 18 to the number columns in the following form, which for identification purposes will be called Table VI-C.

When the figures have been entered in Table VI-C, determine the percentage distribution of enrollment for each grade and year. Report the increase or decrease in enrollment in numbers in column 5, and in per cent in column 6. The percentage in column 6 will be

Table VI-C. Trends in School Enrollment.

Grade	Public School Enrollment				19 -19	
	19		<u>1</u> / 19		Change	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Total		100.00		100.00		
<u>Elementary</u>						
First						
Second						
Third						
Fourth						
Fifth						
Sixth						
<u>Junior High</u>						
Seventh						
Eighth						
Ninth						
<u>Senior High</u>						
Tenth						
Eleventh						
Twelfth						

1/ Current year.

Source: Form 18.

secured by finding the difference between figures in columns 2 and 4, and will be positive if the number in the column representing the enrollment in the current year exceeds that of twelve years ago, and negative if the opposite is true.

SCHOOL INVENTORY

Tabulating the Data

Since all data collected in this study are to be tabulated on the forms in which they were collected, attention need be given only to the numbering of tables.

- Table VI-A. Educational Facilities in the Community (Form 16)
- Table VI-B. Population and School Attendance (Form 17)
- Table VI-C. Trends in School Enrollment (Table VI-C)
- Table VI-D. Holding Power of the School (Form 18)
- Table VI-E. Age-Grade Distribution of Pupils (Form 20)
- Table VI-F. Trends in School Subject Enrollment (Form 21)
- Table VI-G. Trends in Enrollment in Commercial Subjects (Form 22)
- Table VI-H. Trends in Enrollment in Home Economics Subjects (Form 23)
- Table VI-I. Trends in Enrollment in Industrial Arts Subjects (Form 24)
- Table VI-J. Trends in Enrollment in Day Vocational Classes (Form 25)
- Table VI-K. Enrollment in Vocational Extension Classes (Form 26)
- Table VI-L. Program of Practical Studies in the Secondary Schools (Form 27)

SCHOOL INVENTORY

Presenting the Data

Educational Facilities in the Community (Table VI-A)

- Public Schools
 - Elementary Schools
 - Secondary Schools
 - Special Schools and Classes
 - Vocational Classes
 - Day Classes
 - Extension Classes
- Private and Parochial Schools
- Business Schools and Colleges
- Trade Schools
- Other Schools and Colleges

School Population and Attendance (Table VI-B)

Enrollment Trends (Table VI-C)

Holding Power of the Schools (Table VI-D)

Age-Grade Distribution of Pupils (Table VI-E)

Curriculum Trends (Table VI-F, G, H, I, J, K and L)

- Academic Subjects
- Practical Subjects
 - Agriculture
 - Commerce
 - Home Economics
 - Industrial Arts
- Vocational Subjects
 - Day School
 - Agriculture
 - Distributive
 - Homemaking
 - Trade and Industrial
 - Extension Classes
 - Agriculture
 - Distributive
 - Homemaking
 - Trade and Industrial

Provisions for Practical Education in the School Program

Summary

Implications for Vocational Education

CHAPTER VI.

YOUTH SURVEYS

Collecting the Data

In any survey of a community to determine the needs for vocational education it is essential that a study be made of the status of youth in that community. Two groups of youth are given attention in this study--the youth who are still enrolled in the secondary school, and the youth included in the age group 16 to 24 years inclusive, who have discontinued their education. Since the type of information which is needed concerning these two groups of youth is somewhat different, two survey schedules have been developed and are presented in this study. These survey schedules have been used repeatedly and have proven very successful in collecting the information which is needed.

Administration of the Schedule

Experience with past surveys indicates that a satisfactory method of administering the youth surveys, both in-school and out-of-school, is through the homerooms of the secondary schools. The procedure used in collecting these data is as follows:

In-School Youth Survey

Step 1. Call a meeting of all homeroom teachers in the secondary schools.

Step 2. Explain the purpose of the survey and secure the cooperation of all teachers.

Step 3. Present in detail the plan for conducting the survey.

Step 4. Place a blank in the hands of each teacher; discuss the questions, point by point, and explain how questions are to be answered.

Step 5. Set a definite date for administering the survey.

Step 6. Secure a list showing the enrollment in each homeroom in all secondary schools.

Step 7. Count out the blanks required by each homeroom, number bundles according to the number of the homerooms, and see that the blanks are delivered in ample time for use.

Step 8. Collect the blanks and hold for tabulation.

NOTE: To avoid confusion the in-school youth survey should be completed before the out-of-school survey is administered.

8. DO YOU INTEND TO GO TO COLLEGE?

- 1 Yes
- 2 No
- 3 Undecided

17-19. WHAT KIND OF WORK DO YOU DO DURING OUT-OF-SCHOOL HOURS?

- 1 Specify _____
- 2 No work

9-16. WHICH ONE SCHOOL SUBJECT YOU HAVE TAKEN DO YOU LIKE BEST? LIKE LEAST?

Like best Like least

Academic

- | | | |
|---|----------------|---|
| 1 | Languages | 1 |
| 2 | Mathematics | 2 |
| 3 | Science | 3 |
| 4 | Social Studies | 4 |

Practical Subjects

- | | | |
|---|-----------------|---|
| 1 | Agriculture | 1 |
| 2 | Commercial | 2 |
| 3 | Home Economics | 3 |
| 4 | Industrial Arts | 4 |

Vocational Subjects

- | | | |
|---|------------------------------------|---|
| 1 | Agriculture | 1 |
| 2 | Retail Selling and Office Practice | 2 |
| 3 | Homemaking | 3 |
| 4 | Trade and Industrial | 4 |

98 No choice 98

20. IS THIS WORK PRIMARILY?

- 1 At home with pay
- 2 At home without pay
- 3 Away from home with pay
- 4 Away from home without pay
- 5 Other
- 6 No work

21-23. WHAT OCCUPATION WOULD YOU LIKE MOST TO FOLLOW?
(Give first choice only)

- 1 Specify _____
- 2 No choice

24-26. WHAT IS THE OCCUPATION OF YOUR FATHER?

- 1 Specify _____
- 2 No occupation

IN WHAT BUSINESS OR INDUSTRY IS THIS OCCUPATION?

Specify _____

27. IF A CENTRAL VOCATIONAL SCHOOL WERE TO BE ESTABLISHED IN THE CITY OFFERING OPPORTUNITIES FOR ADVANCED VOCATIONAL TRAINING FOR TRADES, INDUSTRIES, COMMERCE, HOME ECONOMICS, ETC., WOULD YOU CHOOSE TO ATTEND SUCH A SCHOOL?

- 1 Yes _____ 2 No _____ 3 Uncertain _____

(Note: A question might be asked at this point concerning the occupation for which vocational training is desired.)

Out-of-School Youth Survey

A method of reaching a fairly good cross section of out-of-school youth for the purpose of filling out the schedules is to administer the survey through the homerooms of the secondary schools. This method proves effective where the school assumes responsibility for the survey. By the use of this means the need for interviews and house-to-house canvassing is obviated. This method assumes a complete sampling of youth.

The plan follows:

Step 1. Each child in the in-school youth survey will be asked to report the names of each older brother or sister 16 to 24 years old, regardless of whether they are single or married, employed or not employed, living at home or in another part of the community, except that no card will be filled out for a brother or sister who is enrolled in the schools of the community.

Step 2. Each pupil who has suggested a name will be asked to carry a schedule to his out-of-school brother or sister. These schedules will be filled out at home and returned by the child.

Step 3. Each child included in the in-school youth survey will be asked to suggest the names of friends in the community who are of ages 16 to 24 years, inclusive. These friends should be only those to whose homes these children are accustomed to go, and should exclude as far as practicable those in the older brother and sister group.

Step 4. Request each child to carry a schedule to the friend whose name he supplied, ordinarily using the relative or older child where two children suggest the same name. The schedule, when filled out, will be returned by the child.

Step 5. Determine the number of blanks needed by each homeroom, count out the blanks and deliver them to the proper homeroom.

Step 6. Collect the blanks from the various homerooms.

Step 7. Assemble alphabetically and remove duplicates.

Step 8. Collect the blanks and hold for tabulation.

NOTE: An attempt should be made to include as large a sampling of out-of-school youth as possible.

56-57. HOW MANY YEARS HAVE YOU BEEN
OUT OF SCHOOL _____?

58. WHAT ORGANIZED VOCATIONAL
TRAINING HAVE YOU HAD SINCE
LEAVING SCHOOL OR COLLEGE?

- 1 Correspondence or extension
courses
- 2 Evening school
- 3 Business school
- 4 Part-time classes with
apprenticeship
- 5 Specialized school other
than the above
- 6 No organized training

59. ARE YOU EMPLOYED?

- 1 Full time
- 2 Part time
- 3 Occasionally
- 4 Not at all

60. IS YOUR EMPLOYMENT PRIMARILY?

- 1 At home with pay
- 2 At home without pay
- 3 Away from home with pay
- 4 Away from home without pay
- 5 Other
- 6 Not employed

61-63. WHAT IS YOUR PRESENT OCCUPATION?

- 1 Specify _____
- 2 No occupation

IN WHAT BUSINESS OR INDUSTRY
IS THIS OCCUPATION?

64-68. FOR WHAT OCCUPATION ARE YOU
SPECIFICALLY PREPARED BY
VOCATIONAL TRAINING? (Do
not include nonvocational
agriculture, industrial
arts, home economics, etc.)

- 1 Specify _____
- 2 No occupation

Length of training _____ months

69-73. FOR WHAT OCCUPATION ARE YOU
PREPARED BY EXPERIENCE?

- 1 Specify _____
- 2 No occupation

Length of experience _____ months

74-76. WHAT OCCUPATION WOULD YOU LIKE
MOST TO FOLLOW? (First choice
only).

- 1 Specify _____
- 2 No choice

77-78. HOW MANY MONTHS HAVE YOU BEEN
UNEMPLOYED? (Answer under
either "a" or "b").

a. Since last regular job of one month
or more duration:

- 1 Less than five months
- 2 Five to eight months
- 3 Nine to twelve months
- 4 One to two years
- 5 More than two years

b. Since leaving school or college (if
you have never been regularly
employed):

- 6 Less than five months
- 7 Five to eight months
- 8 Nine to twelve months
- 9 One to two years
- 10 More than two years

- 98 Question does not apply
- 99 Not ascertainable

79-80. HOW MANY JOBS OR POSITIONS
HAVE YOU HELD SINCE LEAVING
SCHOOL OR COLLEGE? (Count
only those of more than one
month's duration).

- 1 Specify _____
- 2 No regular employment

YOUTH SURVEYS

Compiling the Data

When all youth survey schedules have been returned to the survey director, the next step is to transfer the data from each of the survey schedules to the work sheets prepared for that purpose. Two work sheets have been prepared--work sheet G for compiling the data from in-school schedules and work sheet H for out-of-school schedules.

It is evident that the two surveys should be kept segregated at all times, and should be dealt with separately. Although all out-of-school survey schedules should be compiled as one group, in-school youth survey schedules may be classified by schools or grades if there is a specific reason for doing so. For the general purposes of this survey all data from the secondary schools should be treated as one group.

The procedure to be followed in compiling the data for both surveys is outlined in the following steps:

- Step 1. Edit each survey blank to check on completeness and consistency of information.
- Step 2. Keep the in-school and the out-of-school blanks segregated at all times.
- Step 3. Segregate the survey schedules in each survey as to sex. (If sex is not indicated and cannot be determined by the first name of the case, eliminate the schedule).
- Step 4. Arrange the schedules in ascending order by age in each sex group.
- Step 5. Number the schedules serially by sex, starting with the youngest age group.
- Step 6. Code the schedules. Place a code number beside each answer which was not precoded when the schedule was printed. No matter how carefully the schedules have been prepared, there are always a few questions which cannot be precoded.

Code the schedules in accordance with the youth survey code, in-school Code B, out-of-school Code C, and the occupational code, Code D.

The occupational code is used to identify specific occupations and occupational divisions in the in-school youth survey, questions 21-23 and 24-26; in the out-of-school survey, questions 61-63, 64-66, 69-71 and 74-75. Although specific occupa-

tions may be identified and carried in this study, to avoid a too voluminous report it is suggested that occupations be classified by occupational divisions, and that the specific occupations included in the code be used for identification purposes only.

Step 7. Prepare a sufficient supply of in-school work sheet G and out-of-school work sheet H for use in compiling data from the schedules. The number at the head of columns in the work sheets refers to the questions in the survey schedules. Since this work is arranged for machine as well as hand tabulation, the numbers at the head of each column indicate the number of columns on the sorting machine which will be needed to handle the maximum figure in the column.

For example, the age of youth, which is coded in the actual number of years, requires two columns on the sorting machine and, consequently, two columns are allowed on the blank. Also, since occupations are coded in hundreds, three spaces are allowed on the blank for tabulating occupations. Another factor of importance as far as machine tabulation is concerned is that the two surveys are numbered serially so that the data from both surveys may be recorded on an eighty-space machine card, thus reducing the cost of machine tabulation.

Step 8. Compile the data on the work sheets. Select the group to be compiled and start with questionnaire No. 1 in that group. If the male group in the in-school survey is selected, place the number of the schedule in the column headed "schedule number", at the left side of work sheet G. In column 1-2, place the actual age of the individual. If the actual age is not recorded and it cannot be secured from other data in the schedule, place the number 99, not ascertainable, in the column. The remaining data from this schedule should be transferred to the work sheet in like manner.

Next, proceed with schedule No. 2 in this group, and so on until all data from this group of schedules have been transferred to work sheet G. Follow the same procedure in transferring data from the schedules filled out by in-school females, and record the data on a second series of work sheets.

The data for the out-of-school schedules should be compiled on work sheet H in like manner.

IN-SCHOOL YOUTH SURVEY

Work Sheet G

City _____

Sex _____

Schedule Number		Subjects Liked		Kind of Work	Occupation
		Best	Least		
	1-2	Age			
	3	Sex			
	4	Race or Color			
	5	Residence			
	6	School Grade			
	7	H. S. Intentions			
	8	College Intentions			
	9	Academic			
	10	Practical			
	11-12	Vocational			
	13	Academic			
	14	Practical			
	15-16	Vocational			
	17-19	Out of School			
	20	Type			
	21-23	First Choice			
	24-26	Father's Occupation			
	27	Attend Voc. School			

OUT-OF-SCHOOL YOUTH SURVEY

Work Sheet H

City _____

Sex _____

Schedule Number		
45-46	Age	
47	Sex	
48	Race or Color	
49	Marital Status	
50	Community	
51-52	Grade or College Year Completed	
53-54	Age at Time of Leaving School	
55	Reasons Lv. Sch.	
56-57	Years Out of School	
58	Voc. Training	
59	Employed?	
60	Type Employment	
61-63	Present Occupation	Occupation
64-66	Occupation Prepared for by Training	
67-68	Number of Months	
69-71	Occupation Prepared for by Experience	
72-73	Number of Months	
74-76	Occupational Choice	
77-78	Months Unemployed	
79-80	Number of Jobs Held	

YOUTH SURVEY CODE

In-School

Code B

<u>Code Line</u>	<u>Code No.</u>	<u>Code Line</u>	<u>Code No.</u>
1- 2. PRESENT AGE IN YEARS.....	Years		
Not ascertainable.....	99		
3. SEX		9-12. SCHOOL SUBJECT LIKED BEST	
Male.....	1	9. Academic	
Female.....	2	Languages.....	1
(Discard all blanks		Mathematics.....	2
where sex is not ascer-		Science.....	3
tainable)		Social Science.....	4
4. RACE OR COLOR		10. Practical Subjects	
White.....	1	Agriculture.....	1
Negro.....	2	Commercial.....	2
Other.....	3	Home Economics.....	3
Not ascertainable.....	9	Industrial Arts.....	4
5. PLACE OF RESIDENCE		11-12. Vocational Subjects	
Country farm.....	1	Agriculture.....	1
Country nonfarm.....	2	Retail Selling and	
Urban.....	3	Office Practice.....	2
Not ascertainable.....	9	Homemaking.....	3
6. SCHOOL GRADE		Trade and Industrial..	4
Seventh.....	1	No choice.....	98
Eighth.....	2	Not ascertainable.....	99
Ninth.....	3	13-16. SCHOOL SUBJECT LIKED LEAST	
Tenth.....	4	13. Academic	
Eleventh.....	5	Languages.....	1
Twelfth.....	6	Mathematics.....	2
Postgraduate.....	7	Science.....	3
Not ascertainable.....	9	Social Science.....	4
7. FINISH HIGH SCHOOL		14. Practical Subjects	
Yes.....	1	Agriculture.....	1
No.....	2	Commercial.....	2
Undecided.....	3	Home Economics.....	3
Not ascertainable.....	9	Industrial Arts.....	4
8. ATTEND COLLEGE		15-16. Vocational Subjects	
Yes.....	1	Agriculture.....	1
No.....	2	Retail Selling and	
Undecided.....	3	Office Practice.....	2
Not ascertainable.....	9	Homemaking.....	3
		Trade and Industrial..	4
		No choice.....	98
		Not ascertainable.....	99

YOUTH SURVEY CODE (Continued)

In-School

Code B

<u>Code Line</u>	<u>Code No.</u>	<u>Code Line</u>	<u>Code No.</u>
17-19. OUT-OF-SCHOOL JOB			
Occupation (see occupational code numbers).			
Help at home.....	94	27. ATTEND VOCATIONAL SCHOOL	
Odd jobs.....	95	Yes.....	1
N.Y.A.....	96	No.....	2
No work.....	98	Undecided.....	3
Not ascertainable.....	99	Not ascertainable.....	9
20. IS WORK PRIMARILY		28-31. QUESTIONNAIRE NUMBER	
At home with pay.....	1	Number questionnaires	
At home without pay....	2	serially as instructed.	
Away from home with pay	3		
Away from home without		32. SCHOOL NUMBER	
pay.....	4		
Other.....	5	33-37. DATE	
No work.....	98	33-34. Month	
Not ascertainable.....	99	35-36. Day	
		37. Year	
21-23. OCCUPATIONAL CHOICE		1938.....	0
Occupation (see occupational code numbers).		1939.....	1
No choice.....	98	1940.....	2
Not ascertainable.....	99	1941.....	3
		1942.....	4
		1943.....	5
24-26. OCCUPATION OF FATHER		1944.....	6
Occupation (see occupational code numbers).		1945.....	7
Relief, W.P.A., etc....	96	1946.....	8
No father.....	97	1947.....	9
No occupation.....	98		
Not ascertainable.....	99		

YOUTH SURVEY CODE

Out-of-School

Code C

<u>Code Line</u>	<u>Code No.</u>	<u>Code Line</u>	<u>Code No.</u>
33-37. DATE		50-52. SCHOOL GRADE OR COLLEGE YEAR COMPLETED	
33-34. Month			
35-36. Day			
37. Year		School Grade	
1938.....	0	First.....	1
1939.....	1	Second.....	2
1940.....	2	Third.....	3
1941.....	3	Fourth.....	4
1942.....	4	Fifth.....	5
1943.....	5	Sixth.....	6
1944.....	6	Seventh.....	7
1945.....	7	Eighth.....	8
1946.....	8	Ninth.....	9
1947.....	9	Tenth.....	10
		Eleventh.....	11
38-39. CITY NUMBER		Twelfth.....	12
		Postgraduate.....	13
40-44. QUESTIONNAIRE NUMBER		College Year	
Number questionnaires		First.....	14
serially as per in-		Second.....	15
structions.		Third.....	16
		Fourth.....	17
45-46. PRESENT AGE.....	Years	Fifth.....	18
Not ascertainable.....	99	Sixth or more.....	19
		No schooling.....	98
47. SEX		Not ascertainable.....	99
Male.....	1		
Female.....	2	53-54. AGE AT TIME OF QUITTING SCHOOL	
(Discard all blanks		Age.....	Years
where sex is not ascer-		Not ascertainable.....	99
tainable)			
48. RACE OR COLOR		55. REASON FOR QUITTING SCHOOL	
White.....	1	Reason (see occupational	
Negro.....	2	code)	
Other.....	3	Not ascertainable.....	0
Not ascertainable.....	9		
49. MARITAL STATUS		56-57. YEARS OUT OF SCHOOL	
Married.....	1	Years.....	Years
Single.....	2	Not ascertainable.....	99
Separated, divorced,			
etc.....	3	58. ORGANIZED VOCATIONAL TRAINING	
Not ascertainable.....	9	SINCE LEAVING SCHOOL	
		Correspondence or exten-	
		sion courses.....	1
		Evening school.....	2

YOUTH SURVEY CODE (Continued)

Out-of-School

Code C

<u>Code Line</u>	<u>Code No.</u>	<u>Code Line</u>	<u>Code No.</u>
Business school.....	3		
Apprenticeship.....	4		
Other specialized school.....	5		
No organized training..	6		
Not ascertainable.....	9		
59. ARE YOU EMPLOYED			
Full-time.....	1		
Part-time.....	2		
Occasionally.....	3		
Not at all.....	4		
Not ascertainable.....	9		
60. IS EMPLOYMENT PRIMARILY			
At home with pay.....	1		
At home without pay....	2		
Away from home with pay	3		
Away from home without pay.....	4		
Other.....	5		
Not employed.....	6		
Not ascertainable.....	9		
61-63. PRESENT OCCUPATION			
Occupation (see occupational code numbers)			
Help at home.....	94		
Odd jobs.....	95		
N.Y.A., C.C.C., W.P.A...	96		
No occupation.....	98		
Not ascertainable.....	99		
64-68. VOCATIONAL TRAINING			
64-66. Occupation (see occupational code numbers)			
No occupation.....	98		
Not ascertainable.....	99		
67-68. Length of training.....	Months		
Not ascertainable.....	99		
		69-73. OCCUPATIONAL EXPERIENCE	
		69-71. Occupation (see occupational code numbers)	
		No occupational experience.....	98
		Not ascertainable.....	99
		72-73. Length of experience... Months	
		Not ascertainable.....	99
		74-76. OCCUPATIONAL CHOICE	
		Occupation (see occupational code numbers)	
		No choice.....	98
		Not ascertainable.....	99
		77-78. PERIOD OF UNEMPLOYMENT	
		a. Since Last Regular Job	
		Less than 5 months.....	1
		5-8 months.....	2
		9-12 months.....	3
		One to two years.....	4
		More than two years.....	5
		b. Since Leaving School (if never regularly employed)	
		Less than 5 months.....	6
		5-8 months.....	7
		9-12 months.....	8
		One to two years.....	9
		More than two years.....	10
		Question does not apply...	98
		Not ascertainable.....	99
		79-80. NUMBER OF JOBS OR POSITIONS HELD	
		Number of jobs.....	Number
		No regular employment.	98
		Not ascertainable.....	99

YOUTH SURVEY

Occupational Code

Code D

Question No. 55--WHY DID YOU QUIT SCHOOL?

- 0. Not ascertainable
- 1. Graduated
- 2. Financial
- 3. To go to work
- 4. Illness

- 5. Needed at home
- 6. Trouble in school
- 7. Disliked school
- 8. To get married
- 9. Other

100. AGRICULTURE AND ALLIED OCCUPATIONS

- 101. Farmers (owners and tenants)
- 102. Farm managers and foremen
- 103. Farm laborers
- 104. Fishermen and oystermen
- 105. Foresters, forest rangers and timber cruisers
- 106. Owners and managers of log and timber camps
- 107. Lumbermen, raftsmen and woodchoppers
- 108. Gardners and florists

200. EXTRACTION OF MINERALS

- 201. Operators, managers and officials
- 202. Foremen, overseers and inspectors
- 203. Coal mine operatives
- 204. Other operatives in extraction of minerals

300. MANUFACTURING AND MECHANICAL PURSUITS

- 301. Apprentices--building and hand trades
- 302. Apprentices (except to building and hand trades)
- 303. Bakers
- 304. Blacksmiths, forgemen and hammermen
- 305. Boilermakers
- 306. Brick and stone masons and tile layers

- 307. Builders and building contractors
- 308. Cabinetmakers
- 309. Carpenters
- 310. Compositors, linotypers and typesetters
- 311. Coopers
- 312. Dressmakers and seamstresses (not in factory)
- 313. Dyers
- 314. Electricians
- 315. Electrotypers, stereotypers and lithographers
- 316. Engineers (stationary), cranemen, hoistmen, etc.
- 317. Engravers
- 318. Filers, grinders, buffers and polishers (metal)
- 319. Firemen (except locomotive and fire department)
- 320. Foremen and overseers (manufacturing)
- 321. Furnacemen, smelter men, heaters, puddlers, etc.
- 322. Glass blowers
- 323. Goldsmiths and silversmiths
- 324. Jewelers and lapidaries (factory)
- 325. Jewelers and watchmakers (not in factory)
- 326. Machinists, millwrights and toolmakers
- 327. Managers and officials (manufacturing)
- 328. Millers (grain, flour, feed, etc.)
- 329. Mechanics

Occupational Code (Continued)

Code D

330. Milliners and millinery dealers
 331. Molders, founders and casters (metal)
 332. Oilers of machinery
 333. Painters, glaziers and varnishers (building)
 334. Painters, glaziers and varnishers (factory)
 335. Paperhangers
 336. Pattern and model makers
 337. Piano and organ tuners
 338. Plasterers and cement finishers
 339. Plumbers and gas and steam fitters
 340. Pressmen and plate printers (printing)
 341. Rollers and roll hands (metal)
 342. Roofers and slaters
 343. Sawyers
 344. Shoemakers and cobblers (not in factory)
 345. Skilled occupations (not elsewhere classified)
 346. Stonecutters
 347. Structural ironworkers (building)
 348. Tailors and tailoresses
 349. Tinsmiths and coppermiths
 350. Upholsterers
 351. Operatives--building industry
 352. Operatives
 353. Laborers--building, general and not specified laborers
 354. Laborers--manufacturing and mechanical industries
 355. Air conditioning
 356. Refrigeration
 357. Radiotician
 358. Welder
- 400. TRANSPORTATION AND COMMUNICATION**
- Water Transportation
401. Boatmen, canal men and lock-keepers
 402. Captains, masters, mates and pilots
 403. Longshoremen and stevedores
 404. Laborers
 405. Sailors and deck hands
- Road and street transportation
406. Chauffeurs, truck and tractor drivers
 407. Draymen, teamsters and carriage drivers
 408. Foremen and overseers
 409. Garage owners, managers and officials
 410. Garage laborers
 411. Hostlers and stable hands
 412. Laborers, truck, transfer and cab companies
 413. Laborers, road and street
 414. Others
 415. Owners and managers, truck, transfer and cab companies
- Railroad transportation
416. Apprentices--steam railroad
 417. Baggage men and freight agents
 418. Boiler washers and engine hostlers
 419. Brakemen, steam railroad
 420. Conductors, steam railroad
 421. Conductors, street railroad
 422. Foremen and overseers, steam railroad
 423. Foremen and overseers, street railroad
 424. Inspectors, steam railroad
 425. Inspectors, street railroad
 426. Laborers, steam railroad (includes construction laborers)
 427. Laborers, street railroad (includes construction laborers)
 428. Locomotive engineers
 429. Locomotive firemen
 430. Motormen, steam railroad
 431. Motormen, street railroad
 432. Officials and superintendents, steam railroad
 433. Officials and superintendents, street railroad
 434. Others, steam railroad
 435. Others, street railroad
 436. Switchmen and flagmen, steam railroad

Occupational Code (Continued)

Code D

- | | | | |
|------|---|------|--|
| 437. | Switchmen and flagmen, street
railroad | 500. | TRADE |
| 438. | Ticket and station agents | 501. | Apprentices, wholesale and
retail trade |
| 439. | Yardmen, steam railroad | 502. | Bankers, brokers and money
lenders |
| | Express, post, radio, telegraph
and telephone | 503. | "Clerks" in stores |
| 440. | Apprentices, telegraph and
telephone | 504. | Commercial travelers |
| 441. | Agents, express companies | 505. | Decorators, drapers and
window dressers |
| 442. | Express messengers and railway
mail clerks | 506. | Delivery men |
| 443. | Foremen and overseers, tele-
graph and telephone | 507. | Floorwalkers, foremen and
overseers |
| 444. | Inspectors--telegraph and
telephone | 508. | Inspectors, gaugers and
samplers |
| 445. | Laborers--telegraph and tele-
phone and express companies | 509. | Insurance agents |
| 446. | Mail carriers | 510. | Insurance managers and offi-
cials |
| 447. | Proprietors, managers and offi-
cials, telegraph and telephone | 511. | Laborers in coal and lumber
yards, warehouses, etc. |
| 448. | Radio operators | 512. | Laborers, porters and helpers
in stores |
| 449. | Telegraph and telephone linemen | 513. | Newsboys |
| 450. | Telegraph messengers | 514. | Proprietors, managers and
officials |
| 451. | Telegraph operators | 515. | Real estate agents |
| 452. | Telephone operators | 516. | Real estate managers and
officials |
| | Other transportation and communica-
tion pursuits | 517. | Retail dealers |
| 453. | Apprentices, other transportation
and communication | 518. | Salesmen and saleswomen |
| 454. | Aviators | 519. | Undertakers |
| 455. | Foremen and overseers, air trans-
portation | 520. | Wholesale dealers, importers
and exporters |
| 456. | Foremen and overseers, other
transportation & communication | 521. | Other pursuits in trade |
| 457. | Inspectors, other transportation
and communication | 600. | PUBLIC SERVICE |
| 458. | Laborers, air transportation | 601. | Firemen, fire department |
| 459. | Laborers, pipe lines | 602. | Guards, watchmen and door-
keepers |
| 460. | Laborers, other transportation
and communication | 603. | Laborers, public service |
| 461. | Air hostess | 604. | Marshals, sheriffs, detect-
ives, etc. |
| 462. | Proprietors, managers and offi-
cials, other transportation
and communication | 605. | Officials and inspectors
(city and county) |
| 463. | Others, other transportation
and communication | 606. | Officials and inspectors
(State and United States) |
| 464. | Proprietors, managers and offi-
cials, air transportation | 607. | Policemen |
| | | 608. | Postmasters |
| | | 609. | Soldiers, sailors and marines |
| | | 610. | Other public service pursuits |

Occupational Code (Continued)

Code D

700. **PROFESSIONAL SERVICE**
701. Actors and showmen
702. Architects
703. Artists, sculptors and teachers of art
704. Authors, editors and reporters
705. Chemists, assayers and metallurgists
706. Clergymen
707. College presidents and professors
708. Dentists
709. Designers, draftsmen and inventors
710. Lawyers, judges and justices
711. Musicians and teachers of music
712. Osteopaths
713. Photographers
714. Physicians and surgeons
715. Teachers
716. Civil engineers
717. Electrical engineers
718. Mechanical engineers
719. Mining engineers
720. Trained nurses
721. Veterinary surgeons
722. County agents, farm demonstrators, etc.
723. Librarians
724. Social and welfare workers
725. Abstracters, notaries and justices of the peace
726. Architects', designers' and draftsmen's apprentices
727. Apprentices to other professional persons
728. Billiard room, dance hall, skating rink, etc., keepers
729. Chiropractors
730. Healers (not elsewhere classified)
731. Keepers of charitable and penal institutions
732. Keepers of pleasure resorts, race tracks, etc.
733. Officials of lodges, societies, etc.
734. Radio announcers, directors, managers and officials
735. Religious workers
736. Technicians and laboratory assistants
737. Theatrical owners, managers and officials
738. Other occupations
739. Attendants, pool rooms, bowling alleys, golf clubs, etc.
740. Dentists' assistants and attendants
741. Helpers, motion picture production
742. Laborers, professional service
743. Laborers, recreation and amusement
744. Librarians' assistants and attendants
745. Physicians' and surgeons' attendants
746. Stage hands and circus helpers
747. Theater ushers
748. Other attendants and helpers
749. Dieticians
750. Technical engineers
751. Projectionists
752. Other professional pursuits
800. **DOMESTIC AND PERSONAL SERVICE**
801. Barbers, hairdressers and manicurists
802. Bartenders
803. Boarding and lodging-house keepers
804. Bootblacks
805. Charwomen and cleaners
Cleaning, dyeing and pressing shop workers
806. Owners and proprietors
807. Managers and officials
808. Foremen and overseers
809. Laborers
810. Other operatives
811. Elevator tenders
812. Hotel keepers and managers
813. Housekeepers and stewards
814. Janitors and sextons
815. Laborers, domestic and personal service

Occupational Code (Continued)

Code D

- | | | | |
|------|--|------|--|
| 816. | Launderers and laundresses
(not in laundry) | | |
| 817. | Laundry owners, managers and
officials | | |
| | Laundry operatives | 900. | CLERICAL OCCUPATIONS |
| 818. | Delivery men | 901. | Advertising agents |
| 819. | Foremen and overseers | 902. | Agents, collectors and credit
men |
| 820. | Laborers | 903. | Accountants and auditors |
| 821. | Other operatives | 904. | Bookkeepers and cashiers |
| 822. | Midwives and nurses (not trained) | 905. | Clerks (except "clerks" in
stores) |
| | Porters (except in stores) | 906. | Messenger, errand and office
boys and girls |
| 823. | Domestic and personal service | 907. | Stenographers and typists |
| 824. | Professional service | 908. | Secretarial |
| 825. | Steam railroad | 909. | General office work |
| 826. | Other porters (except in stores) | 910. | Business machine operator |
| 827. | Restaurant, cafe and lunch-room
keepers | | |
| 828. | Cooks | | |
| 829. | Other servants | | |
| 830. | Waiters or waitresses | | |
| 831. | Cemetery keepers | | |
| 832. | Hunters, trappers and guides | | |
| 833. | Other occupations | | |
| 834. | Housewife or housework | | |

YOUTH SURVEYS

Tabulation of Data

A series of tables to be made from the data procured in the youth survey schedules are presented in the following pages. It is evident that to secure all information from the schedule data by cross tabulation would require the use of an extremely large number of tables, and would necessitate a very extensive report.

Since these youth surveys are but a part of the total survey an attempt has been made to select only those relationships which bring out essential data which relate directly to the problem of vocational education in the community. If it is desired to emphasize any other factor which the data will permit, other tables may be added to those which are presented in this technique.

Two methods of procedure may be followed in the tabulation of data from the work sheets--the data may be hand tabulated, or if finances are available a great deal of work may be obviated by machine tabulation. If the data are to be machine tabulated, the work sheets and the blank tables should be turned over to a statistical bureau. In some cases data may be machine tabulated directly from the coded youth survey schedules at additional cost.

The tabulation of data by hand simply becomes a job of counting the number of cases in each classification as indicated by the various tables. To assist survey workers in identifying the source of data for each table, the column numbers from the work sheet are carried in each table.

Attention is called to the need for extreme accuracy in handling the data. A report which is not consistent in its totals or in items which appear in more than one table is of little statistical value.

To secure accuracy it is suggested that totals for major groups be entered on all tables in which these data appear as soon as they are determined for the first table in which they appear. Itemized data in the tables can then be checked against the totals as soon as entered. All tables should be checked both vertically and horizontally to prove the entries.

YOUTH SURVEYS

Presenting the Data

In-School Youth Survey

The Survey

Identification Information

Age and Sex Distribution of Cases (Table VII-A)

Race and Color of Pupils (Table VII-B)

Place of Residence (Table VII-C)

Educational Findings

Age-Grade Distribution of Pupils (Table VII-D)

Subjects Liked and Disliked (Table VII-E)

Future Educational Plans (Table VII-F)

Attitude of Secondary School Pupils Concerning Attending
a Central Vocational School (Table VII-G)

Occupational Findings

Place of Employment (Table VII-H)

Out-of-School Jobs (Table VII-I)

Occupational Choice (Table VII-J)

Occupational Comparison (Table VII-K)

Summary

Implications for Vocational Education

YOUTH SURVEYS (IN-SCHOOL)

Table VII-A.

Distribution of Cases by Sex and Age.

Age in Years (Nos. 1-2)	Sex (No. 3)		Total
	Male	Female	
12 or less			
13			
14			
15			
16			
17			
18			
19			
20			
21			
Not ascertainable			
Total			

YOUTH SURVEYS (IN-SCHOOL)

Table VII-B.

Race or Color by Sex.

Race or Color (No. 4)	Sex (No. 3)		Total
	Male	Female	
White			
Negro			
Other			
Not ascertainable			
Total			

YOUTH SURVEYS (IN-SCHOOL)

Table VII-C.

Place of Residence by Sex.

Place of Residence (No. 5)	Sex (No. 3)		Total
	Male	Female	
Open country farm (three acres or more)			
Open country nonfarm (less than three acres)			
Village, town or city			
Not ascertainable			
Total			

YOUTH SURVEYS (IN-SCHOOL)

Table VII-E.

Subjects Liked and Disliked.

Subject	Number of Subjects Liked (Nos. 9-12)			Number of Subjects Disliked (Nos. 13-16)			Difference
	Male	Female	Total	Male	Female	Total	
ACADEMIC							
Languages							
Mathematics							
Science							
Social science							
PRACTICAL SUBJECTS							
Agriculture							
Commercial							
Home economics							
Industrial arts							
VOCATIONAL SUBJECTS							
Agriculture							
Retail selling and office practice							
Home economics							
Trade and industrial							
No choice							
Total							

YOUTH SURVEYS (IN-SCHOOL)

Table VII-F.

Future Educational Plans.

Educational Plans	Present Grade (No. 6)											Grand Total		
	Male						Female							
	7-8	9-10	11-12	P.G.	N.A.	Total	7-8	9-10	11-12	P.G.	N.A.		Total	
TO FINISH HIGH SCHOOL (No. 7)														
Yes														
No														
Undecided														
Not ascertainable														
Total														
TO GO TO COLLEGE (No. 8)														
Yes														
No														
Undecided														
Not ascertainable														
Total														

YOUTH SURVEYS (IN-SCHOOL)

Table VII-H.

Place of Employment.

Place of Employment (No. 20)	Present Age in Years (Nos. 1-2)										Grand Total
	Male					Female					
	12-14	15-17	18-20	N. A.	Total	12-14	15-17	18-20	N. A.	Total	
IS EMPLOYMENT PRIMARILY:											
At home with pay											
At home without pay											
Away from home with pay											
Away from home without pay											
Other											
Not employed											
Not ascertainable											
Total											

YOUTH SURVEYS (IN-SCHOOL)

Table VII-I.

Out-of-School Jobs.

Occupational Code Numbers (Nos. 17-19)	Present School Grade (No. 6)												Grand Total
	Male						Female						
	7-8	9-10	11-12	P.G.	N.A.	Total	7-8	9-10	11-12	P.G.	N.A.	Total	
100													
200													
300													
400													
500													
600													
700													
800													
900													
94													
95													
96													
98													
99													
Total													

Note: In presenting data, occupational divisions should be inserted in place of code numbers.

YOUTH SURVEYS (IN-SCHOOL)

Table VII-J.

Occupational Choice.

Occupational Code Numbers (Nos. 21-23)	Present School Grade (No. 6)												Grand Total
	Male						Female						
	7-8	9-10	11-12	P.G.	N.A.	Total	7-8	9-10	11-12	P.G.	N.A.	Total	
100													
200													
300													
400													
500													
600													
700													
800													
900													
98													
99													
Total													

YOUTH SURVEYS (IN-SCHOOL)

Table VII-K.

Occupational Comparison.

Occupational Code Numbers	Occupational Distribution ^{1/}			Occupation of Father (Nos. 24-26)	Out-of-School Job (Nos. 17-19)			Occupational Choice (Nos. 21-23)		
	Male	Female	Total		Male	Female	Total	Male	Female	Total
100										
200										
300										
400										
500										
600										
700										
800										
900										
94										
95										
96										
97										
98										
99										
Total										

Note: Entries in this table should be based upon percentage of the total in each group.

^{1/} Occupational distribution of all gainful workers by sex, Table IV-B.

YOUTH SURVEYS

Presenting the Data

Out-of-School Youth Survey

The Survey

Identification Information

- Age and Sex of Cases (Table VIII-A)
- Marital Status and Race or Color (Table VIII-B)
- Place of Residence (Table VIII-C)

Educational Findings

- Age and Grade at Time of Quitting School (Table VIII-D)
- Reasons for Quitting School (Table VIII-E)
- Organized Vocational Training Since Leaving School
(Table VIII-F)

Occupational Status of Youth

- Occupations Prepared for by Vocational Training (Table VIII-G)
- Occupations Prepared for by Work Experience (Table VIII-H)
- Occupational Choice (Table VIII-I)
- Occupations of Youth (Table VIII-J)
- Occupational Comparison (Table VIII-K)

Employment Status of Youth

- Type of Employment (Tables VIII-L and VIII-M)
- Place of Employment (Table VIII-N)
- Number of Jobs or Positions Held (Tables VIII-O and VIII-P)
- Period of Unemployment (Tables VIII-Q and VIII-R)

Summary

Implications for Vocational Education

YOUTH SURVEYS (OUT-OF-SCHOOL)

Table VIII-A.

Distribution of Cases by Sex and Age.

Sex (No. 47)	Age in Years (Nos. 45-46)										Total
	16	17	18	19	20	21	22	23	24	N. A.	
Male											
Female											
Total											

YOUTH SURVEYS (OUT-OF-SCHOOL)

Table VIII-B.

Marital Status and Race or Color.

Marital Status and Race	Sex (No. 47)		Total
	Male	Female	
MARITAL STATUS (No. 49)			
Single			
Married			
Separated, divorced, etc.			
Not ascertainable			
Total			
RACE OR COLOR (No. 48)			
White			
Negro			
Other			
Not ascertainable			
Total			

YOUTH SURVEYS (OUT-OF-SCHOOL)

Table VIII-C.

Place of Residence.

Place of Residence (No. 50)	Sex (No. 47)		Total
	Male	Female	
Open country farm (three acres or more)			
Open country nonfarm (less than three acres)			
Village, town or city			
Not ascertainable			
Total			

YOUTH SURVEYS (OUT-OF-SCHOOL)

Table VIII-F.

Organized Training Since Leaving School or College.

Type of Training (No. 58)	Highest Grade or College Year Completed (Nos. 51-52)						Grand Total
	School Grade			College Year			
	6 or less	7-9	10-12	1-2	3-4	Over 4	
	MALE						
Correspondence or extension courses							
Evening school							
Business training							
Apprenticeship (part-time class)							
Other specialized school							
No organized training							
Not ascertainable							
Subtotal							
	FEMALE						
Correspondence or extension courses							
Evening school							
Business training							
Apprenticeship (part-time class)							
Other specialized school							
No organized training							
Not ascertainable							
Subtotal							
Total							

YOUTH SURVEYS (OUT-OF-SCHOOL)

Table VIII-H.

Occupation Prepared for by Work Experience and Length of Work Experience.

Occupational Code Numbers (Nos. 69-71)	Length of Work Experience in Months (Nos. 72-73)						Total
	1-6	7-12	13-18	19-24	25 to 36	More than 3 years	
				MALE			
100							
200							
300							
400							
500							
600							
700							
800							
900							
98							
99							
Subtotal							
				FEMALE			
100							
200							
300							
400							
500							
600							
700							
800							
900							
98							
99							
Subtotal							
Total							

Note: In presenting data, occupational divisions should be inserted in place of code numbers.

YOUTH SURVEYS (OUT-OF-SCHOOL)

Table VIII-1.

Occupational Choice by Sex and Grade Completed.

Occupational Code Numbers (Nos. 74-76)	Highest Grade or College Year Completed (Nos. 51-52)						Total
	School Grade			College Year			
	6 or less	7-9	10-12	1-2	3-4	Over 4	
	MALE						
100							
200							
300							
400							
500							
600							
700							
800							
900							
98							
99							
Subtotal							
	FEMALE						
100							
200							
300							
400							
500							
600							
700							
800							
900							
98							
99							
Subtotal							
Total							

YOUTH SURVEYS (OUT-OF-SCHOOL)

Table VIII-J.

Occupation by Sex and Grade Completed.

Occupational Code Numbers (Nos. 61-63)	Highest Grade or College Year Completed (Nos. 51-52)						Total
	School Grade			College Year			
	6 or less	7-9	10-12	1-2	3-4	Over 4	
	MALE						
100							
200							
300							
400							
500							
600							
700							
800							
900							
94							
95							
96							
98							
99							
Subtotal							
	FEMALE						
100							
200							
300							
400							
500							
600							
700							
800							
900							
94							
95							
96							
98							
99							
Subtotal							
Total							

YOUTH SURVEYS (OUT-OF-SCHOOL)

Table VIII-M.

Employment Status by Sex and Years Out of School.

Employment Status (No. 59)	Years Out of School (Nos. 56-57)												Grand Total
	Male						Female						
	3 or less	4-6	7-9	10 or more	N. A.	Total	3 or less	4-6	7-9	10 or more	N. A.	Total	
ARE YOU EMPLOYED:													
Full-time													
Part-time													
Occasionally													
Not at all													
Not ascertainable													
Total													

YOUTH SURVEYS (OUT-OF-SCHOOL)

Table VIII-N.

Type of Employment by Sex and Years Out of School.

Employment Status (No. 60)	Years Out of School (Nos. 56-57)										Grand Total		
	Male					Female							
	3 or less	4-6	7-9	10 or more	N. A.	Total	3 or less	4-6	7-9	10 or more		N. A.	Total
IS EMPLOYMENT PRIMARILY:													
At home with pay													
At home without pay													
Away from home with pay													
Away from home without pay													
Other													
Not employed													
Not ascertainable													
Total													

YOUTH SURVEYS (OUT-OF-SCHOOL)

Table VIII-0.

Number of Jobs or Positions Held Since Leaving School by Sex and Grade Completed.

Number of Jobs or Positions (Nos. 79-80)	Highest School Grade or College Year Completed (Nos. 51-52)											
	Male						Female					
	6 or less	7-9	10-12	Over 12	N. A.	Total	6 or less	7-9	10-12	Over 12	N. A.	Total
None												
One												
Two												
Three												
Four												
Five												
Six												
Seven												
Eight												
Nine												
Ten or more												
Not regularly employed												
Not ascertainable												
Total												

YOUTH SURVEYS (OUT-OF-SCHOOL)

Table VIII-P.

Number of Jobs or Positions Held Since Leaving School by Sex and Years Out of School.

Number of Jobs or Positions (Nos. 79-80)	Years Out of School (Nos. 56-57)											Grand Total
	Male						Female					
	3 or less	4-6	7-9	10 or more	N. A.	Total	3 or less	4-6	7-9	10 or more	N. A.	
One												
Two												
Three												
Four												
Five												
Six												
Seven												
Eight												
Nine												
Ten or more												
None												
Not regularly employed												
Not ascertainable												
Total												

YOUTH SURVEYS (OUT-OF-SCHOOL)

Table VIII-R.

Unemployment by Sex and Years Out of School.

Months of Unemployment (Nos. 77-78)	Years Out of School (Nos. 56-57)														Grand Total
	Male							Female							
	1 or less	2-4	5-7	8-10	Over 10	N.A.	Total	1 or less	2-4	5-7	8-10	Over 10	N.A.	Total	
SINCE LAST REGULAR JOB OF ONE MONTH OR MORE DURATION:															
Less than five months															
Five to eight months															
Nine to 12 months															
13 to 24 months															
Two years or more															
Subtotal															
SINCE LEAVING SCHOOL OR COL- LEGE (if you have never been regularly employed):															
Less than five months															
Five to eight months															
Nine to 12 months															
13 to 24 months															
Two years or more															
Subtotal															
Question does not apply															
Not ascertainable															
Total															

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