CHAPTER – 2

ASSESSMENT OF PERSONS WITH INTELLECTUAL DISABILITY

Assessment refers to the process of gathering and analyzing information in order to make instructional, administrative and guidance decisions for an individual who is in need of it. Assessment and evaluation are critical components of special education process. Assessment involves collection and organization of information to specify the problems of a child and make appropriate decisions about him. The decisions may include a wide spectrum of activities ranging from screening and identification to planning of individualized education program and its evaluation. The selection of assessment tools and methods vary depending on the purpose for which the assessment is to be carried out.

Purpose of Assessment

Professionals involved in the assessment process should clearly know the purpose for which the assessment is being conducted. Knowing this is very important because it decides the type of assessment tools to be used for gathering information for decision making. For example, if the purpose is only for screening and identification, a short screening schedule is used; for program planning a checklist or a behavioral scale is used which helps in assessing the current performance level and selection of content for teaching. The purposes of assessment are described below:

Initial Screening and Identification

The students who require special attention or special educational services are initially identified through assessment procedures. The assessment involves either informal procedures such as observation or error analysis or formal procedures such as application of achievement or intelligence tests. In other words, assessment is used to identify the children who require specialized services.

Assessment is also used to screen children who are considered to be 'high risk' for developing various problems. These children have not yet developed deficiencies requiring special education, but they do exhibit certain
behaviours that suggest problems in future. Identifying such children allows 
continuous monitoring of problem areas and designing of remedial program.

**Assessment of Teaching Programs and Strategies**

Assessment may be conducted in Special School setup or Regular 
School setup. In a regular school, if the teacher finds that the academic progress 
of a child is significantly retarded, then he may seek the help of a 
multidisciplinary team for assessment and remediation of the problem in the 
classroom itself. In schools having facility for integrated or inclusive education, 
multidisciplinary teams are available for detailed assessment of suspected cases 
of intellectual disability. Before the child is referred to a special school, pre- 
referral assessment and intervention is conducted in the integrated/ inclusive 
education setup.

In a special school setup, assessment is regularly conducted to find out 
the skill deficit and problem behavior of a special child and plan appropriate 
special education program. Effectiveness of the special education program is 
also regularly evaluated through assessment procedures.

The information collected through assessment in a regular school setup 
may be used in four different ways:

First, prior to referring of a student to special education program, it 
provides an insight to the regular teacher and assists him in determining what to 
teach and how to teach.

Second, it gives an opportunity for evaluating the effectiveness of the 
particular teaching program or strategy. Many times a formal referral to a special 
school can be avoided if assessment information is properly used in a regular 
school to develop pre-referral intervention programming. For example, a student 
X is getting poor marks in a number of subjects as he makes a lot of spelling 
mistakes. Before making a formal referral to special education services, thinking 
that the student may be learning disabled, the regular teacher may assess and 
analyze the work product (spelling errors) of the student and provide a 
remediation program. If student shows progress, further referral to special 
education services can be avoided.
Third, assessment provides technical information to the teacher for taking a decision on the need for a formal referral. As explained above, if pre-referral intervention fails to remediate the spelling problem, then there is a need for referring the student for special education programs.

Fourth, pre-referral assessment and intervention data can be utilized to develop individualized education program for students who are eligible to receive special education.

One of the objectives of assessment is to determine the current performance level of a student in subjects or skills that require special education intervention. This information helps the teacher to identify strengths and weaknesses of students and to select appropriate strategies and procedures for intervention.

The assessment data is used for classification and placement of students with special needs in appropriate special education program. Based on assessment information students are classified and suitable placement decisions are made. For example, a 6 year old child who is diagnosed to have intellectual disability needs a placement in special education program which provides education to children with intellectual disability.

The most important use of assessment information is to determine the goals, objectives, and strategies to teach children who are identified to have special educational needs. As each individual child's needs are different, educational programs are planned to meet their specific need. A systematically planned individualized education program is a blueprint for teachers to follow.

**TYPES OF ASSESSMENT**

The two main criteria given by the American Association of Mental Retardation (AAMR) to define intellectual disability are significantly sub-average general intellectual functioning and deficits in adaptive behavior. To satisfy the criteria of significantly sub-average general intellectual functioning, it is necessary to test the intellectual ability of a child by a standardized Intelligence Test. To satisfy the criteria of deficits in adaptive behavior, the level of skill development of the child should be tested by a standardized Behavioral Scale.
There are several problems specific to the assessment of intellectually
disabled persons. They are:

1. The intellectually disabled persons may have multiple sensory and motor
impairments like loss of vision, hearing and deficits in gross and fine
motor skills. These can substantially affect test performance and resultant
IQ scores.

2. They may have severe delay in language development affecting their
expressive and receptive language as well as all forms of communication
- verbal and non-verbal. Their comprehension of test instructions may be
limited.

3. The presence of behavior problems like hyperactivity, aggressiveness,
social withdrawal etc., makes the child difficult to assess according to
standard testing procedures.

4. Some of the intellectually disabled individuals have poor attention and
high distractibility and hence testing will be difficult.

5. They may be poorly motivated and they may not be cooperative.

The above conditions suggest that assessment of a child with intellectual
disability is a difficult process. A multidisciplinary team and professional
expertise is necessary for proper assessment of these children.

A child with intellectual disability is subjected to clinical assessment,
psychological assessment and educational assessment. After the diagnosis the
child is referred to an appropriate educational program for intervention. The
assessment tools and procedures employed in diagnosis, planning and
evaluation of intervention programs are discussed below.

**CLINICAL ASSESSMENT**

Clinical assessment is a part of assessment in the process of diagnosis of
persons with intellectual disability. It is carried out to identify the cause of
intellectual disability, refer to further investigations to confirm the cause and
other anomalies and to plan necessary treatment.
The individual's current health, vision and hearing status are generally assessed by medical members of the assessment team. Medical assessment may include a health history, physical examination and any other necessary laboratory tests. For example, if it is suspected that a person may have intellectual disability due to genetic problems, he is referred to necessary laboratory tests for confirmation.

PSYCHOLOGICAL ASSESSMENT

Psychological assessment is the process of systematic collection, organization and interpretation of information about a person and situations, and the prediction of the person's behavior in a new situation. Psychological assessment encompasses assessment of the three major aspects of the mind, namely, cognition, conation and affection. Psychological assessment involves understanding of the causes of the problem and the potential solutions for the problem.

The purpose of psychological assessment is to evaluate an individual or group of persons in relation to a specific issue or problem. These may include intellectual functioning, learning disabilities, special abilities, scholastic achievement, personality, emotional and social functioning and questions of normality and abnormality. The psychologist develops hypotheses based upon information or past behavior, present behavior and prediction for future behavior as defined by given situations incorporated in assessment information.

Assessment of intellectual functioning is an important aspect of psychological assessment for persons with intellectual disability.

The widely accepted and most commonly used definition of Intelligence is contributed by David Wechsler (1975). The definition reads as follows:

"Intelligence is the aggregate or global capacity of an individual to act purposefully, to think rationally and to deal effectively with the environment"

Intelligence Testing Movement and Emergence of Intelligence Tests

Before the revolutionary contribution of Binet and Simon in 1905 the word 'Intelligence' had not appeared in psychology textbooks because a means for its assessment was not yet available. The first intelligence scale was developed by Binet and Simon in 1905. The scale was called as the "1905 Scale of
Intelligence". The scale had 30 items in an ascending (increasing) order of difficulty, from very easy to very difficult. The scale was designed for children with 3 to 12 years of age. This scale was revised in 1908 with standardized 58 items by introducing the concept of "mental age". This was done by listing several items that could be passed by a majority of children at each age level from age 3 to 13. Further revision of this scale was done in 1911 by extending the age range to 15 years. All these scales were primarily scales for quantifying the mental abilities of school children. With the introduction of the 1911 scale, Binet extended the potential use of the 1908 scale to normal adults and suggested its use some day in industrial psychology. Binet, who is considered as the father of intelligence test, emphasized that, measured intelligence is not synonymous with overall intelligence. The assessment of the intelligence of an individual child must involve the integration by a compassionate clinician, the information obtained about the child from three totally independent sources like, (a) the results (Mental Age) from the objective psychological examination, (b) indices of performance in the classroom, and (c) relevant medical or related items of psychological function.

Stern: After the death of Binet in 1911, William Stern, a German psychologist, in 1912, converted Mental Age (MA) into an Intelligence Quotient (IQ). Stern recommended that a precise quantitative index of relative ability be computed by dividing the child's earned score on the Binet - Simon Scale (the child's earned mental age - MA - in years and months) by that child's actual chronological age (CA). He also suggested that the resulting value could be multiplied by 100 to remove the decimals. Thus, a formula to calculate intelligence quotient was developed as follows:

\[ IQ = \frac{MA}{CA} \times 100 \]

The formula I. Q. equals M.A. divided by C.A. with the sum multiplied by 100 is merely a device for quantitatively relating each child's test age to the child's own actual age.

Within a year of Binet's death, the 1911 Scale was translated into many languages. The most significant of these translations was by Lewis M. Terman (1877-1956). Terman re-standardized the American revision of the Binet - Simon scale at Stanford University on a cross section of American children. This
scale developed in 1916, was known as the Stanford-Binet intelligence Scale. This Scale was widely used in the United States for assessing the intelligence of individual children and for placing slow children in public schools and training schools. In 1917, when United States of America entered World War I, Otis, a student of Terman developed a "paper and pencil test" based on the revised Stanford-Binet intelligence test. This "Otis Test" was later developed as the famous "Army Alpha" and "Army Beta" Batteries by Terman, Yerkes, and Boring for illiterate and non-English speaking population, basically for the purpose of war recruits.

Distribution of Intelligence

The normal intelligence or IQ in the general population can be plotted in the form of a bell shaped curve called the 'Normal Probability Curve'. In a standard intelligence test like 'Wechsler's Adult Intelligence Scale' the mean IQ score is 100, having a standard deviation (SD) of 15 points. 68.26% of the cases lie between the IQ scores of 85 to 115. On the lower side, 13.59% of the cases lie between the IQ scores of 85 to 70. 2.27% of the cases which lie below the IQ score of 70 are categorized as persons with Intellectual disability. On the higher side, that is, between IQ 115 to 130, 13.59% of the cases lie. Similarly, 2.27% of the cases lie above the IQ score of 130, which are called the gifted group.

Table-2.1: Levels of Intelligence

<table>
<thead>
<tr>
<th>Levels of Intellectual Ability</th>
<th>Range of IQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Genius</td>
<td>Above 140</td>
</tr>
<tr>
<td>Superior</td>
<td>120 – 139</td>
</tr>
<tr>
<td>Above Average</td>
<td>110 – 119</td>
</tr>
<tr>
<td>Average</td>
<td>90 – 109</td>
</tr>
<tr>
<td>Boarder Line</td>
<td>71 – 89</td>
</tr>
<tr>
<td>Mild Intellectual Disability</td>
<td>50 – 70</td>
</tr>
<tr>
<td>Moderate Intellectual Disability</td>
<td>35 – 49</td>
</tr>
<tr>
<td>Severe Intellectual Disability</td>
<td>20 – 34</td>
</tr>
<tr>
<td>Profound Intellectual Disability</td>
<td>Below 20</td>
</tr>
</tbody>
</table>
Types of Intelligence Tests

There are different types of Intelligence tests.

Verbal Test

In verbal tests the test items are written in English or any other Regional language. The subject must know the language, able to read and understand the test items, and indicate the answers in the prescribed answer sheet or write the answers in the form of words.

Non-Verbal Test

The Non-verbal tests require the subjects to perform on tasks with minimal use of verbal materials. These tests are otherwise known as performance tests, such as, block designs, picture completion, etc. In the performance tests, the subject is allowed to express his answers through hand movement such as arranging blocks to match a design and placing pictures in a meaningful sequence. The performance tests are constructed with the aim of making them "culture fair" as it is not possible to make them culture free totally.

INDIVIDUALLY ADMINISTERED TEST

In Individually administered test, the individual works alone with the psychologist in answering questions and performing tasks. During the testing session the psychologist can observe the persons behavior along with any specific difficulties that are encountered. Some of the examples of individually administered test are:

Wechsler's Adult Intelligence Scale (WAIS)

This test consists of both verbal and non-verbal items and is administered individually. In the year 1939, Wechsler developed Bellevue-Wechsler scale for the individual examination of adult intelligence, which was later referred to as the Wechsler- Bellevue – I (W-B I). It contained 10 sub tests - five Verbal (plus one alternate sub- test) and five Performances sub - tests and yielded a Full Scale IQ (FSIQ), a separate Verbal IQ (VIQ), and a Performance IQ (PIQ). The five Verbal Scales were: (1) Information (2) Comprehension (3) Arithmetic (4) Similarities and (5) Digit span or as an alternate sub- test Vocabulary; and the five
Performance Scales were: (1) Block Design (2) Picture completion (3) Picture Arrangement (4) Object Assembly and (5) Digit symbol. In the year 1949, 'Wechsler's Intelligence Scale for Children' (WISC) was developed for the age group of 6 to 16. In the year, 1955, 'W-B I' was revised, re-standardized, and published as 'Wechsler's Adult Intelligence Scale' for the age group of 16 to 64. Wechsler also developed a Scale for the age group of 4 to 6 ½ years. The name of the Scale was 'Wechsler's Preschool and Primary Scale of Intelligence (WPPSI). Wechsler further revised his Scales and published under the names - 'Wechsler's Intelligence Scale for Children- Revised' (WISC-R), Wechsler's Adult Intelligence Scale – Revised (WAIS-R).

**Seguin Form Board Test**

This is a most commonly used Non-verbal (Performance) Test for measuring psychomotor and perceptual abilities for children between 4 and 20 years. It is also used as a quick measure of general intelligence in children between 3 to 11 years and intellectually disabled adults. The subject will be required to fix 10 wooden blocks, such as, Hexagon, Oval, Rectangle, Triangle etc. in the appropriate holes on the Form Board. The Norm table of the test provides for calculation of Mental Age and IQ on the basis of time taken to complete the fixing of all the wooden blocks. Indian Norms of the test is available.

**Raven's Colored Progressive Matrices (RCPM) Test**

The RCPM is a Non-Verbal test. This test can be administered individually or in a group. It is applicable to children of the age group of 5 ½ to 11 years and persons with intellectual disability (all age groups). This test was developed by J. C. Raven and others. The Raven's Colored Progressive Matrices has 36 problems divided into three sets of A, AB, and B. Each of these set contains 12 items in the order of progressive difficulty. The problems are in the form of pictures and drawings and require abstract reasoning ability of the child/adult for solution. The raw scores can be converted into percentile scores. Percentile Rank of the child can be determined by using the Norms table. The test was designed to be used with children, as well as adults with intellectual disability. IQ of persons with intellectual disability can be derived directly from a separate Norm table.
Draw-A-Man Test

The Draw-A-Man Test is a Non-Verbal test. This test can be administered individually or in a group. This test was developed by Good enough in 1926. It is easy to administer and has shown high correlation with other intelligence tests. Pramila Phatak (1962) developed norms for this test for Indian children. Indian adaptation of the Draw-A-Man Test is applicable for the age group of 4 -13 years. The child is asked to draw a picture of a full man on a blank sheet provided by the test administrator. Scoring of the test is done on the basis of the details of the human body drawn in the picture. The following details of the human body are considered as scoring points: Eyes, Nose, Mouth, Head, Forehead, Chin, Ears, Hair or Head Dress, Face, Neck, Trunk, Arms, Palm and fingers, Legs, Feet and toes; Proportions – Feet, Legs, Head, and Arms; Motor control, Dress, Sex, indications, Bust, Full figure, and Environment or Action.

On the basis of scores achieved by the child, Mental Age and IQ are calculated.

DEVELOPMENTAL SCHEDULES

Developmental schedules are inventories for the purpose of assessing the level of development reached by a child. Where formal standardized intelligence tests could not be administered to young children, Developmental schedules are suggested. Information from parents and clinical observations help to assess children's developmental levels. Through the interpretation of the Developmental Schedule, "Developmental Age" (DA) of the infant is obtained. Developmental Age can be converted into "Developmental Quotient" (DQ) by dividing developmental age by chronological age and multiplying by 100 to eliminate the decimals. Thus the formula for calculating the Developmental Quotient shall be as follows:

$$DQ = \frac{DA}{CA} \times 100$$

Commonly used Developmental Schedules are - Developmental Screening Test, Gesell's Developmental Schedule, Denver Developmental Screening Test, Nancy Bayley Scales, etc. Some of these are standardized in Indian conditions.
Developmental Screening Test

In this test the test items are given for different age groups. It measures major developmental areas like motor development, language development, adaptive behavior, and personal-social development. The test is designed to measure the development of the child from birth to 15 years. Indian adaptation of the test has been developed by Bharatraj.

The information on the items of the test is obtained by the use of semi-structured interview with the parents/care takers without requiring any performance on the part of the child. This test is particularly useful for assessing children who are non-cooperative, have severe behavior problems or multiple disabilities.

Gesell’s Developmental Schedule

The schedule covers five major fields of behaviours- Adaptive, Gross Motor, Fine motor, Language and Personal-Social behaviours. Data on these behaviours are obtained through the direct observation of the child’s responses through standard toys and other stimulus objects and are supplemented by information provided by the parent or principal caretaker. The age range for the schedule is 4 weeks to 5 years. Indian adaptation of Gesell’s Development Schedule was done by Murlidharan, (1975).

Bayley Scales of Infant Development

The Bayley scale provides three complementary tools for assessing the developmental status of children between the age group of 2 months and 2½ years, covering the mental scale, the motor scale and the Infant behavior record. The mental scale samples such functions as perception, memory, learning, problem solving, vocalization, the beginning of verbal communication, and rudimentary abstract thinking. The motor scale provides measures of gross motor abilities, such as sitting, standing, walking, stair climbing, and skills of hands and fingers. The Infant Behavior Record is designed to assess various aspects of personality development such as emotional and social behavior, attention span, persistence and goal directedness. Indian adaptation of the Bayley Scale was done by Pramila Pathak.
The Vineland Social Maturity Scale (VSMS)

This was developed by Edgar A. Doll in 1935, and has been revised several times since its first publication. It was intended to be used for program evaluation and research. The scale was designed to assess the social competence of individuals from birth to 25 years of age and above. The Indian adaptation of VSMS, by Fr. A.J. Malin, has an age range of birth to 15 years. There are eight domains with 89 items, grouped age wise: self help general, self help eating, self help dressing, self direction, occupation, communication, locomotion, and socialization. The information is collected by a trained examiner from an informant who is familiar with the client. Scoring of the items gives the information on social age from which the social quotient could be calculated by adapting the IQ formula. Social Quotient = Social Age / Chronological Age X 100

ADAPTIVE BEHAVIOR

The adaptive behavior in general refers to the way in which an individual functions in his or her social environment. The American Association on Mental Retardation defines adaptive behavior as, the effectiveness or degree with which the individual meets the standards of personal independence and social responsibility expected of his/her age and culture group.

Assessment of Adaptive Behaviour

The behavior of an individual changes regularly, depending on the types of social situations to which the individual has to respond. Some behaviors which are appropriate in one setting could be totally inappropriate in another. The time and place and some times the age determine the appropriateness of behavior. The behavior by itself is not 'good' or 'bad'. For example, sleeping in the bedroom versus classroom; sleeping, which is an essential biological need becomes an inappropriate behavior in the classroom, whereas, the same behavior in the bedroom becomes an appropriate behavior. Intellectually disabled persons are known to exhibit inappropriate behavior due to skill deficits or inability to perceive the appropriate behavior in a given situation. Hence, the purpose of assessment is to determine what areas need special help, or special training. Adaptive behavior assessment determines the current level of functioning of the individual. It reflects the strengths of the individual as well as
the weaknesses. Hence, the primary reason for measurement is an effort to help
the individual to learn to improve himself and to function within the socially
acceptable norms.

Adaptive behavior assessment, which is based on the direct reporting of
observable behaviors, gives specific information on the assets and deficits of the
individual. The reason for the deficits or not doing a task may fall into the
following categories.
(a) The individual may never have had the experience or opportunity to carry out
those particular tasks or behaviors.
(b) The individual may have certain physical limitations which prevent the
performance of those behaviors.
(c) The individual may be totally under-motivated for those particular behaviors
because of certain cultural patterns or experiences.

Adaptive Behavior Scales/ Tools for Assessment of Adaptive Behavior

The adaptive behavior, which projects our behavior in the personal and
social areas, reflects our ability to respond to the environment. Thus adaptive
behaviors come under the broad domains of and independent living skills,
functional academic skills, and social responsibility. These elements combine to
form an organized behavioral pattern of the individual. Some of the popular
adaptive behavior scales used for assessing the persons with intellectual
disability are as follows:

The Adaptive Behavior Scale (ABS)

The scale was developed to be used for assessment of intellectually
disabled, emotionally maladjusted and developmentally disabled persons of all
ages for individual program planning. It is divided into two parts: Part - I is
concerned with matters described as adaptive behavior and comprises ten
domains with a total of 66 items. The domains are independent functioning,
physical development, number and time, domestic activity, vocational activity,
self direction, responsibility, and socialization. Part-II of the scale is concerned
with what are called maladaptive behaviours. These are grouped into 14
domains. They include violent and destructive behavior, untrustworthy behavior,
withdrawal, stereotyped behavior, inappropriate interpersonal manners,
unacceptable vocal habits, unacceptable or eccentric habits, self abusive behavior, hyperactive tendencies, sexually aberrant behavior, psychological disturbances and use of medication. There are 43 items in this section of the assessment scale. The ABS is designed for use by some one who knows the individual being assessed. Thus it can, for example, be completed by a case worker or teacher. The assessor records responses to the item on the questionnaire, and no special training is necessary to complete it.

Madras Developmental Programming System (MDPS)

This scale was developed by P. Jeyachandran and V. Vimala (Revised Edition 1992). It provides information about the functional skills of the intellectually disabled persons for purposes of individualized educational program planning. The scale contains 360 items grouped under 18 domains i.e., gross motor activities, fine motor activities, meal time activities, dressing, grooming, toileting, receptive language, expressive language, social interaction, reading, writing, numbers, time, money, domestic activities, community orientation, recreation and leisure time activities, and vocational activities. As an aid to program planning, the items under each domain are developmentally sequenced along a dependence/ independence continuum. The scale has the provision to chart a profile of the current level of functioning of the person with intellectual disability, which could be compared with the results of intervention.

There is a format which is used for recording the performance of the student periodically (I - quarter, II - quarter, III - quarter) and the same can be communicated to family members and others who are involved in education of the student. On assessment, if student performs the activity, it is marked 'A' and if he does not perform the activity, it is marked 'B'. The scale has provision for color coding, i.e. 'A' to be marked in blue and 'B' in red. Each quarter the 'red' can be covered by 'blue' based on the progress. The tool also has a manual, which helps in grouping and programming. This is useful for special teacher for periodic assessment and planning Individualized Education Program.

On the basis of achievement on the MDPS, the child can be categorized into Preprimary, Primary, Secondary, and Vocational Groups, and placed in appropriate classes.
Behavioural Assessment Scale for Indian Children with Mental Retardation (BASIC-MR)

This scale, developed by Peshawaria & Venkatesan (1992), is divided into two parts. Part A, which has seven domains with 280 items, deals with the skill behaviours which are as follows: motor, activities of daily living, language, reading-writing, number-time, domestic-social and pre-vocational. Each domain consists of 40 items. Part B, deals with problem behaviours, consisting of 10 domains with 75 items, i.e., violent and destructive behaviours, temper tantrums, misbehaviors with others, self injurious behaviours, repetitive behaviours, odd behaviours, hyperactive behaviours, rebellious behaviours, antisocial behaviours and fears. The information on the scale is collected through direct observation of the child and by interviewing parents. The items in skill behaviours are rated from 0-5, whereas, the range of score under problem behaviours is 0-2. The scale is exclusively developed for the assessment and program planning for the persons with intellectual disability.

Format of BASIC-MR (Part-A)

Each child with intellectual disability may show different levels of performance on every item on the BASIC-MR, Part A. The six possible levels of performance under which each item can be scored are as follows:

Level One: Independent (score 5) - If the child performs the listed behavior without any kind of physical or verbal help, it is marked as independent and given a score of 5.

Level Two: Clueing (Score 4) - If the child performs the listed behavior only with some kind of verbal hints. It is marked as "clueing" and given a score of 4.

Level Three: Verbal Prompting (score 3) - If the child performs the listed behavior with some kind of accompanying verbal statements. It is marked as verbal prompting and given a score of 3.

Level Four: Physical Prompting (Score 2) - If the child performs the listed behavior only with any kind of accompanying physical or manual help, it is marked as physical prompting and given a score of 2.

Level Five: Totally dependent (Score 1) - If the child does not perform the listed behavior currently, although he can be trained to do so. It is marked as totally dependent and given a score of 1.
Level Six: Not applicable (Score 0) - Some children may not be able to perform listed behavior at all, owing to sensory or physical handicaps. Wherever an item is marked "not applicable", it gets a score of 0.

Format of BASIC-MR (Part B)

The following is the criteria of scoring which need to be used for BASIC-MR (Part-B):

For any given child with intellectual disability, check each item of the scale and rate them along a three point rating scale, i.e., never (n), occasionally (o) or frequently (f).

(a) If the stated problem behavior presently does not occur in the child, mark "never" (n) and give a score of ‘0’.
(b) If the stated problem behavior presently occurs once in a while or now and then, it is marked "occasionally" and given a score of ‘1’.
(c) If the stated problem behavior presently occurs quite often or, habitually, it is marked "frequently" and given a score of ‘2’.

Thus, for each item on the BASIC-MR, Part B, a child with intellectual disability may get any score ranging from zero to two depending on the frequency of that problem behavior.

Functional Assessment Checklist for Programming (FACP)

Functional Assessment Checklists for Programming (FACP) was developed by the National Institute for the Mentally Handicapped, Secunderabad. It is an activity based checklist used for assessment and programming of children with intellectual disability. The activities listed in the checklist are easy to understand, necessary for daily living, easily observable, age appropriate as far as possible and ultimately contribute to living independently in the community.

The content in each checklist consists of the core areas of personal, social, academic, occupational and recreation. As children come from different cultures and ecological backgrounds, there is a provision for deletion and addition of curricular items in each area depending on the individual needs of a student. By doing so, the teacher plans an appropriate individualized curriculum for every student in her class.
GROUPING OF STUDENTS

The checklist covers content for various groups namely pre-primary, primary-I, primary-II, secondary, prevocational-I, prevocational-II, and care group. The grouping is based on ability and chronological age of the children. Keeping the principle of zero reject in mind, the grouping is made for children of all degrees of intellectual disability in the school going age i.e., 3 to 18 years.

Preprimary - This group consists of children between 3-6 years of age. The coverage of content in the areas of personal, social and academic is more than with occupational area in this level.

Primary-I - Student who achieve 80% of the items in preprimary checklist are promoted to primary- I level, and the age of the students entering in this class may be 7 years approximately. In some cases the students may continue one more year in preprimary to fulfill the pass criteria (For example, if a student who is 7 years has achieved about 60% on evaluation in primary checklist he may continue in the same class for a longer time and see whether he/she can achieve the said pass criteria, i.e., 80%).

Primary-II - The students who do not achieve 80% of the items in the checklist in preprimary level even after 8 years of age -are placed in Primary-II. Presumably there are children with low functioning abilities. The content in the academic area is minimal for this group. This group covers children from 8-14 years. When they achieve 80% of the items in the primary-II checklist they are promoted to Prevocational-II. In some cases they may achieve 80% before the age of 14 years and may be promoted to secondary group. Even if they achieve less than 80%, at the age of 15, they will be promoted to Prevocational level- II.

Secondary Group - This group includes students between 11-14 years. It is a mixed group (i.e., students promoted from both Primary I and II). On achieving 80% of the items in this class including the items in academic area, the student will be promoted to prevocational-I and those who achieve less than 80% will be promoted to Prevocational- II.

Pre- Vocational I and II - Both the groups consist of students in the age group 15-18 years. The primary focus of training is on preparing students in basic work skills and domestic activities. Hence, the major content covered in the
checklist are in the areas of occupational, social, and academics. However, the content coverage under academic area will be minimal or need based for prevocational-II group of students.

Intellectually disabled persons over 18 years will be sent to vocational training units with their summative evaluation reports for further programming. This curriculum checklist does not cover the vocational area.

**Care Group** - This group includes children with very low ability (bed ridden profoundly disabled) and the items in the checklist focus on training them in performing partially, the basic skills such as drinking, eating, toileting, and basic meaningful motor movements and communication. If they continue to stay non-ambulatory as the age advances, the parent/caretaker may find it difficult to bring the child to school. In such cases, simultaneously preparation of caretaker for maintaining learned skills is necessary. It is good to have the children of this group distributed one each in each class starting from prevocational group. This would provide a stimulating environment for them. However, they should be assessed using care group checklist, irrespective of in which group they are placed.

**Format** - The format is so designed that the programmer can enter assessment information (entry level) and the progress periodically (at every quarter) for about three academic years, as it is assumed that a student stays a maximum of 3 years in a given level. At the end, a table is given to note the progress of individual child in all the areas periodically after evaluation which may be transferred directly on to a progress report, which is also a component of FACP.

**ASSESSMENT OF DEVELOPMENTALLY DISABLED CHILDREN FOR EARLY INTERVENTION**

Early intervention is an early stimulation and enrichment program for infants and young children with different degrees of developmental disabilities. Upanayan - A Program of Developmental Training for Children with Intellectual Disability, and Portage Guide to Early Education are two behavioral scales which are used to assess very young children for early intervention program.

**Upanayan - A program of developmental training for children with intellectual disability**

This is an assessment tool for young children developed by the Madhuram Narayan Centre in Chennai, India. This program covers children in
the age group of 0-6 years. The program consists of a checklist, a user manual, 
a set of activity cards and material for assessment and training.

The checklist covers five areas of development i.e., motor, self-help, 
language, cognitive and socialization. Each domain has 50 items totaling upto 
250. The items are arranged in a sequence based on normal development.

The activity cards are color coded to separate each domain from the 
others. The manual contains a list of materials to be used during assessment. 
The record formats are provided to note the background information and the 
assessment data periodically. If a child performs an activity it is marked "A" and 
if the child does not perform the activity it is marked "B". The program is intended 
for home training in home based and centre based intervention.

**Portage Guide to Early Education**

"Portage Guide to Early Education" was developed by S. M. Bluma, M. 
Shearer, A. H. Frohman and J. M. Hilliard (1975) in Portage, Wisconsin, U.S.A. 
Indian adaptations of this Test are available in 9 Indian languages including Hindi.

Portage guide is basically a system for teaching skills to pre-school 
children with developmental delays. The portage is a home based training 
system which directly involves parents in the education of their children in the 
early childhood i.e., 0-6 years of age. The training is provided by a specially 
trained teacher or a public health worker with a special training and experience 
in the field of child development. However, the key person in the home based 
program is parents/family members.

It can be used by para-professionals like the staff of Integrated Child 
Development Scheme, non- professionals like parents, siblings, professionals 
such as pre-school educators, psychologists, and doctors.

The portage checklist covers areas such as infant stimulation, self-help, 
motor, cognitive, language and socialization. In each area, the activities are 
listed in a sequential order corresponding to the age. In addition to the checklist, 
there are activity cards for each skill which explains the materials and procedure 
to be used to train the child. The checklist also provides age norms for each task 
on the margin which help the trainer to estimate the age equivalence of the 
child's functioning.
The first step is to check through the listed skills in all the areas and record the performance of the student against each skill under the column entry behavior. There is also the provision to mark date of achievement and remarks. A separate provision is made (Activity chart) to record activities, achievement and targets. As the format accommodates daily and weekly recording of progress, there is close monitoring.

The checklist, activities and record formats are available in the form of a booklet in English and Hindi.

TEACHER COMPETENCIES

A good teacher must have the following competencies to be a good test administrator:

1. Should have good observation skills. The observation must be objective.
2. Should not have bias.
3. Should prepare her self well in advance for testing with the right materials.
4. Should have the skills to put the child and the informant at ease before beginning to test.
5. Should respect the feelings and sentiments of the informants.
6. Should be emotionally stable - for instance should not break down if a parent weeps during the session.
7. Should interact with the student without threatening him with the testing situation.
8. Should record precisely without using comparative terms such as 'fair', 'good', 'poor' etc. Should use descriptive terms, for instance, instead of saying 'the child is aggressive' should say, 'throws objects when needs not met' or whatever is his behavior that is interpreted as aggression.
9. Should be aware of signs of distress, fatigue and loss of interest in the child while testing and suspend testing/reschedule it.
10. Should not suggest responses to informant or the child. Should not ask leading questions. As far as possible remain neutral while questioning.
11. Should not postpone recording to another day after eliciting information about the child.

12. Should visit home if necessary to assess the child in a natural environment.

13. Should use the language the family is familiar with and should talk in clear, crisp sentences.

14. Should be thorough with the tool used so as not to be referring to the Test Manual in the middle of testing.

15. Should establish rapport with the child and family before beginning to test.

To conclude, it may be stated that, India being a country with social, cultural, linguistic variations, we cannot have a single test. Therefore, the Test to be used should suit to the local needs and individual child's needs. Care should be taken to develop them objectively and make provisions for systematic recording, periodic assessment and program planning for the child.

**EVALUATION**

Evaluation is comparison of performance of a student with prescribed criteria. Evaluation is a thoughtful process involving the comparison of the way things are, to the way they should be. During evaluation, data is collected; results are analyzed and compared with a set of criteria to draw conclusions. For example, an objective for student 'A' was "Reads five words correctly after 15 sessions of teaching". On evaluation, it was found that she was able to read only 3 words. Comparison shows that she was able to read only 3 words and she was yet to learn 2 more words. Here, the performance of the student (able to read 3 words - the way things are) was compared with the expected performance (to read 5 words - the way it should be) to find out effectiveness of intervention program.

The same tools may be used to conduct assessment and evaluation. The process is called assessment when it is conducted before implementation of the intervention program. It is called evaluation when it is conducted after implementation of the intervention program. The assessment data gives the current performance level of the student, which helps in planning the individualized education program (IEP) whereas evaluation measures the effectiveness of intervention program.
The effectiveness of the intervention program is measured in terms of student's achievement. If student has achieved expected standards, the teacher selects the next task for teaching. If the student has not achieved the set criteria, she may have to question either the effectiveness of the selected methods (material and their presentation, teaching environment, teacher interaction and continuity of the training program) or question the correctness of the initial assessment data to know whether the content selected for teaching is within the capacity of the student to learn.

Evaluation procedures are specified in Individualized Education Program. Using these procedures, the teacher has to periodically monitor the progress made by the student. The monitoring of the program gives feedback (positive or negative) to both teacher and student. Based on the type of feedback, the teacher either changes her plan or continues the same plan or selects a new activity. On periodic evaluation if the child shows improvement, the teacher will continue with her plan, if no improvement is shown then she may have to make changes in the IEP.

Types of Evaluation

The evaluation procedures used in educational evaluation are known as formative evaluation and summative evaluation.

Formative Evaluation

Formative evaluation is conducted during the intervention program actually being implemented. It facilitates periodic assessment to indicate whether the planned instruction is delivered as planned and whether or not the expected progress is being made by the student. Further, ongoing evaluation, give the teacher and student immediate feedback on the adequacy or inadequacy of instruction and learning so that deficiencies or gaps can be made up quickly.

Summative Evaluation

Summative evaluation on the other hand is a long term, final assessment conducted after completion of a unit of instruction. It indicates final degree of learning or achievement.