CHAPTER IX

RETROSPECT AND PROSPECT

The process of constructing and standardizing the test has been discussed in the foregoing chapters. This will be the first original non-verbal test in Gujarat standardized on such a large sample. Although the bilingual pupil may have sufficient mastery of Gujarati to communicate on ordinary matters, he may lack the monolingual's vocabulary range, verbal fluency or facility in handling verbal relations in Gujarati. Studies on American-born school children of foreign parentage, for example, often indicate a special deficiency on verbal tests. In testing any bilingual groups, such as children of immigrants, the possible influence of language handicap on test performance must be given serious consideration. As stated in the first chapter, Gujarat is no more an unilingual State in the strict sense of the term. The present test will be much useful to test intelligence of pupils of non-Gujarati parentage as it is a non-language test.

Despite the stress and strain experienced in this exhorbitantly expensive and laborious task it has been
successfully completed and a dependable tool to measure intelligence of pupils of the age group 8-14 can be said to be ready as the reliability and validity of the test have been tested and found to be high.

In every field of education intelligence tests are looked upon as very useful tools. Especially in the diagnosis of delinquents and mentally inferior children; for guiding children in the selection of diversified courses; for individualization of instruction; for educational, vocational and personal guidance the use of an intelligence test is a 'must'. So far as the present test is concerned it will be of considerable use for the following purposes.

**Possible Uses of the Test**

1. **The Selection of Entrants to School**

   The test will enable the school authorities to pick out the innately brighter pupils from out of many who seek admissions in the school. The problem of selecting the entrants at two levels: (i) at primary school level for grade V and (ii) at secondary school level for grade VIII. It is very clear that the test will be useful at both these levels.

2. **Educational Guidance**

   The test can be of much use to separate out the
superior and gifted children. They require encouragement and extra treatment from the teacher. The test can help a teacher in the classification of abnormal children. Such children must be directed to child clinics. Thus the test will help a teacher discover the unusual cases.

3. Vocational Guidance

When a student gets through S.S.C. examination he just arrives at the cross-roads. Proper selection of the road will lead him to success and satisfaction in life. The selection of a course is done either haphazardly or with the advice of those who are not skilled in guidance. For this purpose the intellectual ability of pupils has to be assessed for directing their selection of courses. This assessment has to be done over a long period even commencing from primary level so that proper classification could be done at the secondary stage. Hence the need for such a test.

4. Classification of Pupils

Pupils differ in ability to learn. In a particular class there are pupils of different mental levels - bright, dull and average. The intelligence tests such as this enable the teachers to classify the pupils according to their
intelligence and adopt the methods of instructions to suit the individual differences in learning capacity. Such classification can provide the base for the effective programme of remedial teaching.

5. The Backward Child

The use of intelligence tests has shown that not in all cases lack of intelligence is the cause of backwardness but there are other causes which keep the child backward in a class. It has been established beyond doubt that backwardness is not only due to lack of intelligence but also due to other reasons. Such a test will enable the teacher, to diagnose to some extent, the real cause of backwardness.

6. Research in Education and Psychology

Intelligence tests assist in making practicable a large number of researches in education and psychology. Intelligence is one of the important pre-requisites in many researches. The present test, being a valid tool to measure intelligence will be very useful for the cause of research.

The Place of Intelligence Tests in India

We have in India 179 languages and 544 dialects. In a multi-lingual country like India, non-verbal tests such as this are much to be preferred especially since many pupils
may be examined in a language not actually their mother
tongue. Besides this, from the experience gained during
the administration of tests to different schools of the
Gujarat State, the investigator can say that quite a good
number of pupils are poor readers and hence they are much
handicapped in any intelligence test that requires more than
simple kind of reading. The verbal tests of intelligence
should be used with great caution specially at the primary
stage.

An intelligence test for India must be adopted to
Indian subjects and only Indian standards should be consider-
ed valid. It is, therefore, necessary for researchers in
education and psychology to examine and weigh the outstand-
ing difficulties in evolving standardized tests of intelli-
gence for Indian children. There are certain difficulties
in India in preparing norms. The greatest difficulty is the
lack of true record of ages in the case of many children.
Any research on such incorrect data is, therefore, likely
to be off the mark and may lead to wrong conclusions. It
is, therefore, very necessary to guard against this source
of error and to always supplement the data of age by
further query, information and record of the testee such as
the municipal register, hospital records etc. Much of the
labour of a researcher is wasted due to the omission of
doubtful cases from the sample. Moreover, there are diffi-
culties in selecting a sample. The variability of
population due to the factors like sex, age, place, socio-economic status, type of school and language adds to the difficulty in selecting a truly representative sample. Different norms are required for girls and boys, for rural and urban children. The difficulties due to sex differences shall gradually disappear as the education of the girls advances. Likewise, the difficulty of place shall also be overcome as education spreads in the countryside.

Limitations of the Present Work

Despite all that can be said in favour of the test, the fact remains that it is not free from certain limitations.

Firstly, there are no separate norms for boys and girls. Secondly, there are no separate norms for pupils of rural and urban areas. The investigator personally feels that such separate norms for the four categories require administration of the test on a fairly large sample to be selected separately for each of these four categories. The investigator thought it rather unfair to prepare norms just from the sample already selected for the population of age-norms in general. Even for that the number of pupils for a particular age is about 850. From among this if the number of pupils from the rural area is say about 400, then that of girls in the rural area will be reduced to about 200.
only. This is too inadequate a sample for preparation of norms. The investigator holds that general norms will also serve the purpose to a great extent specially when the differences in scores due to sex are not significant at all the ages and those due to place are not significant at all.

Thirdly, the test is not a culture-free measure of intelligence in the strict sense of the term. It is a non-language test, but the test cannot work equally well with the children of other states of India and for the children of other countries the test is as good as useless. Pictures selected for a few items of the test are not free from what can be called Gujarati. There are, in the test, many items which are quite culture-free. This, of course, is no major defect in view of the fact that the test is meant to measure intelligence of the pupils of the Gujarat State. On the whole the test contains nothing which is unknown to an Indian pupil and as far as India is concerned the test is more or less culture-free.

**Suggestions for Further Research**

In the light of what has been done and discussed so far, the investigator has the following suggestions to offer:

1. Separate norms may be established for boys and girls. This naturally requires further administration
of this test to the population of boys and girls.

(2) Such separate norms may as well be established for rural and urban areas. So there will be norms for the following four categories:

(i) Rural boys
(ii) Rural girls
(iii) Urban boys
(iv) Urban girls.

(3) After necessary omissions and commissions in the test the norms may be prepared for the other States of India. The test as such is based on Indian conditions and the Gujarati culture can no longer be treated as an exclusive culture. It is but a part of the Indian culture.

(4) The test scores or IQs may be correlated with the achievement of pupils as measured by some standardized achievement tests instead of examination marks.

(5) The IQs may also be correlated with those measured by performance tests like Koh's Block Design Test or Alexander's Pass-Along Test. They may as well be correlated with the Progressive Matrices Test, the norms for which have been prepared for Gujarati children.

In fine, it is hoped that the test, with all its limitations, will prove to be of immense utility to the headmasters and teacher-counsellors of the Gujarat State.