Many people think they know a slow learner when they see one – that there are unmistakable signs. So thought the teachers of Edison, Newton and a good many other geniuses. Their error should serve both as a warning against offhand judgements of other people and as a stimulus to find out what slow learners are really like and how to identify them.

**Definition**

Let us take a look at the classification of intelligence according to the Wechsler Intelligence Scale for Children-Revised (WISC-R) and use IQ as a definition.

**Intelligence Classification (WISC-R)**

<table>
<thead>
<tr>
<th>IQ</th>
<th>Classification</th>
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</thead>
<tbody>
<tr>
<td>130 &amp; above</td>
<td>Very superior</td>
</tr>
<tr>
<td>120 – 129</td>
<td>Superior</td>
</tr>
<tr>
<td>110 – 119</td>
<td>High Average (Bright)</td>
</tr>
<tr>
<td>90 – 109</td>
<td>Average</td>
</tr>
<tr>
<td>80 – 89</td>
<td>Low Average (Dull)</td>
</tr>
<tr>
<td>70 – 79</td>
<td>Borderline</td>
</tr>
<tr>
<td>69 &amp; below</td>
<td>Mentally Deficient</td>
</tr>
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</table>

From the above classifications according to IQ, slow learners, who are pupils with IQs from 70 to 89 would comprise the groups described as ‘low average (dull)’ and ‘borderline’.

Since its use by Tansley and Gulliford in 1960, the term ‘slow learner’ has been increasingly used in reference to pupils who are failing in their school work. It is used in this sense by the Dept of Education and Science (U.K.) in 1964, to indicate ‘children of any degree of ability who are unable to do the work commonly done by children of their age’ and the term is regarded as interchangeable with the term ‘backwardness’. A.A. Williams (1970) accepts the term ‘slow learners’ but restricts its use to
those children who are of limited intelligence’. Gulliford (1969) defined slow learners as ‘of average or good intelligence but with a marked discrepancy between their educational achievements and their ability as judged by intelligence tests or their performance in everyday affairs or non-academic aspects of schooling. He also suggests that the slow learner is a pupil in an ordinary school rather than in a special school and he holds the category of ‘slow learner’ distinct from that of ‘educationally subnormal’ or ESN.

With the above definitions in mind, let me summarise some of the abilities and disabilities of slow learners:—

1. failure to learn as effectively as the majority of children in school.
2. the primary handicap is one of ‘cognitive’ deficiency.
3. likely to have secondary symptoms of emotional and/or social maladjustments.
4. capable of being educated to the extent of being able to read, compute and, in adult life, to work either in an unskilled or semi-skilled occupation.
5. the cumulative effect of repeated failure increases the chances of slow learners leaving school prematurely.

All things considered, the slow learner’s ability is such that he can expect

- to earn his own living
- to manage his own affairs
- to marry
- to raise children
- to take his place as a responsible member of a democratic community

How Many Slow Learners?

In order to estimate the number of slow learners in the school population, it is necessary to establish a standard by which the slow learner may be defined. To do this, educationists have made use of the concepts developed by Burt (1937). He introduced the term ‘educational age’ related to scores on standardised tests of attainment in school subjects. On such tests, a group of ten-year-old pupils have an average educational age of 10, ranging from 9.5 to 10.5; nine-year-old pupils range from 8.5 to 9.5 with an average educational age of 9 years. Burt also defined backward pupils as those who, in the middle of their school careers, are unable to do the work of the class next below that which is normal for their age. Thus, on standardised
attainment tests, a backward ten-year-old pupil would have an educational age below 8.5. Such a criterion has been referred to as a ‘difference score’. A modification of this approach took the form of a ‘percentage difference’ regarding as backward pupils; those with ‘educational ages’ 20% or more below their chronological ages (Ministry of Education, U.K. 1946). Using this criterion, a backward pupil would have an educational age less than 80% of his chronological age.

Recently, the Goh Report on Education or Report on the Ministry of Education (1978) stated that 60% of the Pr 1 cohort pass PSLE and go into Secondary Schools, 20% have to repeat before they can pass the PSLE and go into Secondary Schools, but the remaining 20% even after repeating 3 times are unable to pass the PSLE. This latter group the report designated the slow learners. No other studies done in Singapore that I am aware of give an estimate of the size of this group of children in our schools. So, in order to give readers an idea of the size of the school population who would fall into this category, I will quote from some studies done in the West.

Burt (1937) estimated backward pupils to be between 10% and 14% of the school population based on studies conducted from 1917 onward and mainly in London. Hill (1939) reported studies carried out in Southend-on-Sea, which suggested that 10–15% of Secondary school pupils were backward to a degree which required more than the provision of education in ‘C’ stream class. In the United States of America, Kirk (1940) estimated that at least 15% of school children were in this category. Educationally, these children were usually 1–3 years below children of their age and many rarely complete Secondary education.

The U.K. Ministry of education (1946) estimated that 10% of the school population would need ‘special educational treatment’. Schonell in 1949, summarised a number of surveys and concluded that slow learners would form 14–17% of the school population. Morris, in her 13-year study (1959–1966) found 19.2% of the pupils to be backward in reading and in a survey of Kent schools found 14% of the pupils to be non-readers or poor readers. Similarly, Hammond (1963) repeated her earlier study in Brighton and found that amongst pupils of 14 years of age and over, 10.5% of the boys and 6.2% of the girls had reading ages below 8 years.

Meanwhile in Dunbartonshire, Clark (1970) tested 1,544 children on the Schonell Graded Word Reading Test using a reading quotient of 85 or below to identify backward readers. She found that 15.3% of the seven-year-old pupils were backward –
18% of the boys and 12.5% of the girls were still backward when re-tested at 8 years old.

During 1970–71, Start and Wells (1972) tested a sample of 7,150 pupils in 300 schools. They found 8–9% of the eleven-year-olds with reading ages below 7 years; 10% of fifteen-year-olds with reading ages below 11 years; 0.4% of the total sample illiterate (R.A. below 7 years) and 15.1% semi-literate (R.A. below 9 years).

During 1967–8, members of H.M. Inspectorate (HMIS) carried out a survey of slow learners in secondary schools and the report was published in December 1971. Questionnaires were completed by 28 comprehensive schools and 128 secondary modern schools covering a population of 91,527 pupils. In the opinion of the head teachers, largely confirmed by HMIS, 12,807 pupils, almost exactly 14% of the schools' population, required some form of special education, mainly as slow learners.

In summary, the studies reported here show the range of estimates to be from 8% to 24% and 13% might reasonably reflect the general trend of the studies. It has been suggested on the basis of firm data, that pupils backward in reading at 8 plus usually fail to make good their deficiency by the end of their school life (Morris, 1966) which certainly creates pressures for the early identification of slow learners.

Learning

The following list of characteristics, based upon observation, summarises the attributes that are most typical of slow learners. Generally, the more pronounced the characteristic, the greater is the degree of retardation. Slow learners –

1. are slow to perceive and react to happenings in the environment.
2. have little curiosity about new things.
3. ask few questions and have little desire to follow up the answers.
4. show little or no interest in how or why things are done.
5. use rote memory rather than reasoning.
6. cannot make mental associations readily.
7. lack fluency, clarity and precision in using language.
8. are over-dependent on teachers and parents for approval.
9. have difficulty transferring knowledge from one area, task or activity to another.

10. are very slow to understand abstract concepts.

11. resort to trial and error rather than to reasoning when solving a new problem.

12. are unable to make generalisations or draw conclusions.

Other Observable Characteristics

Several traits, learning patterns and ways of behaving that cannot be related directly to mentality are observable to a greater degree among slow rather than among average or superior learners. An individual pupil would seldom show all of these traits; however, several of them probably would be observable if the pupil were actually a slow learner. These include the following:

1. generally retarded in physical growth.

2. exhibits more infantile behaviour than most children of the same age.

3. has poor motor co-ordination.

4. is apathetic and listless in class.

5. has low self-concept and little confidence.

6. exhibits poor retention and recall in all types of learning activities.

7. has limited speaking vocabulary.

8. misses school frequently because of illness.

9. exhibits little or no originality in completing independent assignments.

10. shows reversal tendencies when writing easy words or numerals.

11. tends to be either ultra methodical or completely unorganised when completing assigned tasks.

12. is less emotionally stable - becomes easily upset.

Teaching Slow Learners

The dull-normal child or slow learner is a difficult problem for the schools. He is not sufficiently retarded to warrant being in a special school, yet he is not sufficiently bright to maintain the curriculum standards established for the average or superior
children. With IQ’s between 70 and 89, he is somewhat slower in learning the academic subjects than most children in the school.

Regardless of intellectual level, there are a number of foundational skills and abilities every child needs to develop cumulatively throughout his school experience. Reading ability should be cultivated at least to the point where newspapers, popular magazines and the simpler popular books can be read and understood. Language usage, both oral and written should be developed at least to the point where a simple conversation can be carried on eg. in a job interview, simple letters for job application can be written and common forms like income tax forms and reports such as are required in industry and business can be prepared. The simple Mathematics of everyday life must be mastered as the slow learner will be expected to manage his own financial affairs.

Since teaching the slow learner to read is often regarded as one of the most troublesome areas in the curriculum, I would like to elaborate a little more on the teaching of this skill.

The slow learner who is a genuine reading problem may be located in part by comparing his mental age and his reading age. If they coincide fairly well, then the pupil is working at a reasonably high level. He may be recognised too, by comparing his attainments in reading with his attainments on standardised tests in other subjects. If his reading age is well below that in Maths, spelling or other subjects, there is the possibility that the pupil requires remedial work.

The remedial program is mainly good teaching raised to the maximum of effectiveness but also discovery of the specific disability of the pupil and the devising of techniques to deal directly with these weaknesses. The techniques used are the same for slow learners as for average or bright pupils. Briefly, the main features of a good programme of instruction in reading for slow learners are:–

1) The pupil must not attempt reading formally until considerable time has been spent in a reading readiness programme – until he has acquired enough maturity and experience to make reading meaningful and permit the techniques of reading to be mastered easily.

2) After he is introduced to the reading process, great care should be taken to maintain interest, to insure success, and to establish good reading habits.

3) As the reading habits are established, the pupil’s horizons in reading should be gradually widened.
A reading ability roughly comparable to the pupil’s mental age should be regarded as a normal standard of accomplishment.

Besides these basic academic skills, there is another area of development that the school can help. First, the area of vocational guidance, where general attitudes and habits that make for vocational efficiency and ability to succeed on a job can be cultivated eg. thoroughness, neatness, promptness, willingness to take orders from persons in authority and carry them out, ability to get along with other people and work alongside them.

Secondly, in the area of social competence. A democratic community will, when the slow learner reaches maturity, give his judgement of the most complex social-economic problems equal weight to that of the intellectually more fortunate citizen. Since he is not likely to put forth much effort after leaving school to continue education in this area, some understanding of the nature of moral, social and governmental relationships must be cultivated before the slow learner leaves school. His responsibilities to the government and those of the government to him, as well as the moral values of his culture, need to be explained and inculcated in him, so that he may become a loyal and effective citizen, a respectable member of the society he moves around in, with due respect for law and order.

Finally, I would just like to make some very broad suggestions one should bear in mind when teaching slow learners. They are:

1. **Goals must be immediate and tangible**
   The activity that counts now, that satisfies rather quickly a present need or interest or curiosity, that helps to solve a pressing problem should be preferred. To be sure, activities must be chosen for their ultimate usefulness and value for the slow learner to learn, he needs to see that the value is here and now. Goals should, therefore, be short-term and within reach.

2. **Activities must be concrete**
   In teaching slow learners there are 2 major rules.
   i) First, the experiences must centre on ‘tangible’ things. Build the pupil’s experiences on the basis of things, processes and activities that are real and actual eg. trains, boats, planes, cars are real compared to ‘transportation’ which is an abstraction, a concept.
ii) Second, the experiences should be first-hand. Slow learners rely a great deal more on observation, demonstration, journeys and excursions, films and pictures and less on 'booksay' and 'hearsay'.

3. **Activities must be simpler**
   Because of their limited ability, slow learners cannot be expected to carry out enterprises as complex and comprehensive as those for brighter children. Their projects will normally be somewhat shorter, narrower and piecemeal.

4. **Drill or practice must be more extensive**
   Drill or practice should be provided, particularly in skills that are matters more of habit than of insight eg. the number combinations, times tables, pronunciations of words, commonly accepted patterns of speech and language usage.

5. **More frequent evaluation and assessment needed**
   More assessment and evaluation of school progress need to be made with the slow-learning pupil than with the brighter ones as the former have experienced more of their share of frustration and adequacy. Emotional security and a sense of inadequacy and acceptability are less likely to be theirs. They need more frequent assurance that what they are doing is satisfactory. They are inclined to give up easily, especially if the goals are not very clear or their interest is not very high. A further reason for frequent evaluation is that the slow learner is somewhat prone to be 'slipshod' in his work and needs to be shown a better way of doing his work.

The kind of programme that will benefit the slow learner more is an adapted, developmental kind of programme that recognises and accepts his limitations and is geared to his level of ability. The term 'adaptive' is used to indicate that the pupil requires educational programmes which have been devised to meet his general, permanent learning needs. The use of the term 'development' stresses the fact that though the needs are general and permanent, they are not static and do alter and change as the pupil grows and matures. The Basic Course programme and the Special Monolingual Programme advocated by Dr Goh Keng Swee's task force are examples of this type of programme. Supplementary and complementary to this programme, corrective and remedial education should be included for pupils who, even with the best of teaching, do encounter difficulties in learning.
REFERENCES


