CHAPTER III

Use of Tests in Guidance Programme

In practically all of education and in much of psychology, our concern about individuals is to do something about them, individually or collectively.

In so far as education is a science, it is an applied science, and in psychology, too, the applied aspects bulk large in the present century.

To 'know' a person really means to be able to describe him accurately and fully. We can not describe everything about a person, so we must choose for description some attributes that are relevant to guidance programme with special reference to his interest and ability.

One of the greatest needs in all forms of guidance, as well as in other phases of education, is that of obtaining reliable information that can be tested and upon which we can act with confidence. We have not yet succeeded in removing all subjective factors from measurements (it is quite possible that we never shall be able to do this); nor have we devised entirely accurate tests and standards, but the significant thing is that much progress toward these ends has already been made and the way opened for further developments.
Tests and scales of achievement in school subject

The first group of tests to be considered will be the school achievement tests, which are devised to measure scholastic achievement. Of course, all tests given by teachers are tests of achievement. Teachers' marks are ordinarily recorded accurately and have real value. The first difficulty with most of them is the same as that for teachers' marks; they include so many different things: effort, skills, judgements, opinions, appreciations, language ability, handwriting, behaviour etc. Some represent achievement in the subject and some do not; some can readily be measured, and some are extremely difficult to measure. The second difficulty is that there is no definite length of time given to the tests, nor are the questions graded according to difficulty, nor is the form of the various tests the same. This makes it impossible to compare the results of one test with those of another when given by the same teacher or by different teachers. The third difficulty grows out of the first two: subjective opinions of teachers enter into the grades given on the tests.

However most of the tests constructed by teachers for their own use are of essay type, an increasing number are of the so-called 'new type', which require little writing and can be objectively scored. These teachers' made new-type tests are not as effective as the standardized tests of the same type in
revealing achievements and weaknesses of pupils. The results cannot, of course, be compared with those of other classes or other schools. Some things that are very important for us to know about pupils can be revealed better by well-constructed essay-type tests than by the new type of test.

Standard achievement tests attempt to correct some of the faults of teachers' tests such as (a) they are so formed as to test only those things that can be more or less objectively tested, (b) only the definite achievements in the subject studied are tested, (c) each test is arranged so that the answers are always given in the same way, a definite and precise length of time is given for the test and definite detailed directions for scoring the test are given. The results are standardized by collecting the answers from thousand of cases in different parts of the country. These results are tabulated and standards or norms for each grade are constructed. By means of these standards we can compare the achievements of an individual in the same grade.

The chief difficulties in the use of such tests and scales are their newness and incompleteness. They do not measure all of the desirable outcomes in any subject. They are much more effective in measuring the formal side of education than any other. No effective standardized tests have yet been devised for the adequate testing of judgement, appreciation etc. when
pupils are given standardized tests and their achievement scores in these are taken as a measure of the success of their work, the emphasis is placed upon the particular element that is tested. When this is done the education process is greatly weakened. Standardized tests are often misused and thus may constitute a real danger. Norms of achievement for grades are sometimes used as ideals of attainment for all children of given grade. As a matter of fact, the desirable attainment of any given child might well be either considerably above or somewhat below the norm.

It is seldom necessary to discuss the value of such tests and scales for guidance. Any accurate measure by which we can compare the achievement of one person with that of others and even with his own previous achievement will help in diagnosing his points of strength and weakness as well as in judging his abilities. When properly understood and intelligently used, these tests and scales are powerful factors in improvement because they enable us to diagnose difficulties.

General Intelligence Test

General intelligence test or mental test has been found to have even greater value for guidance than the standard achievement tests in school subjects. School subject tests are not only tests of achievement but mental tests as well. However,
those called 'mental tests' are designed primarily as tests of mental ability. Intelligence is then defined as 'the ability to learn acts or to perform new acts that are functionally useful'⁷. It considers native capacity and social influences as two important factors that determine intelligence. Native capacity is an abstract term coined for the purpose of explaining certain phenomena of human life. It can not be proved, but it is a useful term because some differences between individuals are best explained by its use. It should be noted that intelligence, is not degree of adaptation nor effective behaviour, nor merely achievements; not that which has been learned as such, but the ability to adapt oneself, to develop behaviour that is effective, to learn. But do they really test intelligence as thus defined, it is obvious that the only thing that any test of this kind tests is performance at a given time. From such performance one might predict what the later performances will be, but we do not test or measure these future performances. Performance or achievement, indicates the way one actually responds, the way he answers the questions asked in a test, the proficiency of performance at any given time. But ability means the power at any given time with present training and development, to respond in certain ways, to act, to adjust oneself.

Tests can test only performance. Repeated tests and a comparison of results with previous performance and with the performance of other individuals often serve to give us some idea of ability expectancy. We do infer capability and capacity from the same tests but with much less probability of accuracy. Capability is a term used to indicate the upper limit of possible development of an individual at any given time with optimum environment and training from that time on. But the capacity is used to indicate the upper limit of possible development as determined by heredity if environment and training are continually at their best. Hence capability is always less than capacity.

However the methods of expressing the results of mental tests are by the mental age and the intelligence quotient. These are very useful terms if used accurately. The mental age, is a device for comparing the score made by an individual on a given test with the scores made by many other individuals on the same test. The scores of all individuals are arranged by age norms or by mean or median scores of individuals at different ages. Intelligence quotient shows the relationship between the score made by a boy on a certain test and the scores made by others on the same test. It also shows whether the score he has made is equal to, higher than, or lower than that made by others of the same age. It is an expression of relative performance. Many regard it as an indication or a measure of capacity. To others
it means capability. This is, of course, an inference only, for we cannot know what influences will be brought to bear upon the individual later. If his environment is poor and his training meager, he will not develop up to expectations. To some the I.Q. means mental ability. Obviously this is incorrect. Mental age is the term that is used to indicate mental ability. With much greater accuracy, the I.Q. may be taken to be an indication, or measure, of ability expectancy. What the individual does now, the score he has made on a test, is limited by his capacity and is the result of environment and training. Assuming that there will be no radical change in environment and training, we can roughly estimate his expected development or ability as related to other individuals.

Investigations by Newman, Holzinger, and Freeman on identical twins, the work of Wellman and her associates in the State University of Iowa on nursery children, and the work of Skeels on children in foster homes all reveal marked differences in achievement, as measured by test scores between children subjected to favourable or stimulating environment and those with less favourable surroundings. Other investigations indicate that the I.Q. or scores on tests of mental ability are influenced by such factors as education, family life, social status, health, nutrition, general care and freedom from worry and undue strain. The extent of the influences of these factors is not yet clear but it seems certain that it is considerable, especially in
early childhood. It would also have many advantages, especially for individuals beyond sixteen years, for it would avoid the difficulty now experienced in computing the I.Q. for the older groups. The general principle of this method is used in the Bellevue Intelligence scale constructed by Wechsler. This consists of five verbal and five non-verbal subtests.

Whatever method is taken to express the test performance relative to that of other individuals there still remains the question of what the test itself really measures. It is becoming increasingly clear that most tests test what has been learned and probably what has been overlearned and, therefore, remembered. It should be remembered that ability expectancy is based not only on past performance but also on past environment.

The chief value of mental tests for guidance is in the prediction of future performance. On this topic many experimental studies have been made. Unfortunately the results of these studies do not agree; some show fairly high correlation and some very low.

No one can doubt that there is a definite relationship between mental test scores and secondary school failures, but the correlation is not high enough to warrant dependence upon it for the prediction of the failure of individual pupils. Many studies have shown that high-school failures are definitely
related to emotional instability and to faulty preparation in
the fundamental subjects.

Nearly all studies show a fairly high correlation between
intelligence scores and scholastic grades in high school and
college. High scores in mental tests are usually associated with
high scholastic grades.

Clear differences are shown in ability and accomplishment
between the very low I.Q. and the very high I.Q. We can be
reasonably certain that those who are very low would have great
difficulty with school work. Those of high I.Q. as far as
intellectual ability is concerned, would be able to complete the
school programme. This means that, although a high I.Q. is
ordinarily clear evidence of ability to do school work, it is
not a safe guide as a basis of prediction for the large group.

Intelligence scores are undoubtedly much more valuable as
indicating desirable occupational choices, at certain levels,
than are the data regarding intelligence levels of occupations.
This is true because these scores have a high value in predicting
success in school and school success is a necessary element in
the preparation for all higher occupations. In most of the
cases, the value of intelligence scores is found on the negative
side. They indicate fairly well those who should not attempt to
enter a given occupation, but do not indicate the particular
occupation that one should enter.
In general, mental tests are much more valuable for diagnosis and as a basis for counselling than they are for prediction. Individual prediction still eludes us, and it probably always will. This uncertainty should always be kept in mind by the counsellor. The tests are the best instruments for predictions we have and therefore we must use them. It is based on the assumption that the counsellor must know just what the child's ability is and just what he needs, if adequate help is given. Such knowledge is impossible; and even if it were possible its use would violate the fundamental basis of true guidance.

**Aptitude Test**

Aptitude is a measure of the probability of success of an individual. So aptitude is more than potential ability or ability expectancy; it implies fitness for the job. Basically, it includes intelligence, abilities of various kinds, and personality factors necessary for success; it is dependent upon a combination of all these.

The methods of estimating aptitude are, in general, the same as those for the estimate of ability expectancy. Aptitude tests do not directly measure future accomplishment. They measure present performance. They test abilities only and some of these not very well. They usually make no attempt to test readiness to acquire the necessary ability nor the various personality and emotional factors that are so important to success.
on the job. An adequate aptitude test would be one that would measure all the factors necessary for success; this is practically impossible. Aptitude tests that are reasonably valid for workers on the job may not be valid for guidance into an occupation.

In spite of the fact that our present testing programme must be considered as incomplete and entirely inadequate to meet our needs, it is the most encouraging part of the entire educational situation. We see the need of actual objective measurement of achievement, abilities and aptitudes and are embarked upon the development of such a programme. The methods are usually scientific. With all their limitations they are invaluable instruments in guidance.

**Interest Blanks and Inventories**

It is apparent that interests are closely related to aptitudes. Interest is used in guidance, but it may be defined somewhat technically as a feeling of liking. Since it is a feeling it can not be objectively measured or determined.

The methods used in the various blanks are fundamentally very similar. There are certain important differences. One of the most widely used of these blanks, is Strong's vocational interest inventory. These inventories are intended to reveal the extent to which one's interest agree or disagree with those
of successful men and women in a given occupation. The inventory is divided into eight parts as follows: occupations, amusements, school subjects, activities, peculiarities of people, order of preference of activities, comparison of interest between two items, rating of present abilities and characteristics.

Interest inventories have proved to be valuable instruments in locating in general and special interests of secondary school students. When used, it should be with clear understanding of their limitations. Among the limitations are the following:

(a) Interests of high-school students are, naturally, confined to those activities in which they have had experience actually.

(b) Interests are not to be confused with abilities. One may have interest, superficial or deep, in some activity for which he has little ability.

(c) Interests of high-school students are not sufficiently permanent to warrant using them even as indicators of occupational selection.

(d) The patterns of interests as found by Strong are not necessarily related to success in the occupation.
Role of Interest in Guidance Programme

Interest tests have always been a method for helping the individual attain satisfaction for himself rather than a method for satisfying institutions. As a result, the interest inventory is used almost entirely in academic and vocational counselling.

One may conceive such counselling as intended to arrive at a definite decision - a definite goal and a training plan. The student and counsellor in high school may set down a definite plan to study certain subjects, to complete training in a certain professional school, and to find an opportunity to enter a certain type of practice. This plan has small probability of being carried out. Counselling should generate plans with many branches. The significant goal in counselling is to equip the student to make future decisions as choice points are reached. The aim in counselling should be to give the student a more sophisticated view of the choices open to him, and of his own range of potentialities for achievement and satisfaction.

Interest inventories are highly suited to vocational counselling. The student expects his interests to be considered. No psychological mysteries becloud the interest test as they do tests that involve esoteric constructs. The counsellor hesitates to tell a student his aptitude and personality test scores unless there is ample evidence that he can accept and comprehend.
the findings, whereas scores on interest tests can be discussed freely.

The interest inventory can be given to entire classes or entire student bodies, and interpretation of profiles can be carried out in group discussions rather than individual counselling (Layton, 1958, pp. 32ff). Such a process—leading each student to list several career possibilities suggested for him by the test—is an excellent preliminary to further group study of careers or to individual counselling.

The interest inventory assist counsellors in other ways. In the course of the discussion of vocations the student will talk about his family, his social relations and his academic difficulties and so many touch upon problems on which the counsellor can provide assistance.

Darley and Haganah (1955, p. 195), speaking from this point of view, sharply criticize some common practices in vocational counselling. Most specifically, such an approach causes the student to think in terms of occupational stereotypes, instead of trying to see what interests of his match activities in the job.

Instead of making a narrowly occupational interpretation, counsellors should help the student identify the groups of activities in which he has expressed interests. A high score in
literary interests, for example, can be amplified by questioning that will clarify whether this is an interest in reading, in writing or in speaking; whether it is an interest in face-to-face communication or in isolative writing; and whether it is accompanied by any evidence of appropriate talent. The discussion will ultimately come around to specific vocations, as examples of ways in which the interests might be satisfied. Illustrative vocations should be consistent with the student's claimed interests, his probable ultimate level of education and his abilities.

One must help the student to an emotionally acceptable reconciliation of claimed and measured interests. No one can abandon a long-standing self concept easily. An authority who bluntly contradicts firm beliefs invites the client to reject him as an authority.

In fact interests give clues regarding adjustment and personality. While a person conceals many of his attitudes and feelings from a questioner, he is usually pleased to display his interests. When it is understood that the data will be used to lead him into activities he will enjoy, there is likelihood of honest report.

From what has been indicated above in regard to the importance of interest in academic and vocational counselling, we
have good grounds to believe that the interests, in most cases, have a real value even though they are often not safe guides for the choice of an occupation. These interests should be utilised by teachers and counsellors as a means of widening and enriching the knowledge of the pupil.