



Recent Developments in Vocational Guidance in the United States

by

Max F. HAUSMANN

*Henry Phipps Psychiatric Clinic, Johns Hopkins University,
Baltimore, U.S.A.*

A few years ago an account was given in this Review of the origin, organisation, and methods of the vocational guidance movement in the United States.¹ During the five years or so which have elapsed since that article was written the movement has made considerable progress, both in the extent of its operations, and also in the development of new and improved methods and of a more scientific approach to the problems involved. In the following pages the information given in the previous article is brought up to date. In view of the large number of organisations now at work in the field of vocational guidance, the method adopted is to choose certain typical cases and describe them in some detail, from the point of view, first, of their organisation and scope, and secondly, of the methods adopted by them to deal with the fundamental problems of vocational guidance. While it is difficult to generalise about a movement which is developing so rapidly and in which experiment is still actively in progress, attention may be called to the development of new methods (in particular the use of the vocational interest test), the very general application of the principle that the young applicant for work should be not merely directed to a post but should rather be provided with information which will enable him to make his own choice of a career, and the increasing strength of the conviction that guidance is a profession calling for a carefully planned and thorough course of specialised, scientific training.

¹ *International Labour Review*, Vol. XIII, No. 1, Jan. 1926, pp. 48-68 : "Vocational Guidance in the United States of America."

SINCE its origin in 1908, vocational guidance in the United States has shown a tremendous development all over the country. In many cities it has become an integral part of the public school system ; and colleges and universities have shown increasing interest in the movement, both from the research side and in practical application to their own students and graduates.

Within the limits of this article only a summary of recent developments of vocational guidance in the United States can be attempted. It has therefore been necessary to make a very strict selection from the large number of guidance organisations which now exist, and those considered here were chosen as being fair examples of the progress and expansion that has taken place in the last few years. The choice was further limited by the difficulty of securing complete information in certain cases, and by the fact that a number of interesting and important reports were not available in time to be made use of. It should therefore be borne in mind that in almost every case when a specific example is given there exist a number of others equally representative.

The general arrangement of the material is as follows. The actual organisation and work of a number of typical units are first described ; these include official organisations (Municipal, State, and Federal), private organisations, and co-ordinating agencies. In the subsequent sections of the article a functional approach is applied to the same units, and a number of methods used by some of the organisations already described are discussed in detail ; chief among these are methods to measure the candidate's abilities, methods to establish a scientific knowledge and analysis of occupations, and methods to prepare for his task the connecting link between the two, i.e. the vocational teacher and counsellor.

OFFICIAL ORGANISATIONS

Vocational Counselling in the Cincinnati Public School System

The Vocation Bureau of the Cincinnati¹ Board of Education is a product of private initiative in co-operation with the public schools. Originally established in 1911 to administer the issue

¹ Boston, New York, Chicago, Philadelphia, Pittsburg, Minneapolis, Seattle, Rochester, Atlanta, Providence and Oakland also maintain well-organised vocational guidance departments. For a comprehensive report on their activities, cf.

of employment certificates to children leaving school, it has gradually assumed additional duties and functions, while its funds have been increasingly provided by the public school budget.

A director and an assistant director supervise the Bureau ; the work is organised in five divisions :

- (1) Psychological Laboratory ;
- (2) Child Accounting Division ;
- (3) Scholarship Division ;
- (4) Individual Adjustment Division ;
- (5) Occupational Research and Counselling Division.

For the purpose of this article the chief interest lies in the first, fourth and fifth divisions. It has been pointed out¹ that from the time the Bureau was founded its activities have been dependent on and centred in the Psychological Laboratory, which provides individual and group tests, evaluates, diagnoses and makes recommendations on the data collected, and interprets for the other divisions and the schools their findings regarding the mental equipment of the child.

The Individual Adjustment Division renders service to the other divisions and schools by means of its visiting teachers, who ascertain and interpret the social factors relating to the individual children and their problems ; it suggests the adjustments necessary for the solution of these problems.

This article is most directly concerned with the Occupational Research and Counselling Division, which has been carrying out a definite programme of vocational counselling since 1927.² Realising that counsellors need to have definite information about a large number of occupations, the administration requires that each counsellor shall devote at least one day a week to field work—securing detailed information concerning occupations and keeping in touch with actual industrial conditions. The informa-

UNITED STATES, DEPARTMENT OF LABOUR, CHILDREN'S BUREAU : *Vocational Guidance and Junior Placement in Twelve Cities* (Publication No. 149 ; 1925), a revised edition of which was in course of preparation while this article was being written.

¹ " Vocational Counselling ", by Miss CORRE, in *Vocational Guidance Magazine* (Cambridge, Mass.), Jan. 1929.

² From 1921 onward a series of occupational pamphlets have been published ; these deal with Cincinnati's chief industries (the shoe, garment, metal and soap trades, etc.) and are written simply and without technical details.

tion thus secured is given out once a week by counsellors at classes specially designed to provide all the pupils with a general background of occupational information as a part of their social studies. As a consequence of this preparation of the ground, students can derive greater benefit from the eventual individual conference or interview.

Ninth grade pupils must make a definite choice between two divergent paths, i.e. the trade school or the high school; the ultimate outcome of this decision is of such obvious importance to students that two individual interviews are devoted to its consideration.

Before seeing the child the Counsellor learns all that is known about him from a file containing an information form filled in by the child himself, the cumulative record, results of intelligence tests, the teacher's estimate and special reports from social agencies. At the first interview the Counsellor tries to secure a complete record of the child, his likes and dislikes and his plans for the future. The pupil is encouraged to learn more about the occupations that interest him, to talk to people engaged in them and to find out from his family how much time they are willing he should spend in preparation. At the second interview the child is often ready to make a choice. In the case of children of special ability the parents may be interviewed to urge upon them the importance of further training, and scholarships are recommended when the cost cannot otherwise be met. The Counsellor's policy is never to force his plan on the child, but to lead him to think about his own qualifications and to consider various occupations and the training he needs to enter them.¹

A follow-up plan, which would enable the eventual outcome of guidance to be checked in each case, is not yet in operation.

Legal Provision by States for Vocational Guidance

Vocational guidance provisions have been incorporated in the public school laws of some States. The State of New York is one of these; its Education Law² provides that "the school

¹ Seventh grade pupils, who need not make an immediate choice, have only one interview. This is devoted chiefly to awakening interest in a number of occupations and is mainly concerned with educational guidance.

² Article 22, paragraph 609.

authorities of each school district may employ one or more qualified persons for the purpose of providing vocational and educational guidance for minors. . . . Teachers and other persons who devote at least half time to those activities commonly recognised as guidance¹ are required to hold a vocational and educational guidance certificate." To obtain this certificate a candidate must have graduated from an approved four-year college course and have had two years' satisfactory practical or professional experience in industry, commerce, agriculture or other occupational field, or certain variations of this preparation which are regarded as equivalent. In addition the applicant must present evidence of having completed the following courses, which may have formed a part of his previous professional training: (a) general courses (twelve credit hours in all): educational psychology (psychology of adolescence preferred); principles of teaching; educational measurements; sociology; industrial history; economics; (b) special courses (twenty credit hours in all): vocational and educational guidance; psychological tests in guidance; principles and problems of vocational education; methods in counselling and placement; occupational training opportunities in New York State; labour problems, legislation and employment conditions; study and analysis of industrial occupations, commercial occupations, and professional and semi-professional occupations.

Since 1928 the State has maintained a full-time supervisor of guidance who has the duty of giving assistance and advice to the local communities. On one evening a week reliable and timely information relating to occupations and opportunities of training for them is given in three ten-minute broadcast talks; these are reproduced in the form of pamphlets, each of which contains also a selected list of references, the requirements (in New York State) for entrance to the occupation dealt with, and the names of schools and colleges where candidates can be trained for it.

Placement of pupils leaving full-time schools is carried out largely by the part-time schools and by teachers in special vocational schools and courses. In a number of cities the State

¹ The law recognises as guidance functions: teaching classes in education and occupational opportunity; counselling pupils and parents in relation to vocational and educational plans of pupils; assisting pupils to obtain suitable employment at the time of leaving school; engaging in follow-up of pupils who have left school to enter employment.

Labour Department is working in close co-operation with the public schools.

In Pennsylvania the situation is somewhat different. There is no law providing for vocational guidance in the public schools but throughout the State the Department of Public Instruction is attempting to co-ordinate and standardise the various organisations developed under the various systems adopted by the public schools. A *General Bulletin on Guidance* issued in 1927 will further this purpose. Under "the problem of guidance" its importance and even the necessity for it are illustrated by concrete cases and amusing anecdotes. This is followed by specific suggestions as to what the aim of a "programme of guidance" should be : e.g. showing in detail how co-operation between school and home and community may be carried out ; and urging that there should be recognition of the fact that school responsibility does not end when the pupil has graduated. Suggestive forms for a school guidance bureau, information on the subject from various cities and other States, guidance projects and outlines for the study of occupations are given in the "material on guidance" section. The last section contains suggestions for teacher training in guidance, and for reading, for conference programmes, and for bringing the subject before Institute meetings. There is also a bibliography.

The United States Government and Vocational Guidance

There is no Federal Department or Ministry of Education ; each individual State adopts and carries out its own educational policy.

Although the Federal Government cannot intervene in the educational policies of the different States, it has done a good deal of work in co-ordinating and standardising their guidance practices.¹ As a rule the surveys issued by the Children's Bureau of the Department of Labour are the result of careful enquiry and

¹ The federal organisation of vocational education under the Smith-Hughes Act of 1917 is quite distinct from vocational guidance. This Act appropriated liberal sums to be used in assisting the States to pay the salaries of teachers of trades, home economics, and industrial subjects, and to train teachers, supervisors and directors in these subjects. The system in all the States is that for every federal dollar the State must put up an equal amount ; it is administered by a Federal Board for Vocational Education with power to enforce uniform standards and methods from coast to coast.

investigation covering all the States. This applied to such publication as *Advising Children in Their Choice of Occupation*, *Child Care*, *Scholarships for Children*, *The Visiting Teacher*, etc. Figures relating to vocational guidance are published by the Bureau of Labour Statistics; studies of occupations have been made available by the United States Employment Service, which is also within the Department of Labour.

Close co-operation between the Federal Government and the schools all over the country has been developed by the Director of Research of the Civil Service Commission. The Civil Service Commission must be satisfied that objective criteria are increasingly used in the award of federal positions and that these are filled according to merit and not on the old "spoils" system. Since more than 500,000 people are in federal employ the importance of this improvement in procedure is obvious.

In a recent publication the Director of Research has called attention to results that may be expected from these developments, and has emphasised the improvement in guidance and placement due to "co-operation research with schools and industries¹".

The Civil Service Commission has done a tremendous amount of work in regard to selection, placement and promotion of federal employees. It is now proposed to make this work more generally available. Not only the employees need guidance but also the vast number of persons who apply unsuccessfully for positions in the Federal Service need help to enter careers in which they will find an outlet for their abilities and which suit their interests. No additional basic research is involved, as co-ordination enables the study undertaken for the improvement of the Federal Service to be more widely utilised. The gain for the Government lies essentially in the fact that an increase in the number of competent people seeking federal employment may be expected.

The principal means projected to achieve this are as follows: research to perfect tests (i.e. determining standards); these are established by the Civil Service Commission in co-operation with a number of the largest business organisations. Arrangements are made with selected firms to give the tests for certain positions

¹ L. J. C. O'ROURKE: *A New Emphasis in Federal Personnel Research and Administration*. Washington, 1930.

to groups of typical employees, so that the standards of each firm may be determined in terms of Civil Service tests. When these standards are obtained, Civil Service Commission tests are released to industries and schools, and the vocational counsellor is thus enabled to use objective terms in informing the candidate of what seem to be his relative qualifications for various positions in various industries. Further, in the school placement officer's report of a student to an employer the applicant's ability can now be stated in nationally standardised terms. The student also can better judge how far he is prepared to meet actual conditions in industry, and this will act as an incentive to better work—when one is needed—whereas as things are he is first told of his shortcomings in the employment office, i.e. when it is too late for an adjustment.

A "guidance card" has been devised as a part of the new methods. It will show a list of the Civil Service positions that give employment to a large number of persons each year. In parallel columns will be set out (in the order of intelligence-test scores required for each) the names of positions, minimum scores on any aptitude or achievement tests required, salary range and special requirements. In the final column there will be references to reports setting out the duties of each position, where the employment is, opportunities for training within the service, and prospects of advancement by promotion or transfer. These are facts many of which are as yet unknown but are of value to everyone directly or indirectly interested in the Federal Service. In compact form the card outlines requirements, limitations, and opportunities for prospective applicants. The study of actual promotions and transfers will be the base of this information. Provision is also made for co-ordination of registers of eligible applicants for the use of the various departments, and for the guidance of the present employees in regard to transfer, promotion, elimination of blind-alley jobs, etc.

The more interesting results to be expected from the practical application of this research work would seem to be that it should attract people to the positions for which they are best fitted, effect a marked reduction in turnover, and show a prospective applicant his relative chances of appointment and eventually of advancement. It will certainly provide the basis for more practical co-operation between those engaged in vocational research in industries, in schools, and in Government employment.

PRIVATE ORGANISATIONS

Vocational Guidance in Universities and Colleges

The American College training differs radically from that of the European Universities. Whereas the student entering a European University from the outset receives a highly specialised professional training, the American college curriculum is much broader in its scope, and, as a matter of fact, the student's time and attention are to a lesser degree monopolised by purely intellectual endeavour. The American college aims rather at a general cultural level for its student, and at turning him into a well-adapted *zoon politikon* by the time he graduates.

Accordingly most American universities advise their pupils systematically as to their educational and vocational plans, and seek to arrange for their placement in appropriate positions in industrial or other concerns, while they make a point of keeping in close touch with their alumni.

Purdue University, Lafayette, Indiana, provides a good example of a well-organised Vocational Guidance and Personnel system in general. The American four years' college course is somewhat strictly organised : the youth enters as a Freshman at eighteen and becomes in turn Sophomore, Junior, and Senior ; at the end of his Senior year he graduates, being then about twenty-two. The following description of the Personnel Service at Purdue during these four years is mainly given in the words of its director, Dr. Walters.

Before the Freshman arrives he is requested to fill up a form giving complete personal information about himself, and answering also questions as to hobbies, high school, social, and scientific achievements, vocational preference, etc. The form also provides for a self-analysis of his personality, which is intended to focus at once his attention on its development "and to give the college an idea of what he thinks of his own personality". For this he is requested to fill in a personality rating scale, which allows of a quantitative rating of address and manner, attitude (interest in work), character, co-operative ability, disposition, industriousness, initiative, judgment, leadership, and native capacity (intelligence).

In the middle of the Freshman's first year he gives the names of fifteen people (five teachers, five students, and five other

persons), who are asked to rate him on the traits of his personality on a form essentially the same as that he filled in at the outset. These ratings are scored, compiled, averaged and recorded on the students' Personnel Record by the Personnel Office. The general averages are ranked from the lowest to the highest and are divided into quarters; if a student's average falls into the lowest quarter he is asked to come to the Office to discuss the development of his personality, when methods of improvement are pointed out, these being followed up. This procedure is repeated in the third or Junior year; as soon as the ratings of that year reach the office the student whose characteristics are not improved is invited to present himself here as before.

It would appear from statistics furnished that the methods are sufficiently sound to warrant the use of them.

At Purdue descriptive literature of hundreds of industrial concerns, special publications, lectures and conferences tend to familiarise the student with the technical aspects of engineering and other industries; the Personnel Office holds that it should provide a sufficient knowledge of various occupations to enable the student to make his own decision.¹

Actual placement involves *inter alia* personal interviews with representatives of engineering and industrial firms who visit the campus, letters from companies wanting men, and recommendations by the Heads of the Schools with the Personnel Service co-operating; in their last years the Seniors are put into personal touch with industrial concerns by means of visits, etc. At times information about employment is obtained by visits of the Personnel Director to industrial concerns, and every effort is made to bring the prospective employers of the pupils into contact with the specialist teachers of the college.

This organisation at Purdue is representative of what many universities are doing. Some of these carry on research into occupations and have a follow-up service after graduation. Such services have been set up at Vassar College, Smith College, and Goucher College (these three for women), the University of Syracuse, Yale, Michigan, and Stanford. The Yale Graduate

¹ Stanford, Yale, Michigan and other outstanding universities take a similar view as to the supply of information which will enable students to assume responsibility for the choice of occupation.

Placement Bureau, Inc., in New York City, although carried on independently of the University, is helping many young graduates not only with their placement but also with their personal problems in industry. The machinery of this Bureau for collecting facts and for keeping in touch with students who have been placed greatly facilitates effective work among students still at the University.

With the aid of generous endowments, the Yale Personnel Department has launched a far-reaching programme concerned essentially with the collection of occupational data; this has been undertaken partly in co-operation with the scheme of the American Council on Education.

At the University of Cincinnati, Antioch College, and some others there is a co-operative plan which, though not really typical, is interesting from an industrial standpoint: an opportunity is given to the student to find out by actual work whether he is likely to find lasting interest and satisfaction in a particular line of work. Dean Herman Schneider (now President), of Cincinnati University, originated the plan which is followed there; it was first tried in 1906 after many difficulties had been overcome. The student divides his time equally between the university and industrial work; he shifts to and fro between workshop and campus every four weeks. Students are paired so that while one works in the shop his "co-op" is attending classes, and after four weeks they simply change places. From a very small beginning the idea has gained ground rapidly, so that by 1920 the regular four-year course in the Engineering School was entirely dropped in favour of the five-year co-operative plan. It is now proposed to extend the plan to other Schools, and the Schools of Applied Arts, Medicine, and Law have already begun to put it into practice. The Co-ordination Department is the heart of the whole system, for it is manned by the professors and supervisors who place each student in the work which is best calculated to further his individual aims and needs. They maintain contact with the co-operating employers, settle all questions of wages and hours, arbitrate in disputes, change students from place to place as their course progresses, and make sure that each student's practical work fits in properly with his class room work and assignments.

Clearly this system has tremendous advantages from the point

of view of character formation, since the student has to take responsibility and gains experience of the actual conditions of life. Financially, too, the student is much better off than under the more ordinary arrangement.

Guidance in the Y.M.C.A.

Guidance has always had a prominent place in the work of the Y.M.C.A. "In the early days it was not called guidance, it was personal help to young men."¹ Their problems might be educational, religious, social, or connected with the home or community, but all were included with those of a vocational character.

This general helpfulness has developed into a well-organised guidance system in a large number of Y.M.C.A. branches.

In New York City an experiment on a large scale is being made to carry on Y.M.C.A. work on the basis of personal service to individual members. There is an initial interview when each young man or boy becomes a member, and the personal relations thus set up are maintained by further interviews and by observation of the member both through the ordinary opportunities the Association gives and through the Member Clinic service. The Member Clinic is a conference of the heads of the different departments of the Association ; it meets once or twice a week, when the names of all members who have joined the week before are submitted and information is exchanged. Discussion takes place as to how the Association can render service to the members.

Other branches do similar work ; in Camden, N.J., and Boston it is carried on in conjunction with psychologists and psychiatrists.

In Camden there is a psychological clinic whose purpose is to "help the boy in an industrial area where he can become lost in the maze of unskilled occupations which stifle ambition and cause capacity to atrophy." The clinic has its own doctor, who makes physical examinations ; assistants and graduates of the University of Pennsylvania, which is close at hand, give psychological tests ; social investigations, placements and follow-up are in the hands of a special worker. For the conception of adequate

¹ L. H. EMERSON : "Guidance", in *Vocational Guidance Magazine*, April 1930

guidance in Camden includes consideration of all the social, economic and medical factors which may affect the individual in a vocation.

In Boston Dr. Lyman Wells, of the Boston Psychopathic Hospital, is, so to speak, consultant to the Y.M.C.A. clinic; individual cases of maladjustment may be referred to him. He also coaches the whole of the branch staff in order to increase their alertness to evidences of maladjustment in their counselling and testing procedure.

Hamilton, Ohio, has shown that the smaller branches with limited means can do very good work. Here they have issued an attractive booklet dealing in detail with all the questions which may present special difficulties for young men.

As a general Y.M.C.A. policy it is held that if vocational counselling is to have the best results it should be a relationship continued for some time—it should in fact be “a process rather than a single contact”.¹ The author of the preceding words considers that vocational adjustment is not merely one of many adjustments, but actually the most central of all, in the life of the individual.

No comprehensive survey of the actual proceedings of many of the local Y.M.C.A. branches is available at present, but the Personnel Division of the National Council of the Association, in New York, has one in hand, which is shortly to be published.

The Vocational Adjustment Bureau for Girls

New York is carrying out an interesting experiment which was initiated by a group of public-spirited women: the Vocational Adjustment Bureau for the placement of “maladjusted girls”. This term is used to cover all kinds of maladjustment: sub-normal intelligence, emotional instability, marked psychotic tendencies, or failure to conform to accepted social or economic standards.

When a girl comes to the Bureau she is given various tests to determine her general intelligence and special aptitudes. At an interview with the psychologist a list is made of her assets, her limitations, and her aspirations. While great emphasis is

¹ Owen E. PENCE: “The Evolution of the Guidance Idea in the Y.M.C.A.”, in *Religious Education*, Oct. 1930.

placed upon her assets she is urged to face reality and acknowledge frankly her weak as well as her strong points.

Then the Bureau attempts a placement. It has a very long list of employers and of vacant situations ; each position is carefully investigated and analysed before a girl is put into it. Extensive research is undertaken by the Bureau to establish the minimum intellectual level requisite in various lines of work. Regional studies of different sections of New York have been made to facilitate finding work for girls near their homes and so avoid exposing them to the hazards and emotional strain of traffic in New York.

In 1925 the Bureau opened an experimental, curative workshop and has maintained it ever since. Its purpose was to determine what cases of mental or nervous disability could be improved by industrial work of a practical nature carried on under therapeutic methods to the point of at least partial rehabilitation. About 70 girls and women are now enrolled for regular attendance ; their ages range from fourteen to fifty. The aim is to train for placement outside at the earliest possible moment. The type of work done in the workshop must not be too difficult nor the process too slow of accomplishment. It is found that the bright colours of the objects handled have considerable influence on the workers and consequently on the output. In addition to this manual training the Bureau gives mental hygiene talks, and suggestions as to dress, deportment, recreational plans and other things necessary for a socially well-balanced life.

In 1929 the Bureau examined 1,151 new applicants, and rendered service to a large number of persons already on the roll, so that close upon 12,000 interviews were given in one year. This suggests a large measure of success.

CO-ORDINATING AGENCIES

Some associations and federations of public and private organisations call for mention here, as they act as co-ordinating agencies and facilitate intercommunication between the units already considered.

The National Vocational Guidance Association, with headquarters in New York, a federation of branch organisations, takes the first place. It has several active committees at work

throughout the year ; these deal with such subjects as Occupational Research, State Programmes, the Training of Counsellors, and the Co-ordination and Furtherance of Vocational Guidance. The last is of particular importance, for it has full charge of all relations with the J. C. Penney Foundation and general supervision of the work of the Executive Secretary.

The J. C. Penney Foundation in New York appropriates \$5,000 a year for the maintenance of the field secretary of the Vocational Guidance Association, whose duties include the observation and study of vocational guidance practice in various localities and organisations and giving assistance in the organisation of vocational guidance in communities. It is the subsidy from the Foundation that enables the field secretary to do this and other work. Vocational radio talks throughout the country are also arranged under the auspices of the Foundation.

The Personnel Research Federation in New York publishes reports on research in vocational guidance in its *Personnel Journal*. The Federation holds formal and informal conferences every year in different parts of the country ; these bring together investigators and those at work in the field of vocational guidance, placement and employment.

The American Council of Education is essentially a co-ordinating agency. Formed in 1918 to co-ordinate the efforts for the national defence in universities, colleges, and educational associations, it proved so useful an institution that it was continued after the war ; it now includes all the leading educational associations and more than two hundred universities and colleges. Its main task is co-operative investigations under the supervision of a specially appointed committee. Grants have been made to the Council by Mr. John D. Rockefeller, Jr., the Commonwealth Fund, the Carnegie Corporation, and others for special projects. The *Educational Record* is published regularly by the Council.

The American Association of University Women maintains a research organisation, the Institute of Women's Professional Relations, at the North Carolina College for Women, and has published a bibliography of occupations for college women ; it also has a news-letter and occupational information service.

From time to time the Executive of the United States Government has shown interest in vocational guidance. In 1929 a planning committee was appointed, under the chairmanship of

Dr. Ray W. Wilbur, Secretary of the Interior, and was instructed to build up an organisation which would "study the present status of the health and well-being of the children of the United States, and report what is being done for child health and protection". The survey was to include recommendations as to "what ought to be done and how to do it". In connection with this a sub-group was concerned with "vocational guidance and child labour". Among the points on which the sub-group proposed to report were the effectiveness of school organisation and curricula for the purpose of vocational guidance and special provision for retarded and exceptional pupils; an enquiry was also planned into the number of schools using cumulative records to measure their pupils' progress through the whole of their school life.

RECENT DEVELOPMENTS IN METHODS, TESTS, AND INTERVIEWING TECHNIQUE

A very promising test, in the form of an 8-page booklet, has been provided by Dr. Edward K. Strong, Jr., of Stanford University; he has named it the "Vocational Interest Blank". It is already widely used and good results are expected from it. The test is based upon the idea that members of a specific occupation or profession—e.g. engineers as a group—have a definite pattern of interests distinct from the interest patterns of most other occupations and professions. By using the vocational interest test it is possible to determine the extent to which a man's interests approximate to the interest patterns of men who are already in various occupations and professions. Twenty-six occupations are considered: advertising, architect, chemist, life insurance salesman, minister, psychologist, Y.M.C.A. secretary, are fair samples and show how wide the net is cast. Sufficient data have been secured to show that there is agreement between the actual careers of adult men and the recommendations as to careers based on the test scores, and to prove that, as far as can be ascertained within the two years during which the students are followed up, the interest tests have real prognostic value in the case of college men.

The test begins by calling for the usual personal information. This is followed by four sections devoted respectively to "Occupations", "Amusements", "School subjects" and "Activ-

ities"; the subject is requested to express his liking, dislike or indifference to a number of entries under each heading. The range of variety in each group is best conveyed by giving some samples.

Occupations are specified in detail : the subject is not asked what his reactions are to authorship or journalism in general, but has to put down (working rapidly, as first impressions are desired) whether it would or would not appeal to him to be a reporter for the sporting page, a foreign correspondent, the author of a technical book, etc.

Amusements cover anything from poker to pet monkeys and snakes, and include the more ordinary things such as driving a motor car.

The classification of school subjects would seem to have something for all tastes : botany, shorthand, and military drill are among the subjects suggested.

In the section concerned with activities there is no flinching from strong contrasts : samples are doing research work, acting as yell-leader. (A later section seeks to discover the order of preference of activities, by giving a list of ten and asking the subject to indicate three of them which he would most or least enjoy.)

The judgment of the subject on people's peculiarities has also to be recorded ; he must for instance put down his instinctive reactions to absent-minded people or people who talk too loudly. He is asked to state which three factors most affect his work ; extreme cases are put to him : salary received is one, another the opportunity to make use of all one's knowledge and experience.

The test does not omit the classic enquiry : " Which three men would you most like to have been ? " with examples suggested from the worlds of finance, art, and science. In regard to both work and recreation a choice is put before the subject, such as outside or inside work, amusement in a crowd or alone, etc.

Finally the subject is asked to rate his present abilities and characteristics — to state for instance if he is " often ", " sometimes ", or " never " on time with his work, or is easily rattled, or has driving power.

One drawback to the test seems to be that it is wholly concerned with the individual as he is at the time of testing and makes no attempt to discover potentialities as yet unexplored.

Psychological tests are in general use to ascertain the assets and limitations of candidates. The intelligence tests most widely used are the Army Alpha and the National Intelligence Test, and of course the classical Binet-Simon. For personality tests the Downey Will-Temperament (with the avowed tendency to discover neurotic trends), Woodworth, Thurstone and Laird Tests are all used, and to some extent Pressey X-O.

Personality rating scales, such as were described as part of the system at Purdue University, have also been widely adopted. In order to improve rating scales and make them comparable, the American Council on Education has agreed on the following principles: only traits observed by the rater should be rated; traits for which no valid objective measurements are available should not be rated; the number of traits to be rated should not exceed five if teachers are expected to rate the traits of a large number of students; traits should be mutually exclusive; traits should not involve unrelated modes of behaviour.

The performance tests most generally used are probably the different form boards (Healy, Goddard, Seguin, Dearborn), the Stenquist mechanical assembly test, etc.

In aptitude testing O'Connor has done remarkable work for the General Electric Company, in Lynn, Mass. Unfortunately his book, *Born That Way*, scarcely does justice to the value of his practical work.¹

The Research Department of the United States Civil Service Commission has issued a series of publications concerned with the development of methods for a more efficient selection of mail carriers and distributors, typists, policemen, prohibition agents, etc.; this is of undoubted importance on account of the large number of people actually selected on the lines laid down. Prohibition officers and policemen are now examined according to definitely standardised tests and questionnaires; standardised methods of investigating the character of applicants for positions as mail carriers and distributors have also been developed.

The vocational interview is a more important part of the United States guidance system than European observers are wont to assume. It is very rare for test scores as such to be considered an absolute measure; they are rather taken as indications which

¹ *Aptitude Testing*, by Clark L. HULL, is probably the best survey of the field in recent years.

must be interpreted and evaluated by the psychologist. The Psychological Corporation in New York has issued *Aids to the Vocational Interview*¹ with the view of providing a more systematic basis for these interviews. The different points are put before the interviewer in logical order, and to some degree Dr. Strong's principles are adopted in regard to the opportunities given to the individual interviewed to express his vocational interests.

OCCUPATIONAL INFORMATION

If vocational guidance is to reach a high standard of efficiency there must be both adequate methods of ascertaining the candidate's abilities and weaknesses and extensive knowledge of what traits and abilities are called into play in different occupations and to what degree.

In all vocational guidance systems studies of occupational information have therefore an important place. The two most important forms in which these studies can be cast are : (a) vocational monographs, giving a connected survey of a given occupation, considering the abilities and personality traits required as well as salaries, chances of promotion, etc. ; (b) records of usage or job specifications, i.e. records of performance of a number of different individuals carrying out the same job in different organisations.

The American Council on Education has dealt with these two points ; it has probably gone into them more thoroughly than has any other body.

One of its committees was put in charge of vocational monographs, and after close consideration of what the content of such monographs should be a working model outline was adopted, and it was tried out by having monographs prepared by a few individuals or industrial firms working in a field where sufficiently reliable data were available. Dr. Crawford of Yale University supervised a monograph dealing with banking and trust companies ; another was prepared by Dr. Charters of the University of Chicago on librarianship. Dr. Yoakum at Michigan undertook one on medicine, and a fourth monograph was prepared by Dr. Mann in conjunction with the American Tele-

¹ A form drawn up by Dr. Bingham, Dr. Achilles, and Miss Leahy.

phone and Telegraph Company. When these were published a list of questions on certain points upon which the authors desired to have a consensus of opinion was distributed with them. They are to be read critically by a group of forty students, whose suggestions and criticisms will be the basis for revision and for deciding on further policy and development.

For "records of usage" the Council has in many cases undertaken preliminary studies in co-operation with various Federal Departments in Washington, but records are being established also in private business organisations and in colleges. The terminology adopted for the records is as follows¹:

Record of Performance: this term applies only to the description of the activities of a single individual in a particular job, position or situation. To make a well-rounded record of performance it is necessary to record the activities of the individual on his job over a long enough period of time to include all of the essential activities that are likely to recur.

Job Specification: this is a composite of the records of performance of several different individuals who did the same job: it therefore eliminates from records of performance non-essential personal peculiarities.

A Record of Usage is the composite of the job specifications of a group of similar jobs in a variety of organisations. It defines the results any individual must accomplish and the tolerances of acceptable performance in a particular type of work in any organisation.

In other words, records of usage describe accurately not only the mechanism of the work but also the quality of performance that is essential to success; they tell not only what the employee has to do but how he has to do it.

The value of a complete file of records of usage for every important position in a company is very great. It enables a placement officer to visualise the qualifications an individual must possess to fill successfully each position. This fine differentiation increases in importance when vocational guidance is given on a functional basis. The approach may involve a somewhat startling departure from the occupational classifications commonly used and it may even seem rather difficult to think in these terms, but we are told on good authority² that the attempt to do so has won the support of practical and successful men of affairs.

¹ "The Activities of a Research Scientist in Government Service", in *Educational Record*, April 1929.

² *Choice of an Occupation*. Yale University, 1929.

Records of usage have been drawn up by the Council on Education in co-operation with the State Department ; the jobs of the President of the United States and of a Foreign Service Officer have been recorded on the general lines laid down. The Departments of the Interior, Commerce, and Agriculture have all used the scheme by applying it to positions in their own particular line of work ; the Department of Agriculture founds upon it a description of the various promotion stages of biologists employed by it.

In conjunction with colleges the duties of president of a college and of a vocational secretary have been analysed and set down, and in co-operation with industrial firms the functions of a production executive have been recorded.

Modern inventions are laid under contribution to assist in spreading vocational knowledge. Not only the Penney Foundation but also the New York State Department of Education use the radio to send out information in respect of occupations, and vocational guidance is to be popularised by the talkies in a series of pictures produced by the Electrical Research Products Corporation of New York City.

THE TRAINING OF VOCATIONAL COUNSELLORS

The vocational counsellor is the connecting link between the agencies collecting facts and the human material to be guided on the basis of these facts. It is the vocational counsellor who has to determine, on the ground of a careful study of records of usage, into which vocational patterns the applicant seems to fit best, intellectually, temperamentally, and physically. It is evident, therefore, that the selection of persons for so responsible a position and their preparation for their work are of no small importance.

Out of a more or less haphazard preparation for vocational counselling more definite curricula have gradually emerged, and attempts are being made to establish uniform standards for the whole country.

A committee composed of authorities in the field of vocational guidance is working out a standard plan for the preparation and training of experts. The Chairman, Dr. Harry E. Kitson, of Columbia University, has studied the matter at close quarters, for

a series of special courses on guidance has been provided in the University designed to meet the requirements for the M.A. and Ph.D. degrees.

The broad assumptions taken by this committee as the basis of its work are as follows :

1. Vocational guidance is a distinct profession and should be prepared for by specific training.
2. This training should be graduate work preceded by a good liberal education as represented by the bachelor's degree, preferably specialising in the social sciences.
3. The content of the training courses should be based on the things (functions) which one does in vocational guidance.
4. In addition to these courses, students should have industrial experience, or experience in some occupation other than teaching.

The training courses proposed are as follows :

Principal courses :

1. Principles and problems of vocational guidance ;
2. Analysis of vocational activities ;
3. Methods of imparting information about vocation ;
4. Analysis of individuals and counselling of individuals ;
5. Placement and follow-up ;
6. Field work in guidance ;
7. Research on special problems.

Courses in related techniques :

Statistics ;
Mental tests ;
Special case work ;
Educational guidance.

Courses giving related knowledge :

Vocational education ;
Labour problems ;
Mental hygiene or abnormal psychology ;
Psychology of adolescence.

Many universities provide for the study of guidance as a special subject for their summer session. The Columbia University scheme may serve as an example. It consists of the following courses :

Principal courses :

Guidance and personnel in education and vocation ;
Analysis of the individual ;
Field work in guidance and personnel ;
Methods and content of the course in occupations ;
Illustrative lessons in an occupation class.

Related courses :

- Measurement of intelligence ;
- The economic effects of education ;
- Elementary educational statistics ;
- Psychology of adolescence ;
- General principles of mental hygiene ;
- Principles of family social work ;
- Labour problems.

Courses in vocational education are also recommended.

At the Harvard Graduate School for Education a two-year scheme is suggested¹ for students without teaching experience who intend to take up work as vocational or educational counsellors :

First year, first half :

- Educational institutions and practices (historical and comparative) ;
- Principles of educational psychology and of mental hygiene ;
- Principles of vocational guidance.

First year, second half :

- Methods of measurement and experimentation in education :
- Principles of teaching ;
- Vocational counselling and organisation.

Second year, first half :

- Individual development and education ;
- Principles of vocation, education, statistical methods in education.

Second year, second half :

- Education as guidance ;
- Social policy and education ;
- Measurement in guidance ;
- Seminary in guidance.

This course of study is offered only to students " who are already fitted to undertake intensive work of a distinctly professional nature in this field ". Here we have an echo of the basic requirements set out by Dr. Kitson's committee.

Comparing these requirements and the outlines of study quoted with the training courses offered a few years ago² by a number of American universities and colleges, it is possible to discern a certain advance in thought and a more scientific attitude.

¹ By the adviser, Dr. John M. Brewer, one of the earliest promoters of the vocational guidance movement.

² Cf. *International Labour Review*, Vol. XIII, No. 1, Jan. 1926 : " Vocational Guidance in the United States ", especially pp. 65-66.

In New York Dr. Mary S. Hayes (Director of the Vocational Service for Juniors) has succeeded in launching a scheme for training counsellors by practical experience, this being in her judgment preferable to a purely academic training. The Rockefeller Foundation has granted \$14,000 a year for three years to carry out a practical training programme. The plan is that future counsellors should have opportunities of direct observation and take an actual share in the guidance work of "ten selected colleges, secondary school systems, mental hygiene clinics, State and Federal departments, business organisations and industrial and social research bureaux".

The first group of candidates was sent out in October 1930. Obviously no conclusions can as yet be drawn from an experiment still in its infancy, but the reports obtained so far seem promising.

THE OUTLOOK

In the foregoing pages it has been shown how out of the humble beginnings of vocational guidance in 1908 an extremely complex and vital organism has developed; far-reaching plans have been thought out with vision and intelligence, and are now being realised with the care and attention to detail which are required to carry out great projects.

Much has been done, still more remains to be done. The criticism often made that vocational guidance is no good because a sufficiently high degree of reliability has not yet been achieved is not justified; the same sort of criticism has been applied to other branches of human science. The important thing is to find out where the weak spots are and formulate policy and future plans accordingly.

Dr. Morris Viteles (Director of the Camden Psychological Clinic) has called attention to some of the weak points.¹ At present, he says, group tests and mass treatment of statistical data are in the ascendancy in the analysis of vocational ability, and "the individual becomes lost in the shuffle of interpreting mass data". He is of opinion that there is little to be gained in measuring classes and schools as a whole, and that in the vast number

¹ "The Clinical Approach in Vocational Guidance", in *Vocational Guidance Magazine*, Oct. 1928.

of cases the need is to enlarge our understanding of the individual subject. He thinks that it is possible to use group tests in such a way as to contribute to this end, "but in our present pursuit of wholesale testing there is danger that the clinical point of view will become obscured". Dr. Viteles pleads for a shift of emphasis from consideration of the group as a unit to a more complete study of the individual, or, as he terms it, the clinical approach. Here the aim is to fit together into a complete whole the various data bearing upon the life of the individual or, more specifically, his vocational adjustment. "Like the pieces of a cut-out puzzle the various items must be assembled into a picture or pattern delineating the personality of the individual and its particular setting."

In psychiatric clinics personality studies of this kind are used extensively in dealing with maladjusted individuals. In the endeavour to throw light on the total reaction patterns and personality reactions of the individual, these studies take into account such things as his endurance, his type of choice and decision, his formula of satisfaction, e.g. whether he is satisfied with the result of a short period of effort, or capable of a protracted striving to reach a distant goal, and so on. A similar method might be usefully applied in the study of vocations.

The question of personnel is a serious problem. It is a responsible task to guide a youth or girl into one vocational path rather than another; the consequences of a choice and its ultimate effects on happiness and health are of obvious importance. In the article quoted above Dr. Viteles points out that the present tendency is to centralise the responsibility for guidance "in a teacher picked almost at random from the teaching force"; and that the specially trained counsellor is still rare in schools practising vocational guidance. He makes no doubt that if the clinical point of view were accepted in formulating guidance plans it would cut out many of the workers now given responsibility in helping young people to choose their life's work. Who, then, should supersede or advise the teacher? There are the rival claims of the psychiatrist and the psychologist to be considered. As to the first, objections have been advanced that he is unfamiliar with objective methods and tends to look through misshapen lenses; and further that he does not know enough of industrial conditions. There are also objections to relying entirely on the psychologist.

Earlier in this article an outline has been given of some of the schemes for the preparation and systematic training of vocational counsellors ; those who have worked out the schemes strongly hold the view that there is such a thing as a *profession* of vocational counselling. If this is so it would appear that vocational guidance can only be entrusted with confidence to that profession.

But wholly apart from the particular considerations as to which courses should be followed and which subjects studied, the fact remains that, after all, the highest aim of education and preparation for life can only be attained if this education and preparation are given by "one who has himself or herself a reasonable mastery of life and of its mainsprings and forces, and the ability to forge crude emotional material into power".¹

Within the space available here only a rapid survey of what has been accomplished and what is being planned by the leaders in the new Science of Work has been possible. There has been urgent need for such a science since the time that the Industrial Revolution brought about evils and maladjustments which to some extent still exist to-day. It is already firmly established, both in theory and practice, and in other neighbouring fields great advances have also been made. And for reasons alike theoretical and practical it is becoming more and more evident that it is only through a scientific approach that we can hope to solve our economic problems and to contribute to the progress of mankind ; or in other words, to the sum total of happiness and satisfaction of the human race.

¹ Dr. Adolf MEYER (Psychiatrist-in-Chief of the Johns Hopkins Medical School) : *Suggestions of Modern Science Concerning Education*.