DEPARTMENT OF THE INTERIOR
BUREAU OF EDUCATION

BULLETIN, 1918, No. 19

# VOCATIONAL GUIDANCE IN SECONDARY EDUCATION

A REPORT OF THE COMMISSION ON THE REORGANIZATION OF SECONDARY EDUCATION APPOINTED BY THE NATIONAL EDUCATION ASSOCIATION


WASHINGTON
GOVERNMENT PRINTING OFFICE
1918

ADDITIONAL COPIES
OF THIS PUBLICATION MAY BE PROCURED FROM
THE SUPERINTENDENT OF DOCUMENTS
GOVERNMENT PRINTING OFFICE
WASHINGTON, D. C.
AT
5 CENTS PER COPY

# CONTENTS.


| | Page. |
|---|---|
| Letter of transmittal | 4 |
| Preface | 5 |
| Committee on vocational guidance | 7 |
| Reviewing committee of the Commission on the Reorganization of Secondary Education | 7 |
| Section I.—Purpose of the report | 9 |
| Section II.—Meaning and purpose of vocational guidance | 9 |
| Section III.—Limitations of the field of the report | 11 |
| Section IV.—A brief description of various vocational guidance plans | 11 |
| 1. Employment supervision | 13 |
| 2. Vocational information | 14 |
| 3. Placement | 15 |
| 4. Guidance in choice of curriculum | 15 |
| Section V.—Vocational guidance program recommended | 16 |
| 1. Survey of the world's work | 16 |
| 2. Studying and testing pupils' possibilities | 18 |
| 3. Guidance in choice and rechoice of a vocation | 20 |
| 4. Guidance with reference to preparation for a vocation | 21 |
| 5. Guidance in entering work | 21 |
| 6. Guidance in employment | 22 |
| 7. Progressive modification of school practices | 23 |
| 8. Progressive modification of economic conditions | 23 |
| Section VI.—Some important related topics | 24 |
| 1. Psychological tests and vocational guidance | 24 |
| 2. The home and vocational guidance | 27 |
| 3. Cooperation of the schools and other agencies | 28 |
| 4. The training of vocational counselors | 28 |
| Reports of the Commission on the Reorganization of Secondary Education | 29 |

# LETTER OF TRANSMITTAL.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
*Washington, July 18, 1918.*

SIR: In no other country in the world do so many boys and girls receive regular high-school education of a general cultural type as in the United States and the number of such boys and girls in this country is rapidly increasing, having more than doubled since 1905 and increased more than 60 per cent since 1910. But American democratic ideals demand not only that all should have as nearly as possible equal opportunity for education, but also that all men and women should be employed in that form of work by which they may contribute most to their own happiness and to the common good. In our complex industrial and economic life, it is little less wasteful to leave boys and girls without assistance and guidance in selecting their occupations and finding employment than it would be to leave them unaided in obtaining education. Both are necessary for the highest good to individual and society. But as yet we have had less experience in vocational guidance than we have had in education, and its principles are not so well known as are the principles of education. For these reasons the Commission on the Reorganization of Secondary Education appointed by the National Education Association and cooperating with this bureau has included the subject of vocational guidance in secondary education in its investigations. I recommend that the report on this subject submitted herewith be published as a Bulletin of the Bureau of Education.

Respectfully submitted.

P. P. CLAXTON,
*Commissioner.*

The SECRETARY OF THE INTERIOR.

# PREFACE.

The Commission on the Reorganization of Secondary Education holds that vocational guidance is an essential function of the secondary school. Unless plans for such guidance are thoroughly incorporated and continuously exercised, the efforts of the school in behalf of the youth in its charge will be largely misdirected.

The social and cultural significance of vocational guidance is due to the conception of vocation as a means not only of earning a livelihood, but also of serving society and of developing the personality of the worker. As stated by the reviewing committee of this commission in its forthcoming report:

> Vocational education should equip the individual to secure a livelihood for himself and those dependent on him, to serve society well through his vocation, to maintain the right relationships toward his fellow workers and society, and, as far as possible, to find in that vocation his own best development.
>
> This ideal demands that the pupil explore his own capacities and aptitudes and make a survey of the world's work to the end that he may select his vocation wisely. Hence, an effective program of vocational guidance in the secondary school is essential.

The term vocational guidance has been seriously misconstrued. It is the purpose of this report to correct such misconceptions and to outline a comprehensive plan for exercising proper vocational guidance.

Attention is called in particular to the scope of the program recommended whereby the secondary school becomes responsible for the vocational adjustment of all young people of secondary school age, whether in school or at work.

The report contained in this bulletin was drafted for the commission by its committee on vocational guidance, and after discussion and revision it has been approved by both the committee on vocational guidance and the reviewing committee. Approval by the reviewing committee does not commit every member individually to every statement and every implied educational doctrine, but does mean essential agreement as a committee with the general recommendations.

CLARENCE D. KINGSLEY,
*Chairman of the Commission.*

## COMMITTEE ON VOCATIONAL GUIDANCE.

Frank Mitchell Leavitt, chairman, associate superintendent of schools, Pittsburgh, Pa.
Frederick J. Allen, bureau of vocational guidance, division of education, Harvard University, Cambridge, Mass.
John M. Brewer, Normal School, Los Angeles, Cal.
Arthur H. Chamberlain, California State Council of Education, San Francisco, Cal.
Randall J. Condon, superintendent of schools, Cincinnati, Ohio.
Jesse B. Davis, principal, Central High School, Grand Rapids, Mich.
Clarence D. Kingsley, State high school inspector, Boston, Mass.
E. George Payne, principal, Teachers' College, St. Louis, Mo.
Eli W. Weaver, Boys' High School, Brooklyn, N. Y.
Laura F. Wentworth, vocational director, High School of Practical Arts, Boston, Mass.

---

## THE REVIEWING COMMITTEE OF THE COMMISSION ON THE REORGANIZATION OF SECONDARY EDUCATION.

(The Reviewing Committee consists of 26 members, of whom 16 are chairmen of committees and 10 are members at large.)

*Chairman of the Commission and of the Reviewing Committee:*

Clarence D. Kingsley, State high-school inspector, Boston, Mass.

*Members at large:*

Hon. P. P. Claxton, United States Commissioner of Education, Washington, D. C.
Thomas H. Briggs, associate professor of education, Teachers' College, Columbia University, New York City.
Alexander Inglis, assistant professor of education, in charge of secondary education, Harvard University, Cambridge, Mass.
Henry Neumann, Ethical Culture School, New York City.
William Orr, senior educational secretary, international Y. M. C. A. committee, 104 East-Twenty-eighth Street, New York City.
William B. Owen, principal, Chicago Normal College, Chicago, Ill.
Edward O. Sisson, president, University of Montana, Missoula, Mont.
Joseph S. Stewart, professor of secondary education, University of Georgia, Athens, Ga.
Milo H. Stuart, principal, Technical High School, Indianapolis, Ind.
H. L. Terry, State high-school inspector, Madison, Wis.

*Chairmen of committees:*

Organization and administration of secondary education—Charles Hughes Johnston,[1] professor of secondary education, University of Illinois, Urbana, Ill.
Agriculture—A. V. Storm, professor of agricultural education, University of Minnesota, St. Paul, Minn.
Art Education—Henry Turner Bailey, dean, Cleveland School of Art, Cleveland, Ohio.
Articulation of High School and College—Clarence D. Kingsley, State high-school inspector, Boston, Mass.
Business Education—Checsman A. Herrick, president Girard College, Philadelphia, Pa.

---

[1] Deceased Sept. 4, 1917.

*Chairmen of committees*—Continued.

Classical Languages—Walter Eugene Foster, Stuyvesant High School, New York City.

English—James Fleming Hosic, Chicago Normal College, Chicago, Ill.

Household Arts—Mrs. Henrietta W. Calvin, United States Bureau of Education, Washington, D. C.

Industrial Arts—Wilson H. Henderson, extension division, University of Wisconsin, Milwaukee, Wis.

Mathematics—William Heard Kilpatrick, associate professor of education, Teachers' College, Columbia University, New York City.

Modern Languages—Edward Manley, Englewood High School, Chicago, Ill.

Music—Will Earhart, director of music, Pittsburgh, Pa.

Physical Education—James H. McCurdy, director of normal courses of physical education, International Y. M. C. A. College, Springfield, Mass. [Now in France, in charge of Y. M. C. A. recreation work.]

Sciences—Otis W. Caldwell, director, Lincoln School, and professor of education, Teachers' College, Columbia University, New York City.

Social Studies—Thomas Jesse Jones, United States Bureau of Education, Washington, D. C.

Vocational Guidance—Frank M. Leavitt, associate superintendent of schools, Pittsburgh, Pa.

# VOCATIONAL GUIDANCE IN SECONDARY EDUCATION.

## SECTION I.—PURPOSE OF THE REPORT.

The purpose of this report is to outline a comprehensive plan for vocational guidance as an integral part of secondary education,[1] and to indicate the responsibility of the secondary school for the vocational adjustment of all pupils of secondary school age whether in school or at work.

The committee hopes that this report will stimulate interest and promote experimentation, and that the suggestions offered will be helpful not only to school administrators and those assigned to special duties in the field of vocational guidance, but also to teachers who through daily contact with young people have opportunity to counsel and inspire them.

## SECTION II.—MEANING AND PURPOSE OF VOCATIONAL GUIDANCE.

Certain activities now classified as vocational guidance have been carried on in the past by individual teachers for individual pupils. Within the past decade marked progress has been made in organizing, developing, and systematizing these activities.

It is not the purpose of vocational guidance to decide for young people in advance what occupation they should follow, nor to project them into life's work at the earliest possible moment, nor to classify them prematurely by any system of analysis, either psychological, physiological, social, or economic.

*Vocational guidance should be a continuous process designed to help the individual to choose, to plan his preparation for, to enter upon, and to make progress in an occupation.* It calls for a progressive improvement of the public-school system and a fuller and more intelligent utilization of its richly diversified offerings. It requires a more accurate adjustment between the school and all worthy vocations. For some children it demands a plan of continuation education and supervision in employment by educational authorities. It should develop an interest in the conditions prevailing in the child-employing industries and bring about improvement of those conditions. It

[1] In this report the term secondary education refers to both junior and senior high schools. In school systems having eight-year elementary schools, the vocational guidance needs of pupils in the seventh and eighth grades call for much that is recommended herein.

should utilize the cooperation of all social-service agencies that can be of assistance. For society at large it should result in a more democratic school system, a wiser economy in the expenditure of school time, and a more genuine culture.

Many people, not only teachers, but also employers and business men, have an idea that in some mysterious way we can look into the future, determine what each child should be, and prepare him specifically for that ultimate end. This is a false conception, unsupported by psychology and contrary to the principles of democracy. Vocational guidance, properly conceived, organizes school work so that the pupil may be helped to discover his own capacities, aptitudes, and interests, may learn about the character and conditions of occupational life, and may himself arrive at an intelligent vocational decision. In other words, vocational guidance, while not ignoring the proper functions of personal counsel, emphasizes vocational decision by rather than for the pupil and prefers to ascertain his capacities, aptitudes, and interests through, rather than before, contacts with vocational activities. Since we can not look into the future, we must attempt to prepare young people so that they can make each decision more wisely when the need for such decision arises. Therefore, vocational guidance, rightly conceived, does not involve deciding for young people what occupation they should follow, nor projecting them into life's work at the earliest possible moment, nor classifying them prematurely by any system of analysis.

Advice given by commercial agencies, or by persons or organizations or schools lacking sound educational philosophy and the social perspective necessary to conserve the interests of democracy, is neither safe nor adequate.

The school must teach the youth not only how to adjust himself to his environment, but also how to change that environment when the need arises. Guidance that helps only a few individuals to succeed might produce a competitive system even more relentless than that of the present day. Vocational guidance should help in bringing about a cooperative solution of the problems of economic and social life, and should help the largest possible number of individuals.

If wisely directed, vocational guidance will greatly improve the schools themselves by making them more responsive to the social and economic needs of the pupils and of society. Like most educational advances, its chief dangers lie on the one hand in the extravagant claims of too zealous promoters and on the other hand in the unreasoning skepticism of the ultra-conservative. Somewhere between these two extremes should be found a reasonable program that will command the support and respect of thoughtful educators everywhere.

## SECTION III.—LIMITATIONS OF THE FIELD OF THE REPORT.

This report deals primarily with the needs of youth between 12 and 18 years of age, whether in school or at work.

The ideals of vocational guidance, however, can not be satisfactorily attained without remodeling the instruction of the first six school years. Elementary education should be so organized as to give some knowledge of occupations and afford opportunity for a wide variety of experience or activities having vocational significance. Defects in the elementary school and in the economic situation are inducing young people to leave school prematurely. Changes, therefore, should be effected in the elementary school program and every effort should be made to lead pupils, parents, and employers to realize the importance of longer schooling.

Moreover, a few organizations of genuinely social character are studying the problems of vocational adjustment for adults. Their experience can be of immense service to school counselors in many ways. Cooperation with such organizations is commended.

For the vocational guidance of young people between 12 and 18 years of age, however, the school must assume the major responsibility. Its duties are immediate as well as remote. The school should interest itself in the earlier vocational experiences of all the youth of the community. In other words, providing for a "start in life" is the school's immediate concern. In developing a program of vocational guidance, therefore, it is necessary to distinguish clearly between the immediate and the ultimate purpose. A common criticism of our schools in general is that their aims are too remote to fix the attention and to hold the interest of most pupils. To fall into that error in inaugurating a system of vocational guidance would be fatal to the success of the movement. While the ultimate purpose should lead to the giving of much that is inspirational and illuminating, the immediate purpose must not be neglected by those who are to provide the practical plans.

## SECTION IV.—A BRIEF DESCRIPTION OF VARIOUS VOCATIONAL GUIDANCE PLANS.

The Committee on Vocational Guidance is dealing with problems radically different from those confronting the other committees of the Commission on the Reorganization of Secondary Education. In this instance the problem is not primarily that of reorganization, because the established plans in this field are few and recent. Moreover, there are few accepted standards by which to measure these new theories and programs. Such standards as have been formulated are buttressed mainly by opinion.

Plans presented in this section have been devised in various parts of the country, under widely differing circumstances, in the attempt to solve not the whole problem but, in each case, some part of it that seemed particularly important to an individual worker. Hence the theories, arguments, and practices here described are those of pioneers.

Guidance can best be given only when the plan for exercising it begins before the probable time of leaving school, helps the pupil across the gulf that now separates the school from occupational life, and finally accompanies him upon his new pathway until he is competent to direct himself in his new environment. One method of classifying vocational guidance plans, therefore, is to consider them in relation to the time when pupils leave school. In the following analysis three major groups of pupils are described. It should be understood at the outset that this is a hypothetical classification, and that the committee does not advise nor contemplate the segregation of these groups in actual practice. Nor does the committee intend that any good thing suggested for one group should be withheld from individuals in another group.

(*a*) One group leaves school at the termination of the compulsory age limit, 14 years in most States, in the majority of cases with less than eight grades of training. While individual differences in capacities, ambitions, and opportunities will result in widely differing success in later life, and while differentiation of school work would reveal special aptitudes, provide special training, and call for special forms of vocational guidance in consequence, in the main the vocational guidance needs of the several members of this group are similar in the early occupational years, and the same general method of exercising such guidance is appropriate for all. This method may be designated as "employment supervision." This group also needs some instruction in occupational problems before leaving school and compulsory continuation school work after entering employment.

(*b*) A second group is composed of pupils who will remain in school from four to six years beyond the sixth grade, but will not enter higher educational institutions. This includes both the "drop-outs" and the majority of the graduates of the four-year high school. While individual differences will ultimately distribute this group widely, they have special need for "guidance in choice of curriculum," "vocational information," and "placement." The value of vocational information and placement will be enhanced manyfold by the presence in the junior high school of prevocational work and in the senior high school of curriculums with genuine vocational content.

(*c*) A third group is on its way to higher educational institutions. The special duty of the secondary school for them is guidance in the choice of curriculum, of elective courses within the curriculum

chosen, and of the higher institution to be attended. Such guidance should make the pupil more intelligent regarding the general characteristics of many vocations, more sensitive to, and appreciative of, his own peculiar aptitudes, opportunities, and duties, and better informed regarding the rich offerings now afforded by secondary schools and by higher institutions of learning.

## 1. EMPLOYMENT SUPERVISION.

Excellent experimental work has been done in "employment supervision." This work has shown that for the sake of society as well as for the sake of young persons in employment, even more solicitous care should be given to them because they have entered upon the exacting duties of occupational life. That children are at work is no reason why they do not need education, though they may need a different kind of education. The committee recognizes that these children should still be wards of the school system and continue to receive the benefits of its training and instruction through part-time attendance at school to be required by legislation. It has been shown that they may be so guided in their labors that they will get much education out of their daily occupations, and that this is not likely to result unless they are carefully and intelligently supervised by the educational authorities. Such supervision tends to establish better cooperation between the schools and employers, and with labor unions as far as child labor is concerned.

Whatever may be possible in the way of advancement for individual members of this group, the majority will enter, for a time at least, the ranks of the industrial army, and their ultimate success will depend upon their ability to understand their conditions and to make the most out of the opportunity that these conditions present, both for work and for leisure. How has this been accomplished? A careful study of the occupations of the children of this group reveals the fact that, of necessity, there must be considerable migration from job to job. Some work is seasonal, some is only temporary, while some has no future and is so monotonous that it ought not to be long endured. While the results of this migration may be harmful, and frequently are, there are educational possibilities in such variety of occupation, and these possibilities are multiplied when the school authorities are in a position to control the changes to some extent, to prevent the individual from remaining too long in a "dead end" job, to advise against undue and unnecessary "job hoboism," and to counsel the individual whenever a change is made. The education that these young people get from their daily toil is greatly enhanced when the school authorities assume the responsibility of guiding and counseling them. At least one of the large

cities has appointed a school officer whose title is "employment supervisor."

In some places continuation classes are maintained without exercising employment supervision as described above, and conversely in other places employment supervision is exercised without maintaining continuation classes. To secure the greatest returns from either, however, it has been found that the two should be linked together and it is preferable that they be directed by the same school official. Since employment supervision applies to persons of secondary school age, it should be developed in connection with both junior and senior high schools.

### 2. VOCATIONAL INFORMATION.

Perhaps the most important phase of vocational guidance at present conducted in the four-year high school is that designated as "vocational information." Interesting experiments have demonstrated beyond a doubt that it is desirable to collect and to impart information about vocations, and to show the connection between these vocations and the various subjects of instruction in the high school program, and to do it in such a way as to cause the whole high school situation to take on a new aspect, both to the pupils and to the teachers. Even the academic courses have been vitalized by the vocational motive.

Methods of collecting information about vocations and occupational life are numerous and varied. In some instances private philanthropic organizations have prepared studies of several occupations and presented them to the public school for distribution. In other cases a similar service has been performed by the local chamber of commerce or board of trade. Libraries also have cooperated with the public schools in making such material easily available for the use of pupils.

Some schools have developed credit courses in "occupations." During the past two or three years a number of books have appeared, some of which may be used as textbooks, and others as reference books. In these courses trips are made to industrial plants and business offices and a great variety of occupations and professions is studied. This work is in many places made a part of the course in community civics.

Other schools are systematically devoting a part of the work in English to vocational themes, oral and written. By this method all the pupils in the school are helped to a thoughtful and intelligent attitude toward the problems of vocational selection and preparation.

Other subjects in the program have been broadened in many schools so as to give an outlook upon industries and vocational life.

Numerous plans are now employed for bringing the pupils into more intimate contact with men and women who represent the local business community. Among these are the following: Junior associations of commerce and vocational clubs; talks on vocations by local business men and women; and systematic placement in temporary employment as a part of their education.

### 3. PLACEMENT.

Placement increases the sense of responsibility of both the school and the employer for the success of the school-trained child in his early occupational life. It is especially important for children in group (*b*).

In a few cities the employment departments of the Y. M. C. A. and Y. W. C. A. and free public employment bureaus work in hearty cooperation with the public schools. While often efficient, these bureaus serve only a small minority of the persons needing such service.

Several cities have established school placement bureaus. The plans for such bureaus differ widely. In some places the machinery for registering pupils and positions is as elaborate as that of private employment agencies. In other places the bureau merely invites employers to consult them when in need of youthful help and urges pupils to consult the bureau before seeking work. Experience has shown that the school placement bureau must keep accurate records of its work in order that the bureau and the schools may become more intelligent in methods of placement and education.

Whatever the plan, be it simple or elaborate, the school is the proper guide and protector of the child, and the best way in which to get a good position is through the disinterested services of the school. The best results of placement can not be secured, however, unless an organized effort is made to retain children in school as long as possible. Experience with school placement bureaus has demonstrated that no city can afford not to have such a bureau, or if the city be small, to have the duties of such a bureau performed by the part-time service of a teacher or other school official.

### 4. GUIDANCE IN CHOICE OF CURRICULUM.

Guidance with reference to the choice of curriculum and electives within curriculums is now recognized as of great importance for all pupils in the secondary school, whether or not they are going to a higher educational institution. Too frequently is secondary education conceived entirely as training for some already chosen career. Early choices are regarded, however, in many schools as provisional and encouragement is given to the pupils to revise their early choices

whenever they gain a clearer insight into their own needs, aptitudes, and capacities.

For those who are to have an extended education reaching into the college or other higher institution, employment supervision and placement are obviously inappropriate, at least as far as the secondary school is concerned. The courses in "vocational information" or "occupations," however, are proving valuable for these pupils. Such courses are and should be so taught as to have great civic and ethical value and the information they give can not be obtained in college courses as at present organized. Furthermore, agriculture, commerce, and industry are calling more and more for college trained men and women, a fact that should be called to the attention of young people while they are in high school.

High-school pupils who can continue their education beyond the secondary school need accurate information regarding managerial and professional careers, the opportunities that they offer, the extent and nature of the preparation demanded, the financial resources needed for this preparation, and for the lean years of early professional service, as well as detailed advice regarding the various educational institutions where preparation may be obtained, together with the requirements and advantages of each.

## SECTION V.—VOCATIONAL GUIDANCE PROGRAM RECOMMENDED.

No system of vocational guidance now employed is complete and adequate, but the committee recommends the following as a reasonable and comprehensive vocational guidance program. The eight steps in this program are evolved from a careful study of the philosophy underlying the vocational education movement:

1. Survey of the world's work.
2. Studying and testing pupils' possibilities.
3. Guidance in choice and rechoice of vocation.
4. Guidance with reference to preparation for vocation.
5. Guidance in entering upon work; that is, "placement."
6. Guidance in employment; that is, "employment supervision."
7. Progressive modification of school practices.
8. Progressive modification of economic conditions.

### 1. SURVEY OF THE WORLD'S WORK.

In an adequate program the spirit of vocational guidance will be manifested in the whole system of administration. Such a spirit will call for a broad program of studies, especially in the years of the junior high school, and will protest against too narrowly restricted or too highly specialized curriculums in the senior high

school. Every curriculum should provide sufficient diversity to give pupils as wide experience as the limitations of time and school conditions will permit. The school should also give a vocational interpretation to these experiences.

The committee recommends the Grand Rapids plan for the intelligent use of a part of the work in English composition to develop a thoughtful attitude on the part of the pupil toward the problems of wise choice of and adequate preparation for vocation. The reader is referred to the report of the Committee on English [1] and to the chapter on "Educational Guidance" in the forthcoming report of the Committee on Organization and Administration of Secondary Education. Other reports also will show how the several secondary school subjects may be so broadened as to give vocational outlook.

The committee also recommends specific courses, appropriate for the age, grade, and conditions of the pupils, designed to give systematic instruction regarding such phases of the world's work as can be brought within the comprehension of the class. Emphasis should be given to aspects likely to influence in any important way the later choice of occupation. Such courses obviously should describe the conditions of work, the relation to the health of the worker, the financial returns, and the opportunities for advancement. They should emphasize particularly the value of the service to society and the effect of the occupation upon the growth and development of the worker.

The study of occupations should assist individual pupils to discover and develop special interests. While this purpose can be realized most effectively where the program offers opportunity for wide experimentation or "sampling," yet much can be accomplished by the course itself, especially if effective illustrative material is provided. An important phase of this course is the first-hand study of occupations by the pupils themselves. Local occupations are the ones most advantageously studied by this method, but not all such occupations can be studied in the same detail. The following outline, based upon successful experience, could with slight modification be used effectively in almost any school:

OUTLINE FOR THE STUDY OF A VOCATION.

I. General statement concerning the vocation:
   1. Value of the vocation as a social service.
   2. Duties of one engaged in it.
   3. Number engaged in it in local community.
   4. Relative number engaged in it in general, with its probable future development.
   5. Relative capital invested in it.

[1] Bulletin, 1917, No. 2, U. S. Bureau of Education, pp. 143-147.

II. Personal qualities demanded:
    1. Qualities of manner, temperament, character.
    2. Mental ability.
    3. Physical demands.
III. Preparation required:
    1. General education.
    2. Special or vocational education.
    3. Apprenticeship conditions.
    4. Experience required.
IV. Wages earned by workers:
    1. Range of wages made (table showing distribution of all cases).
    2. Average wage per week.
    3. Relation of wage to length of experience and preparation.
V. Length of working season, working week, working day, etc.
VI. Health of the workers:
    1. Healthful or unhealthful conditions.
    2. Dangers, accidents, or risks.
VII. Opportunities for employment:
    1. In local community.
    2. In general.
VIII. Organization of the industry, including the relations of the worker to his fellow workers, his employers, and the community.
IX. Status of the workers:
    1. Opportunities for advancement.
    2. Time for recreation and enjoyment.
    3. Adequate income for recreation and the comforts of life.
    4. Any other items of peculiar interest in this connection.
X. Biographies of leaders in the vocation.

## 2. STUDYING AND TESTING PUPILS' POSSIBILITIES.

Obviously individuals differ widely in their aptitudes, capacities for work, and other characteristics. An adequate vocational guidance program should develop the pupil to the point where he will appreciate this fact and will be able to evaluate, to some extent, at least, his own capabilities. While some people overcome by training what appear to be temperamental and physical obstacles, it is best, other things being equal, for each individual to engage in that work for which he is best adapted. It is a simple matter to state the principle, but actual accomplishment in this field is meager. The technique of studying the problems involved has not been developed, and, in fact, has hardly been discussed. Should the individual himself bear the entire responsibility of discovering his aptitudes, presumably in later life and after experience with the trial and error method, or should responsibility be shared by the school, at present almost equally unprepared, but with great opportunities for developing a technique if it will only address itself intelligently to the task?

One of the most effective and available means of studying and testing pupils' possibilities is through "sampling" and "try-out" courses. These are especially appropriate in the junior high-school

period. They should not be confined to the industrial courses, but every pupil should have some experience in a wide variety of activities. Home gardens may give some taste of agriculture; typewriting, business projects, and the keeping of accounts may give an insight into clerical and business pursuits; while handwork and industrial arts may reveal aptitudes in artisanship and mechanics. Surely the capacity to write and speak and interest in history, science, mathematics, and languages should be looked for and, when found, regarded as significant.

Extra classroom activities should be utilized as a means of discovering aptitudes. For instance, debating societies, especially when organized as city council, State legislature, or Congress, test powers of leadership; the school paper tests ability for journalism; the dramatic society may reveal qualities useful on platform or stage; and the management of an athletic team or school paper may disclose business ability. Moreover, these and other extra classroom activities have almost unlimited possibilities for giving contacts with different phases of adult activities.

Until social and economic conditions are immensely improved many children will leave school prematurely. The relation of mentality to early leaving has been studied for many years in the school system in Cincinnati. The school authorities of that city have been convinced that the schools should study the pupils for the purpose of discovering and recognizing the cases of low mentality two or three years prior to the time when the children are likely to leave school. In support of this policy the following considerations, among others, are given:

First, a very large proportion of the group that drops out early are badly retarded in school. With a 14 age limit, 66 per cent of those leaving school in Cincinnati between 14 and 16 were more than a year retarded. When the age limit was raised to 15 for boys and to 16 for girls, the retardation, figured on the same basis, rose to 80 per cent.

Second, a comparison of the children who left school in Cincinnati at 14 years with a corresponding group who were intending to remain in school showed that the children intending to remain were superior in every mental and physical measurement made. The difference was large at 14 years, and still larger at 15. The results were not yet summed up beyond 15 years, but it is believed that in general the difference is a progressive one.

Third, this same group of industrial workers in Cincinnati, when subjected to psychological tests at 18 years, contained 42 per cent who were materially below the norms for their age. The results seemed to indicate the mental inferiority of the majority of the children who left school as early as they were allowed.

Fourth, the studies so far made of the relative ranks of school children at various ages tend to establish the theory that wide differences in mental ability display themselves early in a school career; that the children at the foot of the class in early grades are, on the whole, those who become retarded and leave school early; and that those in the upper portion of the class in the early grades generally continue to lead the class and to go on in school after the compulsory school age. When the judgment of the school is supplemented and corrected by careful experimental measurements, it becomes safer to form a judgment about the probable length of a school career.

In view of these facts it seems to many persons that the school should, a few years before the end of the compulsory school age, select, or rather recognize, those children whose inferior mental ability is likely to be a factor in sending them into industry at the earliest possible moment. Is it not, therefore, desirable to modify the course of instruction for this group of children, provided they can be recognized early enough?

### 3. GUIDANCE IN CHOICE AND RECHOICE OF A VOCATION.

The choice of a vocation by the pupil should follow some study of the world's work and some attempt on his part to ascertain his own aptitudes. He should make such a choice early enough to enable him to make some preparation for that vocation before leaving school. One of the main advantages of an early choice is that it gives definite purpose to much school work and gives the pupil vital interests around which he will organize many ideas which otherwise would make but passing impression upon him.

It is of the greatest importance that these early choices should be regarded by both pupil and school as provisional. There should be every encouragement for the pupil to revise his choice whenever increased insight into either the world's work or his own aptitudes or a new conception of service to be rendered indicates that some other vocation would be preferable. For this reason, among others, curriculums should be so organized as to permit change from one to another with the minimum of loss, and all curriculums should be conducted in the same high school, so that pupils may be encouraged and not hindered in making desirable readjustments.[1]

Early choices may well be between wide fields of activity rather than between specific vocations, or the pupil may fix his attention upon four or five vocations which appeal to him. As he progresses his choice may be narrowed to a specific vocation.

While these choices should be made by the pupil himself, nevertheless the school should exercise guidance to the extent of urging a

[1] See the forthcoming report of this commission entitled, "Cardinal Principles of Secondary Education."

thoughtful attitude, of helping the pupil to correct and verify his impressions, and of giving him the principles underlying wise choice.

### 4. GUIDANCE WITH REFERENCE TO PREPARATION FOR A VOCATION.

For the pupil who has made even a preliminary choice of a vocation the school should give careful advice regarding the subjects of study to be taken. This educational guidance, however, should not be administered in a narrow or short-sighted manner. Vocational preparation is only one of the valid objectives of education and too exclusive attention to this objective is not only socially disastrous, but also defeats even vocational efficiency. For a discussion of the valid objectives of education the reader is referred to the forthcoming report of the reviewing committee of this commission. Vocational education should take into consideration also the need for adaptability to changing economic conditions.

For the pupil who intends to enter a higher institution, the school should seek to give the broadest education consistent with the valid demands of the type of higher education which the pupil desires to pursue. The education of high-school pupils should not be narrowed because some particular higher institution which the pupil may possibly enter sets up arbitrary and narrow standards. The responsibility for such standards must be borne by the higher institution itself and not be allowed to distort secondary education.

For the pupil who has neither chosen a vocation nor decided to enter a higher institution, the school should offer a variety of work intended to help him form an intelligent purpose.

All pupils should, through the courses in civics, become acquainted with the opportunities for continued education, such as libraries, public lectures, and forums. Those who leave school during the high-school period should have their attention called specifically to opportunities for continuation education in both public and private day and evening schools.

### 5. GUIDANCE IN ENTERING WORK—THAT IS, "PLACEMENT."

Briefly stated, the purpose of placement is to bring a youth desiring work into contact with the employer seeking some one to fill a position and to see that the characteristics of the young person and the requirements of the position promise success for the youth and satisfaction for all concerned.

Much that has been said in Section IV regarding placement is pertinent here. Each school system should develop its own type of placement.

The highly organized placement bureau is not appropriate for a village school, nor is it necessary. Here the placement may be secured through the personal interest of the teachers and their

acquaintance with employers in the community. In order, however, to develop placement to the highest efficiency in such communities, some systematic plan must be made for interesting the employers in the school product. The details of such a plan would vary with the local conditions.

### 6. GUIDANCE IN EMPLOYMENT—THAT IS, "EMPLOYMENT SUPERVISION."

An adequate vocational guidance program will require that all children under 18 years of age shall be under the supervision of the educational authorities, whether the children are in school or have gone to work. The registration of all working children under that age with the school authorities should be compulsory. Reports by the employers and visits of inspection by school officers at frequent intervals should also be required.

These children who have gone to work are sorely in need of continued education adapted to their special needs. The establishment of such continuation classes and the attendance of all employed children under 18 should be made compulsory by law.

All that is presented in Section IV under the head of "Employment supervision" and the reference in this section to information regarding opportunities for education in evening schools are pertinent to "Guidance in employment."

Under present conditions the first occupation chosen by a young person is not likely to be the one which finally becomes his life work. This is true particularly of those who choose earliest and with the least preparation for vocational life. When a youth stays in school until he is 18 or 19 years of age, the opportunities for a wise and deliberate choice are greatly improved. Even in such cases, however, unfitness or unsuitability of the worker for the position is often discovered later and the desirability of a readjustment is demonstrated.

Early changes by the younger and untrained workers are not necessarily bad. While grave dangers attend "job hoboism," early changes, if properly supervised, may give a kind of vocational training through a "wandering apprenticeship." Mrs. Woolley has pointed out that those who make several changes in the early and relatively uneducative positions secure, as a group, higher wages than those who stay too long in their first place. She says, "Children who display an excessive amount of shifting in industry—as much as seven or eight times during the first two years—are inferior. They belong to the worst retarded group, and these numerous changes do not tend to result in higher earning capacity. The group of children who change positions three or four times during the first two years increase their earning capacity as compared with the corresponding group who remain in the same position."

The school should assume its full share of responsibility in helping young people to choose their positions, where necessary, in helping them in their early readjustments. This responsibility will be met in part by giving information, by providing training, by placement, or by employment supervision; but it will not be met adequately until the school induces the pupil and parents to consider for themselves the problems of vocational selection.

### 7. PROGRESSIVE MODIFICATION OF SCHOOL PRACTICES.

As indicated in other parts of the report, the inauguration of an effective vocational guidance plan should be of great value to the school system. It should lead the school to modify its practices from time to time without waiting for an educational revolution. It should prevent the school from making the mistakes incident to the enthusiastic development of special courses or curriculums in the hands of specialists without due regard to the real demands of the industrial and economic situation generally. Such mistakes have resulted at times in overcrowding certain vocations and absolutely neglecting others, to the great disadvantage of young workers. The vocational guidance department is in a position to criticize effectively the training offered in the school through its study of the way in which the school product succeeds or fails when subjected to the test of actual service. Another result of this check system should be the modification of high-school work on the basis of the power evidenced by high-school graduates in their college work.

### 8. PROGRESSIVE MODIFICATION OF ECONOMIC CONDITIONS.

Vocational guidance must not only teach the child to adjust himself to his environment, but must also equip him to change that environment. The kind of guidance that merely helps individuals to meet successfully the requirements imposed by employers might make for a more heartless competitive system than exists at the present time. Vocational guidance should lead to the cooperative solution of community problems of economic and social life on the basis of mutual welfare.

Employers are finding that recognition of social welfare in the conduct of their enterprises is not only good citizenship but is good business. Faith in the effectiveness of plans that promote community helpfulness must be instilled into the pupils, who will be the adult citizens of the next generation. Twenty years from now, undoubtedly, the spirit of cooperation will permeate vocational life more than it does to-day, and because of that fact school children must acquire the spirit of cooperation and be trained in cooperation through the social organizations of classroom and school community. The

significance of cooperation should be taught in all the social studies and in the course in occupations.

## SECTION VI.—SOME IMPORTANT RELATED TOPICS.

### 1. PSYCHOLOGICAL TESTS AND VOCATIONAL GUIDANCE.

Recently much has been said and written regarding the value of psychological tests for the discovery of vocational aptitudes and vocational disabilities. Considerable experimental work has been done in this field in the past six or seven years, and there are several types of occupations for which tests have been developed. Wide differences of opinion exist, however, as to the value of these tests for purposes of vocational guidance. Their value as contributions in the field of experimental psychology should not be confused with their value as effective means of selecting an occupation for an individual or an individual for an occupation. As the work is in the early stage of experimentation, judgment on this point must be suspended until results are more conclusive. It is important, nevertheless, to set forth the prominent facts regarding these tests for the readers of this report.

The layman should be guided in his attempt to evaluate the results of vocational psychology by the writings of recognized psychologists rather than by popular writers or by those who advertise perfected systems of vocational analysis. Frequently the layman is sanguine of early results in the field of vocational selection, while the psychologist is frankly critical of the assumption often made that people can be selected for specific positions or positions selected for individuals with anything like scientific accuracy.

The psychologists, however, are quite clear regarding their aims, methods, and partial accomplishments. They are confident that progress is being made, though they do not predict certainty in results for the immediate future. They are seeking for correlations between the results of these tests and the actual performance of the tested individuals later on in some particular line of work. They believe that where there is a high coefficient of correlation in a large number of trial cases, it will be reasonably safe to accept the results of the same tests when given to untried applicants, and to expect that those succeeding in the tests will succeed also in the positions in question. The most helpful type of work in the field of mental testing for vocational guidance is the administering of miscellaneous tests of a sort that promise well and the subsequent selection of the best of these tests as measured by actual results. Work of this kind requires time, but promises well for the future.

Experimental work in the field of vocational psychology falls into three rather distinct classifications, as follows:

First, there is the attempt to supply the employer with tests that will enable him to select from a large number of applicants those most likely to succeed in a given position. This procedure is coming to be known as "vocational selection." It promotes efficiency in the organization and thus benefits the employer. One group of employers is so fully convinced of the ultimate efficiency of this method of selecting employees that they have given the necessary financial support to enable one of the universities to experiment extensively in this field for a term of five years.

Less extensive experimentation has been carried on by individuals to devise tests for the selection of workers for special occupations. Tests for determining ability to profit by musical training, and tests devised for the selection of salesmen, are illustrative of this kind of investigation. In some instances such tests aim to discover special vocational aptitudes while in others they merely designate degrees of general intelligence. To some extent, therefore, these tests may coincide with the general intelligence tests mentioned below.

Second, there is the attempt to determine which of several occupations would be the best one for a given individual to follow, at least so far as his mental characteristics may serve as an indication. This involves not only an analysis of the individual's mental equipment but also an extensive study of the characteristics of successful workers in each of the important occupations, in order that the demands of the positions may be ascertained. Naturally, much less has been done in this field than in the one just examined. Theoretically it would be necessary to canvass the whole range of occupational life before the investigator would be able to say that a given individual would reach his highest degree of self realization in a particular position. The principle seems relatively simple, but its extension in practice presents many difficulties. So far as the committee is aware, no psychologist has yet presented a complete and comprehensive analysis of the mental aptitudes essential for success in any single occupation.

Third, there is the attempt to develop tests for the measurement of general intelligence. The significance of these tests for purposes of vocational guidance, rests on the assumption that an occupation can be classified with reference to the kind or amount of intelligence demanded of those who are engaged in it. It is assumed, further, that young people can be classified as to their general intelligence according as they grade high or low with reference to established mental standards or levels. Obviously if such standards can be fixed and if tests can determine the level of intelligence at which a given individual stands, this phase of psychology will have an important bearing on vocational guidance.

It is not within the province of this report to discuss the relative merits of different systems of intelligence scales, or the limits within which their results have been shown to be effective, but it may be noted that results are found to be more reliable with younger than with older children. What appears to be a proved value of general intelligence tests is the assistance that they may give in determining which children will probably leave school prematurely. Experiments in this field have been carried on in the public schools of Cincinnati for several years. As a result the school authorities are convinced that there is an important relation between retardation, elimination, and low mentality. In this connection Supt. Condon says: "Measuring scales of intelligence have already reached the point where they can be of assistance to the schools in selecting children for certain kinds of vocational training. Such a selection is the most fundamental phase of vocational guidance, since the advice is given while there is still time for special training." Reference to this method of selection is given in greater detail under the heading "Studying and Testing Pupils' Possibilities," Section V of this report.

In most cases interest in the development of general intelligence scales has centered in the "scales" rather than in the young people immediately in need of guidance, for it is realized that many years of experimentation and scientific study will be necessary for its completion. In this field the psychologists themselves attach more importance to the testing of the tests than to the testing of people.

It will be some time before actual proofs of the validity of psychological tests for vocational guidance can be established, meanwhile, young people must be guided. It is also to be noted that the psychological test "tests only what it tests" and that there are many other factors in the problem of vocational guidance all of which the counselor must consider, for his problem is one demanding immediate solution.

Furthermore psychological tests themselves reveal the fact that a fundamental characteristic of the human being is adaptibility—the ability to improve with practice. It is probable, therefore that other considerations, geographic, social, and economic, will frequently have greater weight in determining a youth's occupation, than his peculiar mental equipment, important as that factor may be. In other words, vocational guidance may well become a special study for the sociologists, or the economists, as well as the psychologists. It is precisely for this reason that the vocational counselor must not rely with too much confidence on unverified and possibly unimportant results of psychological tests.

As intimated, few tests have been given in such a way as to determine the ability of the youth to improve with instruction and training. The province of the vocational counselor, however, is to see that education and training become prominent elements in guidance. Therefore the ideal vocational counselor will be something of a psychologist, but he will also be a sociologist, an economist, and, most of all, an educator in the best modern sense of the word.

The committee believes that we should welcome continued experimentation in the field of vocational psychology, but that we should put the present emphasis upon education, training, and supervision. We are of the opinion that when false expectations are abandoned and unreasonable demands are withdrawn, psychology will be able to render worthy service in vocational guidance, and the psychologist may have a large share in making adjustments between individuals and society.

## 2. THE HOME AND VOCATIONAL GUIDANCE.

In the past 20 years the responsibility for advising with pupils and for starting them in their work has been shifted in large measure from the home to the school. In the future the school should do no less, but the home should do more than at present.

There is no activity of the school system that should be more closely in touch with the home nor one that should find a more cordial welcome on the part of parents than the work of the vocational guidance department. It is impossible to form an accurate judgment of a child's capacities, tendencies, and ambitions, without a knowledge of his home environment. Such an understanding can be gained only through visits which, whenever possible, should be made by some one directly connected with the school as teacher or officer. Where this is not feasible, the assistance of social workers may be utilized. In Boston, for example, it has been found effective to have social workers make visits and report in detail directly to the schools.

Furthermore the parents should be conversant with, and interested in the purposes of the various curriculums and courses offered by the school, the pupil's progress in his studies, and in his school work generally, and the fields of work open to him as a result of the preparation received. Such intelligent interest on the part of the parents may be aroused in various ways. The visits of teachers or social workers will help, but they should be supplemented by circular letters and pamphlets giving definite information about the curriculums and courses offered and the work toward which they lead. Personal conferences with individuals or with small groups of parents and more formal discussions in the meetings of parents' associations are also recommended.

### 3. COOPERATION OF THE SCHOOLS AND OTHER AGENCIES.

Activities conducted by organizations like the Boy Scouts, Girl Scouts, and the Camp Fire Girls, can contribute to the understanding of occupational questions. The Y. M. C. A. and similar organizations have successfully assisted in finding suitable employment for young people and have helped individuals to solve their vocational problems. Social and religious organizations everywhere can encourage young people to make a serious study of occupational decisions. To render such service for young people under the stress of early occupational experiences is to strengthen the material foundations for a righteous life and is therefore quite in keeping with the larger purposes of the modern church that stands for moral and religious efficiency. Its main efforts in this field should be to stimulate vocational guidance in the public schools.

Under proper direction the school will find means for utilizing the resources of numerous local organizations in such a way that each can make definite contribution. The ultimate responsibility for effective guidance should, however, rest with the public school, for it is under public control, it is in position to serve not only a part but all of the young people of the community, and it can ordinarily obtain the best trained workers.

### 4. THE TRAINING OF VOCATIONAL COUNSELORS.

Up to the present few persons have been trained specifically for counseling. This service is now rendered mainly by teachers who give extra time or have lighter schedules of teaching so that they may do this important work more effectively. The classroom teacher, by reason of intimate contact with the pupil will always be an important factor in any plan for conducting vocational guidance. For this reason teachers should be encouraged to study the principles and methods of vocational guidance.

The ideal plan, however, calls also for a vocational-guidance director and such assistants as may be needed. Their training should include: Courses in educational theory and practice; courses in the theory and methods of vocational guidance; psychology, sociology, and economics, including the social and economic aspects of labor problems; and a detailed study of many vocations. The basal requirements for vocational counselors include: Sympathy with youth, that they may invite their confidence and recognize their possibilities; occupational experiences, to know conditions at first hand; and social spirit and ethical soundness, to evaluate vocations in terms of personal development and service to society.

## REPORTS OF THE COMMISSION ON THE REORGANIZATION OF SECONDARY EDUCATION.

The following reports of the Commission on the Reorganization of Secondary Education are now available as bulletins of the United States Bureau of Education and may be purchased of the Superintendent of Documents, Washington, D. C., at the prices indicated. Other reports are in preparation. Remittance should be made in coin or money order as stamps are not accepted:

The Teaching of Community Civics. Bulletin, 1915, No. 23. 10 cents.
Social Studies in Secondary Education. Bulletin, 1916, No. 28. 10 cents.
Reorganization of English in Secondary Schools. Bulletin, 1917, No. 2. 20 cents.
Music in Secondary Schools. Bulletin, 1917, No. 49. 5 cents.
Physical Education in Secondary Schools. Bulletin, 1917, No. 50. 5 cents.
Moral Values in Secondary Education. Bulletin, 1917, No. 51. 5 cents.
Vocational Guidance in Secondary Education. Bulletin, 1918, No. 19. — cents.