Unit - 2 ❐ Intellectual Disability: Nature, Needs And Intervention

Structure

2.1 Introduction

An intellectual disability (also commonly referred to as a developmental disability among other terms) is, simply stated, a disability that significantly affects one's ability to learn and use information. It is a disability that is present during childhood and continues throughout one's life. A person who has an intellectual disability is capable of participating effectively in all aspects of daily life, but sometimes requires more assistance than others in learning a task, adapting to changes in tasks and routines, and addressing the many barriers to participation that result from the complexity of our society.

2.2 Objectives

After going through this unit you will be able to:-

- Understand the concept of Intellectual Disability
- Describe the types and characteristics of Intellectual Disability
- Explain the scope of assessment
- Understand the meaning of assessment
- Explain the purposes of assessment
- Understand the types of assessment
- Describe the Strategies for Functional Academics and Social skills
- Understand the concept of Assistive Devices, Adaptations, Individualized Education plan, Person Centered Plan, Life Skill Education
- Explain the meaning of Vocational Training and Independent Living

2.3 Definition, Types and Characteristics

2.3.1 Definition

Internationally the definition of Mental Retardation has moved away from medical model to rehabilitative model. Current trend is to describe the condition by using functional and educational terms rather than clinical terms. Definitions are listed chronologically to demonstrate the variations in describing condition of Mental Retardation.

a. Definition of Mental Retardation - American Association of Mental Retardation (AAMR) 1983:

As per American Association on Mental Deficiency, also previously known as American Association on Mental Retardation - Mental Retardation refers to a significantly sub - average general intellectual functioning resulting in or associated with concurrent deficits in adaptive functioning.

b. Definition of Mental Retardation - Persons with Disabilities Act 1995:

Mental Retardation means a condition of arrested or incomplete development of a person, which is specially characterized by sub-normality of intelligence manifesting before age of 18 years.

c. Definition of Mental Retardation - American Association of Mental Retardation (AAMR) -1992:

Refers to significantly sub-average intellectual functioning, existing concurrently with or more of the following applicable adaptive skill areas:

Communication

Self-care

Home Living

Social Skills

Community Use

Self-direction

Health and Safety

Functional Academics

Leisure

Work

In adopting this definition and accompanying classifications system, AAMR (1992) suggested that Mild, Moderate, Severe and Profound classification categories in previous definitions to be substituted with "levels" of support needed by an individual using term listed below:

Intermittent: Support of high or low intensity is provided as and when needed. Characterized as episodic or short-term during life - span transitions.

Limited: Supports are provided consistently over time, but may not be extensive at any one time. Supports may require fewer staff members and lower expense than more intense levels of support.

Extensive: Supports are characterized by regular involvement (daily) in at least some environment (work or home) and not limited (example: Long-term support & long-term home living support).

Pervasive: High intensity supports are provided constantly, across environment, mostly and may be of life sustaining and intrusive nature. Pervasive supports typically involve a variety of staff members.

This definition essentially restates the 1993 AAMD definition, except that it describes the developmental period age as 22 years, consistent with the USA federal definitions of developmental disabilities.

d. Definition of American Association of Mental Retardation (AAMR) - 2002

Definition reads, "Mental Retardation is a disability characterized by significant limitations, both in intellectual functioning and in adaptive behavior, as expressed in conceptual, social and practical adaptive skills, the disability originating before the age of 18 years.

The complete and accurate understanding of Mental Retardation implies that a particular state of functioning, which begins in childhood, having many dimensions and affected positively by individualized supports. As a model of functioning, it includes the context and environment within which the person functions and ecological approach that reflects the interaction of the individual with the environment. The outcomes of interaction are with regard to independence, relationships, societal contributions, participation in school and community and to personal well-being.

e. Definition of Intellectual Disability

Intellectual disability is a disability characterized by significant limitations in both **intellectual functioning** and in **adaptive behaviour**, which covers many everyday social and practical skills. This disability originates **before the age of 18**. (**American Association on Intellectual and Developmental Disabilities (AAIDD)- 2010**)

All the key terms are explained below:

1) Intellectual Functioning

Intellectual functioning—also called intelligence—refers to general mental capacity, such as learning, reasoning, problem solving, and so on.

One way to measure intellectual functioning is an IQ test. Generally, an IQ test score of around 70 or as high as 75 indicates a limitation in intellectual functioning.

2) Adaptive Behaviour

Adaptive behaviour is the collection of conceptual, social, and practical skills that are learned and performed by people in their everyday lives.

- Conceptual skills—language and literacy; money, time, and number concepts; and self-direction.
- Social skills—interpersonal skills, social responsibility, self-esteem, gullibility, naïveté (i.e., wariness), social problem solving, and the ability to follow rules/ obey laws and to avoid being victimized.
- Practical skills—activities of daily living (personal care), occupational skills, healthcare, travel/transportation, schedules/routines, safety, use of money, use of the telephone.

Standardized tests can also determine limitations in adaptive behaviour.

3) Age of Onset

This condition is one of several developmental disabilities—that is, there is evidence of the disability during the developmental period, which is operationalized as before the age of 18.

4) Additional Considerations

But in defining and assessing intellectual disability, the AAIDD stresses that additional factors must be taken into account, such as the community environment typical of the individual's peers and culture. Professionals should also consider linguistic diversity and cultural differences in the way people communicate, move, and behave.

Finally, assessments must also assume that limitations in individuals often coexist with strengths, and that a person's level of life functioning will improve if appropriate personalized supports are provided over a sustained period.

Only on the basis of such many-sided evaluations can professionals determine whether an individual has intellectual disability and tailor individualized support plans.

2.3.2 *Types*

A child may be classified as having an intellectual disability at one of the levels listed below.

Mild intellectual disability (MID).

(1) Intellectual functioning ranging between an upper limit of approximately 70 to a lower limit of approximately 55;

(2) Deficits in adaptive behaviour that significantly limit a child's effectiveness in meeting the standards of maturation, learning, personal independence or social responsibility, and especially school performance that is expected of the individual's age level and cultural group, as determined by clinical judgment.

Moderate intellectual disability (MOID).

(1) Intellectual functioning ranging from an upper limit of approximately 55 to a lower limit of approximately 40; and

(2) Deficits in adaptive behaviour that significantly limit a child's effectiveness in meeting the standards of maturation, learning, personal independence or social responsibility, and especially school performance that is expected of the individual's age-level and culturalgroup as determined by clinical judgment.

Severe intellectual disability (SID).

(1) Intellectual functioning ranging from an upper limit of approximately 40 to a lower limit of approximately 25; and

(2) Deficits in adaptive behaviour that significantly limit a child's effectiveness in meeting the standards of maturation, learning, personal independence or social responsibility and especially school performance that is expected of the individual's age-level and cultural group as determined by clinical judgment.

Profound intellectual disability (PID).

(1) Intellectual functioning below approximately 25; and

(2) Deficits in adaptive behaviour that significantly limit a child's effectiveness in meeting the standards of maturation, learning, personal independence or social responsibility and especially school performance that is expected of the child's age-level and cultural group, as determined by clinical judgment.

2.3.3 Characteristics of Target Group

The general characteristics of children with Intellectual Disability are:

1. Delayed development in developmental milestones.
2. Poor language development.
3. Short attention span and poor communication.
4. Poor motor integration and coordination.

5. Poor social skill.
6. Poor memory.
7. Poor in thinking, generalization, reasoning and imagination.
8. Poor or delayed concept formation.
9. Poor in scholastic or in academics.
10. May be associated with a typical physical feature i.e. small head/ large head, small eye etc.

The **signs** and **symptoms** of intellectual disability are all behavioural. Most people with intellectual disability do not look like they are afflicted with such, especially if the disability is caused by environmental factors such as **malnutrition** or **lead poisoning**. The so-called typical appearance ascribed to people with intellectual disability is only present in a minority of cases, all of which are syndromic.

Children with intellectual disability may learn to sit up, to crawl, or to walk later than other children, or they may learn to talk later.Both adults and children with intellectual disability may also exhibit some or all of the following characteristics:

- Delays in **oral language development**
- Deficits in **memory** skills
- Difficulty learning **social rules**
- Difficulty with **problem solving** skills
- Delays in the development of adaptive behaviors such as self-help or **self-care** skills
- Lack of **social inhibitors**

Children with intellectual disability learn more slowly than a typical child. Children may take longer to learn language, develop social skills, and take care of their personal needs, such as dressing or eating. Learning will take them longer, require more repetition, and skills may need to be adapted to their learning levels. Nevertheless, virtually every child is able to learn, develop and become a participating member of the community.

In early childhood, mild intellectual disability (IQ 50–69) may not be obvious, and may not be identified until children begin school.Even when poor academic performance is recognized, it may take expert assessment to distinguish mild intellectual disability from **learning disability** or emotional/behavioral disorders. People with mild intellectual disability are capable of learning reading and mathematics skills to approximately the

level of a typical child aged nine to twelve. They can learn **self-care** and practical skills, such as cooking or using the local **mass transit** system. As individuals with intellectual disability reach adulthood, many learn to live independently and maintain gainful employment.

Moderate intellectual disability (IQ 35–49) is nearly always apparent within the first years of life. **Speech delays** are particularly common signs of moderate ID. People with moderate intellectual disability need considerable supports in school, at home, and in the community in order to participate fully. While their academic potential is limited, they can learn simple health and safety skills and to participate in simple activities. As adults they may live with their parents, in a supportive **group home**, or even semi-independently with significant supportive services to help them, for example, manage their finances. As adults, they may work in a **sheltered workshop**.

People with severe or profound intellectual disability need more intensive support and supervision their entire lives.[5] They may learn some **activities of daily living**. Some require full-time care by an attendant.

2.4 Tools and Area of Assessment

2.4.1 Assessment

Assessment is an inevitable process in daily life for understanding, adjustment, and for taking decision for future action. Assessment is carried out in a family, in classroom, in the religious places, in the market, in the corporate office, in the execution of Government duties and responsibilities and all other everyday work of the society. It is a vital part of the scientific method of understanding and intervention.

Assessment starts from collection of information and continues in making decision for appropriate action to be taken for improvement of the individual. This process is very much useful in different essential services like - physical health, mental health, guidance and counselling, educational process, training, employment, and performance appraisal etc. In all these services collection of information for particular purpose, analysis of the information and making a decision for future course of action for improvement are essential features.

Definition

Assessment in general is a process of collection of information about an individual or a group and taking a decision for that particular individual or group for future course of

action. **Assessment refers to the process of gathering and analysing information in order to make instructional, administrative and/ or guidance decisions about or for an individuals (Wallace, Larsen, and Elksnin, 1992)**.

Definition of assessment focuses on three aspects :-

1. Collection of information
2. Analysis of information
3. Making decision for instructional, administrative and guidance.

2.4.2 Types of Assessment

Special Educational Assessment involves collection of information relevant to educational need of the children. This includes personal data, educational performance, the resources, the family involvement in training, and voluntary supports that could be gained for training mentally retarded student. For all these information, it is essential to collect information through different methods. These methods are :-

a) Formal

b) Informal

Formal

In this method, the information is collected by administering test/ behavioural scales / checklist, interview or administering questionnaire. The information is collected through very structured situation. It needs lots of preparation for the tester or observer.

Informal

In this method, the information is collected through natural interaction between the subject and observer. As because the information is being collected in a natural situation, there is a chance of getting appropriate response from the subject.

Different Tests are constructed for Assessment. Constructions of the tests are also vary as per the process of construction. There are two types of tests. These are Norm Referenced Test and Criterion Referenced Test. Norm referenced assessment and Criterion referenced assessment are named on the basis of the test used in the assessment process. The details of these two assessment process is given below :-

Norm Referenced Assessment

Norm Referenced Assessment is the more traditional approach to assessment. These tests and measurement procedures involve test materials that are standardized on

a sample population and are used to identify the test takers ability relative to others. It is also known as formal assessment.

Norm referenced assessment is defined as a procedure for collecting data using a device that has been standardized on a large sample population for a specific purpose. Every standardized assessment instrument will have certain directions that must be followed. These direction specify the procedure for administering the test and ways to analyse and interpret the results and reporting them. Examples of the more commonly known formal assessment devices are the Wechsler Intelligence Scales for children - Revised (WISC-R), the Illinois Test of Psycholinguistic Ability (ITPA). The Standford-Binet Intelligence Test and the Peabody Picture Vocabulary Test - Revised (PPVT-R) and Peabody Individual Achievement Test (PIAT).

Advantages of Norm-Referenced Assessment

Norm Referenced tests are widely used in special and remedial education for many reasons.

* First, the decision of categorizing the children as exceptional or special is mainly based on the test results of NRTs.
* Second, it is easy to communicate test results to parents and others unfamiliar with tests.
* Third, norm-referenced tests have received the most attention in terms of technical data and research. They are specifically useful in problem identification and screening.

Disadvantages of Norm-Referenced Assessment

The use of norm referenced tests data for the purpose of educational programming is questioned in many instances for the following reasons.

* Information obtained from norm-referenced testing is too general to be useful in everyday classroom teaching. Many educators disregard the prognosis and interpretative types of data provided by standardized tests because the information is often not directly applicable to developing daily teaching activities or interventions. What does knowing a student's WISC-R score or grade equivalent in reading specifically tell a teacher about what and how to teach ? For instance, what is important is to know whether the student needs to learn initial consonants or is he having difficulty with comprehension.
* NRTs tend to promote and reinforce the belief that the focus of the problem is within the student. It is because the primary purpose of NRTs is to compare one

student with another. However, although a student may differ from the norm, the real problem may not be within the student but in the teaching, placement or curriculum. Educators must begin to assess teacher behaviours, curriculum content, sequencing and other variables not measured by norm referenced tests.

Criterion Referenced Assessment

Criterion Referenced Assessment is concerned with whether a student is able to perform a skill as per the criteria set, or not. In contrast to norm-referenced assessment, which compares one persons performance to others, criterion referenced assessment compares the performance of an individual to the pre-established criteria. In criterion-referenced test, the skills within a subject are hierarchically arranged so that those that must be learned first are tested first. In math, for example addition skills would be evaluated (and taught) before multiplication skills. These tests are usually criterion referenced because a student must achieve competence at one level before being taught at a higher level.

Advantages of Criterion Referenced Assessment

The criterion referenced test results are useful :-

* to identify specific skills that need intervention
* to determine the next most logical skill to teach as the implications for teaching are more direct with criterion referenced tests.
* to conduct formative evaluation, that is, the performance of the student is recorded regularly or daily when the skills are being taught.

This makes it possible to note the student progress, to determine if intervention is effective and to help decide the next skill to be taught if achieved, if achieved, if not to decide what other strategies or methods and materials are to be used for teaching.

Disadvantages of Criterion Referenced Assessment

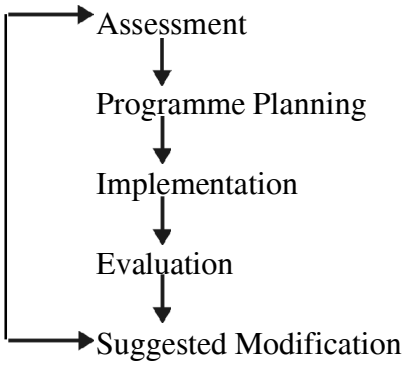
* Establishing the passing criteria for a specific skill is a problem in criterion referenced testing.

  For example, if a test were needed to determine whether student had mastered high school mathematics, there is a problem of determining exactly which skills should be included in the test. Further, should a student pass the test if 90% of the questions are answered correctly or only if 100% are correct ? These decisions must be carefully considered, because setting inappropriate criteria may cause a student to struggle unnecessarily with a concept.

* It is difficult to decide exactly which skills should be included in the test.
* There is also a problem that the skills assessed may become the goals of instruction rather than selecting the skills that the student should know. Due to this, the teachers may narrow down their instruction and teach in accordance with what is measured on the test rather than what is truly required for the student to know.

Continuous Assessment

Assessment is an ongoing process. In the process of Special Education to the children with Intellectual Disability, their abilities are assessed periodically to plan the future training programme. A flow diagram of which is given below :-



In the above diagram, evaluation is carried out after implementation of the programme to see the level of achievement compared to set criteria. Evaluation is restricted to the programme planned for the child. Assessment covers the other non-planned area for training. Assessment after each year or after a particular period of training is inevitable for decision making about the child. For example, a student of Primary class in a Special School for the Intellectually Disable children is assessed at the joining time for programme planning. After one year and completion of 4 years in that class assessment is carried out for further decision making both for administrative purpose and training purpose. Assessment is a continuous on-going process which is a vital part of Special Education.

2.4.3 Tools and Areas of Assessment

In special education assessment, the same tool can be used for diagnostic, prescriptive and evaluation purposes. Purposes for assessment include monitoring student

understanding during a lesson, checking student progress during a specific programme implementation and evaluating student achievement at the end of training programme. In the first two instances, the assessments are called **Formative Evaluation**; in the latter instance, it is **Summative Evaluation**. It is used to measure how well students have learned key content and skills as defined by the learning segment's goals and objectives. The selection of assessment tools and methods vary depending on the purpose for which the assessment is to be carried out and the type of the data that has to be gathered. Following are the various tools available for special educational assessments developed for the Indian context.

1. Madras Developmental Programming System (MDPS)

The first Indian comprehensive Behavioural Scale developed in 1975 at Chennai, the then name Madras to use for assessment of behaviour potential and programme planning of mentally retarded children. This scale could be used for any age, sex and level of retardation in our country. This is a Criterion Referenced Assessment Scale, which provides an inbuilt system for periodic assessments and evaluation, which helps for planning, execution and monitoring of special education, and related services for children with mental retardation.

Description

This scale could be used for individualized Educational Programming and in classroom teaching. There are 18 domains in the scale and each domain comprises of 20 items. The items in the domains are sequentially arranged in most of the domains. The domains are listed below :-

1. Gross Motor Activities
2. Fine Motor Activities
3. Meal Time Activities
4. Dressing
5. Grooming
6. Toileting
7. Receptive Language
8. Expressive Language
9. Social Interaction
10. Reading

11. Writing
12. Numbers
13. Time
14. Money
15. Domestic Activities
16. Community Orientation
17. Recreation, Leisure Time Activities
18. Vocational

Administration

The administration of this scale is very simple. The user should have an assessment kit ready on different items of the domains and collects information by a) direct observation, b) report from the parents, caretakers and others informal. The item already the student achieves is marked by A and fails is marked by B. at the end of the administration all the A's and B's are counted in each domain and entered at the right side column of the domain. The A's are coloured with blue and the B's are coloured with red. The blue area indicates the student's performance and red area indicates the needs to be given training.

Use

The scale is widely used for both IEP and assessment and management in the classroom due to its unique features like :-

1. Contains wide area of behavioural domain.
2. Details of items in each area.
3. The items of many areas are sequentially arranged.
4. Easy administration.
5. Helps in curriculum development.
6. Helps in Educational Grouping of the children and summative evaluation.
7. Helps in formative evaluation of the curriculum transaction.
8. Helps in monitoring the special educational services.
9. Could be used throughout the schooling of the student.

2. NIMH - Vocational Assessment and Programming System for Persons with Mental Retardation (NIMH-VAPS)

This scale was developed at NIMH under the supervision of Ms. A.T. ThressiaKutty in 1998. The scale is developed to assess the general ability, vocational potential and work behaviour of the mentally retarded adults. This aims at assessing the vocational potentiality of an adult with MR and helps in planning and execution of vocational training. It provides information on work readiness skills, helps to identify suitable jobs in the community.

It is useful for formative and summative evaluation of the vocational training also. It could be used in training set up in the institution, sheltered workshop or workshop or open employment system while job training.

Description

The scale is mainly divided into 4 parts :-

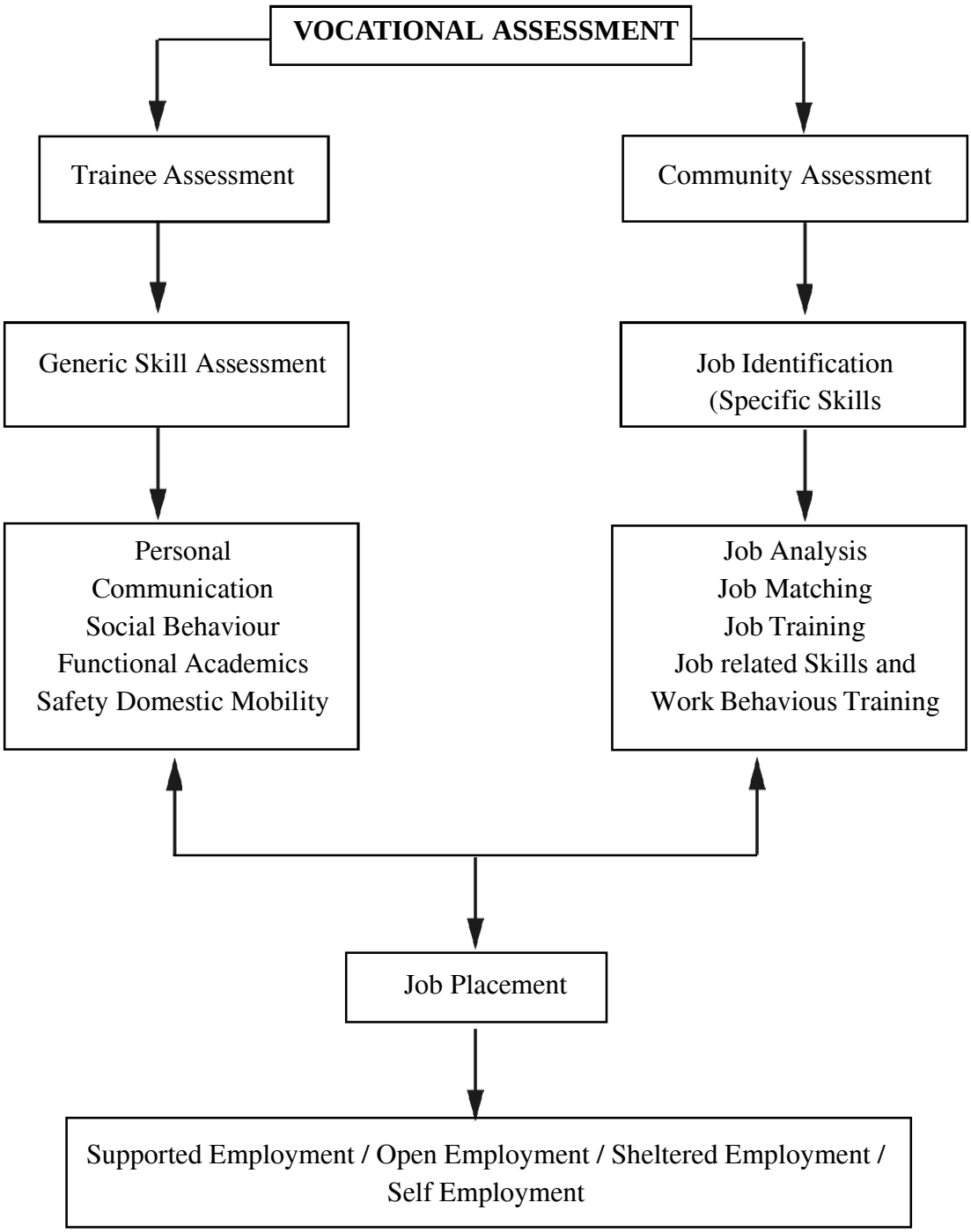
1. Vocational Profile.
2. Generic Skill Assessment Cheklist.
3. Job Analysis Format.
4. Work Behaviour Assessment Checklist.

Generic Skills Assessment Checklist

Personal	04
Communication	05
Social Behaviour	10
Functional Academics	30
Safety Skills	07
Domestic Behaviour	13
Mobility and Hand Functioning	05
Occupational Skills	06
TOTAL	**80**

Job Analysis Format

- Main Work Area
- Additional Duties
- Work Related Skills


VOCATIONAL ASSESSMENT
Trainee Assessment
Community Assessment
Generic Skill Assessment
Job Identification
(Specific Skills
Personal
Communication
Social Behaviour
Functional Academics
Safety Domestic Mobility
Job Analysis
Job Matching
Job Training
Job related Skills and
Work Behavious Training
Job Placement
Supported Employment / Open Employment / Sheltered Employment /
Self Employment

- Personal
- FA
- Sex
- Education
- Recreation
- Independent Living Skills

Work Behaviour

- Job Requirement
- Job Training Procedures
- Trainers Responsibilities
- Parents Cooperation

Work Behaviour - Assessment Checklist

- Physical Appearance
- Personal Interaction
- Regularity & Punctuality
- Communication/ Social Manners
- Quality & Quantity Aspects of Work

Scoring System

Performance of each item by the trainee must be observed and codes must be given against each item as per the instruction given below :-

Description	Code
Always	3
Attention	2
Rare	1
Never	0

Use

- Provides information on jobs selected
- Identifies areas in which training is needed

- Emphasizes on the job training.
- Evaluates work related skills and work behaviour.
- Targets employment for all trainees who are assessed.
- Extends support for job retention.

3. <u>Behavioural Assessment Scale for Indian Children with Mental Retardation (BASIC-MR)</u>

This behavioural scale was developed at NIMH under the guidance of Peshwaria R. and Venkatesan A. in the year 1992. This is developed to assess and evaluate the performance of the children with mental retardation of various level and age group. This has two parts.

1. BASIC-MR Part-A
2. BASIC-MR Part-B

BASIC-MR Part-A is used for understanding the strength and needs of the children with mental retardation to develop the educational programming. Part-B is used to assess the problem behaviours of the children with mental retardation to intervene to reduce the problem behaviour which are the main hindrances for their learning. Both the parts are useful for assessment of adaptive behaviour and maladaptive behaviour of children with mental retardation for classroom management.

Description

BASIC-MR Part-A has seven areas and each area has forty items. The details of the test is given in the table:-

Sl No.	Domain	No. of Items
1.	Motor (Gross Motor & Fine Motor)	40
2.	Activities of Daily Living (ADL)	40
3.	Language (Receptive & Expressive)	40
4.	Reading - Writing	40
5.	Number - Time	40
6.	Domestic - Social	40
7.	Pre-Vocational - Money	40

BASIC-MR Part-B has ten areas. Different areas have different varying number of items. The details of the test is given in the table :-

Sl No.	Domain	No. of Items
1.	Violent & Destructive Behaviours	16
2.	Temper Tantrums	04
3.	Misbehaviours with Others	07
4.	Self Injurious Behaviour	10
5.	Repetitive Behaviour	08
6.	Odd Behaviours	08
7.	Hyperactivity	03
8.	Rebellious Behaviours	06
9.	Anti-Social Behaviours	09
10.	Fears & others	04

Administration

BASIC-MR Part-A : The information is collected through observation, interview the parents and report from the teachers and caretakers. The degree of performance in each item could be noted by different points. The description of the points is described below :-

Scoring

Description	Code
Independent	5
Clueing	4
Verbal Prompting	3
Physical Prompting	2
Total Dependent	1
Not Applicable	0

Use

It is used for the following purpose :-

1. Assessment to understand the strength and needs of children with mental retardation.
2. Programme planning for IEP & Group Teaching
3. Evaluation of performance
4. Monitoring of the programme
5. Report writing

4. <u>Functional Assessment Checklist for Programming (FACP-NIMH)</u>

Functional Assessment Checklist for Programming - FACP-NIMH was developed at NIMH in the Department of Special Educational under the supervision of Dr.Jayanthi Narayan. It was developed keeping in view that, it would lead to appropriate programming. It also provided inbuilt periodic evaluation facility for monitoring progress and modifying the programmes. It also provides quantitative and qualitative measurement of the student's progress. The FACP has 7 parts. These are: -

1. Pre-Primary
2. Primary-I
3. Primary-II
4. Secondary
5. Pre-Vocational-I
6. Pre-Vocational-II
7. Care Group

Grouping is done for the purpose of maintaining uniformity in special education, time bound programming and for easy transaction of curriculum in special school for the children with mental retardation. The different checklists are developed for different classes. The particular checklist contains minimum required skill for that class and scope of inserting items those are required for each domains of the checklist. The items to be inserted is being decided by the special educator involved assessment. This is being done as per the need of the student according to his socio-cultural background. After completion of stipulated training in particular class decision will be taken for promotion.

Promotion procedure could be easily administered through evaluation. After achieving more than 80% task prescribed in a particular group the student could be promoted to the higher class.

Each checklist has 5 domains. These are: -

1. Personal
2. Social
3. Academic
4. Occupational
5. Recreational

Administering Checklist

The student's performance on each item must be noted. The information regarding the student's performance could be collected by observation through activities, report from the parents, the caretakers and from the last records. Performance could be recorded as code given below :-

Encoding the students performance for the domains - Personal Social Academic & Occupational

Performance	Code	Description
Yes	+	The student can perform the item with no help.
Occasional causes	C	The student reads to be given classes which requires thinking by the student to perform the task.
Verbal Prompting	VP	Telling each subtasks verbally to the trainee like - rinse hands, 'pick up soap' apply so on.
Physical Prompting	PP	Physically helping the student to complete the task.
No	-	Student is totally dependent on the task hence one has to completely perform the task for the student.
No Exposure	NE	Lack of opportunity to learn.

Scoring Recreational Activities

Code	Description
A	Takes initiative and participate effectively.
B	Participates when other initiates.
C	Involves self but not aware of rules.
D	Observes with interest.
E	Not interest (Indifferent)
NE	No Exposure

Usefulness of FACP

1. The items are easy to understand.
2. Necessary activities are enlisted.
3. Necessary items are to be observed for a particular class.
4. Scope of including items necessary in a particular domain for students from specific cultural background.
5. Proper weightage could be given to their performance.
6. It has scope for monitoring and evaluation.
7. It could be used for curriculum transaction and reference for promotion.

5. Upanayan - A programme of Developmental Training for Children with Mental Retardation

This is an assessment tool for young children. This programme covers children in the age group of 0-6 years. The programme consists of a checklist, a user manual, a set of activity cards and material for assessment and training.

Description

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

Administration

The activity cards are colour 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 student performs an activity it is marked "A" and the student does not perform the task it is marked "B".

The programme is computerized so that the parent can be given the respective activity cards needed for training their student. The programme is intended for home training in home based and center based intervention.

6. Portage Guide to Early Education

This is developed by S.M. Bluma, M. Shearer, A.H. Frohman and Jean M. Hilliard (USA). It is basically a system for teaching skills to pre-school children with developmental delays. The portage project 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 student development. However, the key person in the home-based programme is parents/ family members.

It can be used by Para-professionals like the staff of Anganwadis, Balwadis, non-professionals like parents, siblings, and professionals such as pre-school educators, psychologists, and doctors.

Description

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 student. The checklist also provides age norms for each task on the margin, which help the trainer estimate the age equivalence of the student's functioning.

Administration

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 behaviour. 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.

2.5 Strategies for Functional Academics and Social Skills

2.5.1 Functional academics

Functional academics is merely academics made functional designed to teach skills which allow each student to succeed in real-life situations at home, school, work and in the community. The functional academics curriculum includes a range of areas namely:

- Pre-requisite concepts
- Maths
- Reading
- Writing
- Communication
- Community orientation
- Skill oriented activities etc…..

Given these areas the teachers tailor the academic programs to the age, gender, needs and functioning of the student. Each of the subcomponent is divided into skill level and taskanalyzed to sequential steps which ranges from early childhood to transitional skills. Such skills are not taught in isolation but as part of multi-sensorial approach. Key outcome of functional skills is for the students to exercise maximum sense of control, engage in self-directed behaviour and autonomy over his/her environment.

Functional Reading

Functional Reading is defined as a student's actions or responses resulting from reading printed words (Brown and Parlmutter, 1971). Functional term is related to application of learnt skills in real community settings. Hence words selected for reading must be "functional" allowing the reader to become independent in community living. As stated by Polloway and Patton (1993), reading is the key to personal and social adjustment and for successful involvement in community activities. Kirk and Monroe (1948) outline three goals that help develop frame for teaching readers with disability:

Primary goal for all students who are mildly or moderately disabled for learning

academics, is to develop **"ability to read for protection and survival"**. This includes examples like – Directions in community, Sign Boards in community, **Labels**on consumer products for daily use and significant symbols that direct for safety and survival such as symbol for toilets, danger symbol, signage for restaurant etc.

Second goal is for reading to gain "information and instruction" which

implies an individual to deal with application for jobs, reading news-papers to be updated on current happenings for general knowledge, reading advertisements, facilitate usage of telephone and address book for accessing social contacts.

Third goal is to read for "pleasure". For most of students with Mental

Retardation this is an essential pre-requisite and a realistic goal which helps them engage in making simple accessible choices in daily life at home and outside home in community.

Teaching Functional Reading:

Teaching functional reading has several approaches as stated by Auckerman (1971), however he endorses an eclectic method is necessary for meeting individualized needs of students with Mental Retardation. However approaches are separately explained for purpose of clarity in selecting approaches rationally to suit each child with disability meaningfully and disability level wise.

(i) Sight Word Vocabulary (Whole Word Approach):

By helping student recognize the "whole word" at one time and later introducing the awareness to decode each letter to spell appropriately helps child first pay attention to group of familiar alphabets in a cluster. Later while decoding the student can become familiar with sequence of placement of letters and the rational for spelling the word by associating sound with specific letter and arrangement of letters and corresponding sounds that represent placement of letters in given word spelling.

We use this technique for the student to identify his or her own name and then the alphabets in it. Start with the student's name to read and write. The letters in the name have to be associated with the pics first, then letter-letter matching and then writing the whole name. Matching left -right then diagonal and then placing the letters in the required sequence for the name. Similarly for surname, home address. Once these are achieved father's name, mother's name, sister's name, brother's name. Start with words the students can associate and is relevant for them through this method.

(ii) Errorless Discrimination (Walsh & Lamberts, 1979):

Here teacher can present the whole word in isolation and read aloud by pointing to the word beginning with 3 to 4 letter words then slowly progressing using same method to read complex words increasing in letters from 5 to 6 and onwards according to the child's pace and ability to progress in reading, in 4 to 6 trials.

Functional Writing

One of the important mode of communication is written expression. This demands eye - hand coordination, motor co-ordination, sense of direction and recognition of symbols (pictures/letters/ numbers/words/punctuation etc). Some writing tasks require **"left to right"** orientation in horizontal direction (for writing words), whereas some tasks require vertical orientation (for writing numbers in arithmetic problems as in addition or subtraction).

Writing involves Four Stages:

i. Tracing
ii. Joining Dots
iii. Copying
iv. Writing by Memory (including spellings of words and sequence of words in a sentence).

Functional Arithmetic

Numbers play an important role in our lives. Our communication involves reference to negotiating quantities. Schwartz and Budd (1983), define Functional Mathematics as "use of mathematics needed for vocational, consumer, social, recreational and home making activities".

Functional mathematics includes:

Functional Arithmetic: At the preschool level of education and primary, the students need to count parts of the body, things in the classroom, blades of the fan, legs of an animal, table, fingers of one hand, etc.

Pre-Computational Skills:

Development of maths skills follows a sequence:

Relative position of one in quantities - such as being aware of terms to describe quantities "more"/ "less"/ "few"/ "none" even before introducing number values.

Teach the student to identify "1" object only. Then introduce the symbol "1" only after student successfully identifies real object in "1" quantity. Then place the object under the flash card with written symbol "1". Finally ask the student to read the numeral "1" by showing the flash card.

Teach the student further numbers only after learning concept of "1" successfully. Place "one more" after "1" and then by counting say "1" and "2" in orderly

manner. Also encourage to identify which of the body parts are in "2" numbers on one's own body. Same procedure will follow for teaching higher numbers in sequential order. Counting items in daily use must follow "left to right" orientation.

Writing Numerals: This includes - Tracing, Copying and Writing from Memory.

Cardinal and Ordinal Numbers: Numbers indicating **"quantity"** is called a "cardinal numbers" (Ex: **How many** boys have visited house.) and those values that identify **"position"** are called as "ordinal numbers" (Ex- in case you are searching a house address, often directions read left turn and third house on the left side, this denotes position of the house

(ii) Computational Skills:

It includes basic skills in addition, subtraction, multiplication, division etc.

(iii) Application Skills

Daily experience in our life requires application of maths skills, some include money, time, capacity, weight and mass, length and distance. All these areas involve some form of measurement, which is based on relative comparisons.

Money - It helps us compare worth of objects. Instruction about money should follow sequence throughout, in relation to practical experiences. Therefore it should be planned in such a way that each student's needs in terms of utility are met.They can be asked to make the totals of list of grocery items on calculator.

Students can be sent to purchase a few items from the shop. They can make a total of clothes for laundry or given for ironing.

Time - While defining time we are comparing a period between two events with predetermined duration. First thing while teaching time is to build concept of events happening in sequence. An important pre-requisite for telling time is an identification of clock and calendar. To relate parts of the day and night and understand its relevance with reading time in clock.Understanding progress of time in days, weeks and months year wise and relate use of calendar. It is important that student honours daily routine for respecting time limits for getting ready to school, mealtime, TV watching, or visiting friends or places and differentiate between school and holiday schedule. Student must also comprehend frequency of events that occur weekly, monthly and yearly, such as festivals and birthdays occur once a month but Sunday comes once in a week and school going is a daily routine.

Weight / Mass / Length / Distance:

We use measurement in day-to-day activities to describe "how much", "how long", "how far" concepts very frequently for making important decisions. Comparative statements like more vs. less, big vs. small, heavy vs. light are used meaningfully in daily practical real situations. These relative measurements are very essential for daily living, therefore adaptive options for measurement are necessary to use in teaching students with Mental Retardation for regular use.

a. Capacity / Volume:

Introduce that liquids like water, oil, milk and petrol are measured in unit of Litres (Ltr) and Millilitre (ml), which refers to "capacity / volume".

b. Weight and Mass:

Drawing from example of measuring liquids, introduce concept of weight of objects or person how they may be heavy or light and therefore unit of measurement for that is "Kilogram", "grams".

c. Length and Distance:

Length of bench, plot and height of a person is measured in feet and cloth is measured in metres or centimetres. Distance between places or locations like distance between two cities is measured by Kilometres or metres. These are all measurement concepts used in daily life. These concepts can be taught with simple exercises for students.

2.5.2 Social Skills

Appropriate social behaviours are necessary for any person to be an acceptable member of the society. Every human being is expected to follow certain standards of social behaviour, set by the society according to the cultural norms and age level of the individuals.

In case of persons with mental retardation, intensive training is needed to cultivate appropriate social behaviours. Instead of keeping them away from the society, giving them chances to mix in the society from the childhood itself will lead them towards gaining social competency. The training should be started very early in life. The family, the relatives, neighbours, friends, and the society at large are responsible for the social skills training of the persons with mental retardation.

❖ The following social skills are need to be taught:

1 Waits for needs to be fulfilled

2 Plays with peers sharing objects

3 Greets others

4 Obeys Commands

5 Says ‘Please’, ‘Thank you’, ‘Sorry’ appropriately

6 Helps parents in household tasks

7 Asks permission

8 Takes turn

9 Participates appropriately at meal time

10 Dresses and grooms appropriate to the situation

11 Visits relatives and friends

12 Participates in social functions

13 Behaves appropriately with the opposite sex

14 Returns borrowed materials

15 Identifies human service persons and community helpers

HOW TO TRAIN?

- Give chances to learn the skills through regular selected activities.
- Gradually reduce the number of repeated instructions and observe his performance in natural environments.
- Include him as a family member, in all family get together.
- Give him chances to participate in social and religious functions. Outings help in enhancing social skill training.
- Accept the intellectually disabled child as a member of the family and the community.

Intensive training is needed to cultivate appropriate social behaviours in the persons with Mental Retardation. The training should started early in life. The family, the relatives, neighbours, friends and the society at large are responsible for the social skills training of the persons with mental retardation.

The persons with mental retardation need stimulation, repeated chances, supervision and training to develop proper skills.

2.6 Assistive Devices, Adaptations, Individualized Education Plan, Person Centered Plan, Life Skill Education

2.6.1 Assistive Devices

Assistive technology is the term used to describe devices used by people with intellectual disabilities and/or other disabilities that help compensate for functional limitations and increase learning, independence, mobility, communication, environmental control and choice. This term also refers to direct services that assist individuals in selecting, acquiring or using such devices.

How do people with intellectual disabilities use assistive technology?

Communication: Low to high tech communication devices can be the means for communication for a person who cannot communicate with his or her voice, due to physical and/or cognitive reasons.

Environmental Controls: Devices to control the environment are important to people with severe or multiple physical disabilities and/or cognitive disabilities, who have limited ability to move about in their environment or control electrical appliances. Technology allows a person to control electrical appliances, audio/video equipment such as home entertainment systems or to do something as basic as lock and unlock doors.

Mobility: Simple manual to sophisticated computer-controlled wheelchairs and mobility aids such as walkers and canes are available for a person who cannot walk.

Education: The computer can be a tool for improved literacy, language development, mathematical, organizational, and social skill development. Alternative ways to access computers are available for people who cannot operate a keyboard. A variety of software is available to help computer-users who have visual impairments and facilitate improved spelling and literacy skills for individual users with print disabilities.

Activities of Daily Living:

Examples are:

- Devices to assist a person with memory difficulties to complete a task or to follow a certain sequence of steps from start to finish, such as making a bed or taking medication
- Directional guidance systems with auditory cues to help a person travel from one place to another

- Devices to help a person shop, write a check, pay the bills, or use the ATM machine

Employment: In response to the Americans with Disabilities Act, employers are making the workplace more cognitively accessible. This may require worksite modifications by the employer, to permit the employee to perform a job. For example, an audiotape might be used to prompt a worker to complete each task in a job.

Sports and Recreation: Adaptations can be made to computer games which allow the game activity to be slowed down for a user who cannot react as quickly to game moves and decision-making. Specially adapted sports equipment is available to compensate for functional limitations, such as specially designed ball ramps that are used in bowling.

How can assistive technology benefit people with intellectual disabilities?

Assistive technology can help people with intellectual disabilities overcome barriers towards independence and inclusion. Technology can compensate for a person's functional limitations. People with intellectual disabilities should be introduced to assistive technology as early as possible. The AT device should be available for use throughout the day and in natural settings, including home, school, work and recreation. There should be consistency in the kind of technology available, how it is used, and methods for instructing the user on operating the device. Transitions from one device to another should be made as smooth as possible by building on and integrating previously learned skills. Technology solutions should be flexible and customized to accommodate the unique abilities of each person with intellectual disabilities. There is a growing use of assistive technology with infants and young children, particularly with communication devices introduced to facilitate early language development.

2.6.2 Adaptations

Adaptations retain the learning outcomes of a prescribed curriculum, and are provided so the student can challenge the regular learning outcomes. A child on an adapted program may be well below the standard of the class, but still may be able to minimally meet the grade level expectations. Class or grade level comparisons in establishing if a student meets expectations should be avoided. These adaptations can include alternate formats, instructional strategies and assessment procedures. Adaptations include, but are not limited to:

- extended time for assignments or tests,
- a learning assistance support block is scheduled to develop and practice study skills,

- audio tapes or a peer helper to assist with assigned readings,
- a computer to facilitate the completion of written assignments,
- alternatives to written assignments to demonstrate understanding,
- separate settings for tests and exams, and
- supervised breaks for tests and exams.

Adaptations/Accommodations:

For Mild to Moderate Intellectual Disability:

- Do not use complex sentences with a person who is mentally slow.
- Concentrate on concrete ideas and skills. An individual with Intellectual Disability often has trouble with abstract concepts.
- Make instructions clear and concise. Break directions down into small steps or tasks.
- Demonstrate whenever possible. Showing is often more effective than telling.
- Be patient, persistent, and consistent.
- Provide warmth and acceptance. Promote a sense of security through a smile, words of praise, or physical expressions of affection.
- Show respect. Do not be condescending. Talk to the individual as a person; talk to an adult as an adult, not as a child.
- Don't have low expectations for a person with Intellectual Disability. Given training and support, a person with retardation can be gainfully employed and totally integrated into society as a valuable, contributing member.

For Severe to Profound Intellectual Disability:

- Use the accommodations listed above.
- Do not react with pity, anxiety, or a variety of other negative emotions when first meeting a person with a severe handicap.
- Use age-appropriate conversation.
- Use age-appropriate activities.
- Include these individuals in community and family activities. Even an individual with profound retardation profits from events that provide integration/interaction with persons who are not handicapped. In fact, this is the way he/she learns

best. Being exposed to every phase of community life allows him/her to learn the behaviours necessary for achieving maximum participation in society.

Parents must be made fully aware of adaptations to their child's program on an ongoing basis and formal reports or IEP's should note the adaptations being made.

2.6.3 Individualized Education Plan (IEP)

To make teaching and learning effective for Person with Intellectual Disability, an individual educational program is prepared to meet the individual need of the child as every child is unique and needs are specific. Hence, a comprehensive evaluation is carried out to facilitate the process of program planning. The evaluation involves health history, education history, family history etc. mental ability, sensory ability, adaptive behaviour, maladaptive behaviour, academics status and many other elements.

Intellectual impairment in mental retardation is characterized by poor or less ability to understand and learn. The individual differences between people with mental retardation are varied to such an extent that every child needs can only be met through a well planned IEP.

Special educator, principal, teachers, parents and other professionals as per requirements of the multidisciplinary team (Occupational Therapist, Physiotherapist, Social worker, nurses, psychologist etc.) who are concerned with the needs of the students need to participate in the meetings to develop and evaluate the IEP.

The well formatted written IEP document serves as a management tool for intervention.

Depending upon the child needs the IEP should have program in PT, OT, ST along with the special education programme. In totality the IEP helps in implementing, monitoring and evaluating the program.

Components of IEP

Globally IEP contains a specific format with all the components, intact to write IEP. This is written in two parts.

Part-1

1. Demographic data

It includes, child's name, age, sex, education, mother tongue, address, parents name, occupation, income, date of filling the IEP, registration number, class and roll no. etc. on specific heads on which information is required.

2. **Significant information about the "person with mental retardation"**

   Any significant and specific information in relation to the child may be documented. E.g. Sensory preference, learning time preference, attention span, rate of learning etc.

3. **Goals:** Goals selected on annual basis which the teachers expect the students to achieve over a period of one year as per curricular content is documented.

4. **Associated condition**: Many person with mental retardation have an additional disability or more are technically referred to as multiple impairment/ disability. For e.g. Mental Retardation, Visual Impairment, Mental Retardation and Hearing Impairment, Mental Retardation and Cerebral Palsy, Mental Retardation and Epilepsy, Mental Retardation and Autism etc. Curricular strategies and planning may differ in cases with additional impairments.

5. **Staff responsible**: The person responsible for implementation of the IEP is documented for administrative and clinical reasons.

PART-B

1. **Skill**: Specific statements of what skill / task / activity to be taught is documented in the specific terms. E.g. writing names of month of year.

2. **Baseline or current level**: The current level or baseline performance level of the student in reference to the task/ skill/activity for teaching is documented. E.g. can write names, 3-4 letter words.

3. **Specific objectives or Behavioral objectives**: This is the statement that specific what the student will learn(content) what the student will do with the content(behavior), performance level of the student in the content(criteria) and how much is the time period required for achieving the target(duration).

4. **Material and learning aids**: Learning aids make learning meaningful and easier. Every child has unique needs hence; learning aids effective for one child may not be effective for other child. Depending upon what is to be taught and child specific interest, level and needs learning aids may differ for same activity.

5. **Procedure:** How to motivate the child to learn the activity and how the task will be taught is described stepwise under procedure. This all includes different strategy to be used to make the learning effective.

6. **Evaluation:** The student's performance in the particular task chosen against the set criteria as per the specific objective is noted.

Some more information on the IEP content

Background information: This information is noted briefly focusing on educational relevant details which help in IEP planning. Child family background (siblings, socio economic status, educational status, status of family members); birth and developmental history, school history, occupational history are required for appropriate IEP planning and family intervention. For e.g. for a rural child with illiterate parents more sketches, less written matter and material as per rural availability will be required. Child having history of epilepsy without medical intervention may have to be referred to medical intervention.

Assessment of current level of functioning: Without being subjective and adding any interpretation the teacher notes down the exactly what the child does while performing a specific activity. The teacher at this stage doesn't says no or doesn't point out the mistakes. Assessing the current level required skill and efficiency and to be done with accuracy. A wrong assessment will lead to a long goal i.e. to high or too low goal. A total assessment of a child may take a week or more and a natural environment is preferred for assessment. Certain specific information like toileting, bathing skills etc. may be availed from the parents. The teacher must make a good interpretation of the parent remarks. The assessment will include various skills in motor, self help, socialization, language, domestic activity, recreational activities, academics activities, time and money concept. For a slow learner and high functioning MR assessment may have to be conducted for grade level functioning using the regular school books. Here silent reading, oral reading, reading comprehension, spelling, writing ability, dictation, writing on own, arithmetic ability, arithmetic comprehension etc. may have to be tested. Assessment of the detailed pre vocational skills need to be conducted. Various assessment tools used for assessment in our country are:-

1. Madras Developmental Programming System (MDPS).
2. Functional Assessment Checklist for Programming (FACP).
3. Behavioural Assessment Scale for Indian Children having Mental Retardation (BASIC – MR)
4. PORTAGE
5. UPNAYAN
6. NIMH-Vocational Assessment Programming System(VAPS)

Goal

By considering the child past achievement, rate of achievement, current level, practical use of the activity, priority need of the child, time required of the training, parental involvement level and teachers skills; goals are selected. The activities of the daily living goals are the priority areas. Priority goals may differ for home based training and school based programmes.

Short term objectives

It means breaking down of annual goals into smaller units. Specific strategy can be worked out for the achievement of the objectives. The objectives would contain the condition in which the child would perform, who would perform, what behaviour would be performed, what would be the criteria of the performance and duration for the achievement of the objectives. The objectives are stated in behavioural terms specifying observable behaviour and criteria for mastering. It clearly tells what is expected from students and what is to be done.

2.6.4 Person Centred Plan

Person centred planning has been used for over 20 years and, in that time,

there has been much learning.

It cannot be explained with a simple one-sentence definition. In fact, the use of the word 'planning' leads to significant misunderstandings and a focus on doing a 'plan', rather than the more important essential components of listening and thinking with the person, learning what it is the person and their family want, and responding to providing the supports needed to achieve the goals and aspirations of the person and their family and friends. The process is embedded in the person's social and cultural context and therefore reflective of, and responsive to, their personal, social and cultural circumstances. Probably the best way to ensure that its complexity is understood is to quote from some of the people who have written about, practised and taught person centred planning over the years. Helen Sanderson describes it as:

" …a process of continual listening and learning, focused on what is important to someone now, and for the future, and acting upon this in alliance with their family and friends. It is not simply a collection of new techniques to replace individual program planning. It is based on a completely different way of seeing and working with people with disabilities which is fundamentally about sharing power and community inclusion."1

*(*Sanderson, H. (2000) PCP: Key Features and Approaches, http://www.helensandersonassociates.co.uk*)*

The NSW Community Participation Program Guidelines state that service providers should move to person centred planning and identified five key issues. These are that:

_ the person is at the centre

_ their wider social network is involved as full partners

_ there is a partnership between the person, their family and the service provider

_ the whole of life is considered

_ there is continued listening, learning and action.

(NSW Community Participation Program Guidelines 2006, DADHC, www.dadhc.gov.nsw.au)

2.6.5 Life Skill Education

Life skills have been defined by the **World Health Organization (WHO)** as "abilities for adaptive and positive behavior that enable individuals to deal effectively with the demands and challenges of everyday life". They represent the psycho-social skills that determine valued behaviour and include reflective skills such as problem-solving and critical thinking, to personal skills such as self-awareness, and to interpersonal skills. Practicing life skills leads to qualities such as self-esteem, sociability and tolerance, to action competencies to take action and generate change, and to capabilities to have the freedom to decide what to do and who to be. Life skills are thus distinctly different from physical or perceptual motor skills, such as practical or health skills, as well as from livelihood skills, such as crafts, money management and entrepreneurial skills .Health and livelihood education however, can be designed to be complementary to life skills education, and vice versa.

Key Life Skills

Life skills include psychosocial competencies and interpersonal skills that help peoplemake informed decisions, solve problems, think critically and creatively, communicateeffectively, build healthy relationships, empathize with others, and cope with managingtheir lives in a healthy and productive manner.

Essentially, there are two kinds of skills -those related to thinking termed as ***"thinking skills"***; and skills related to dealing withothers termed as ***"social skills"***.

While thinking skills relate to reflection at a personal level, social skills include interpersonal skills and do not necessarily depend on logical thinking. It is the combination of these two types of skills that are needed for achieving assertive behaviour

and negotiating effectively. "***Emotional***" can be perceived as a skill not only in making rational decisions but also in being able to make others agree to one's point of view. To do that, coming to terms first with oneself is important. Thus, self management is an important skill including managing/coping with feelings, emotions, stress and resisting peer and family pressure. Young people as advocates need both thinking and social skills for consensus building and advocacy on issues of concern.

The Ten core Life Skills as laid down by WHO are:

1. Self-awareness
2. Empathy
3. Critical thinking
4. Creative thinking
5. Decision making
6. Problem Solving
7. Effective communication
8. Interpersonal relationship
9. Coping with stress
10. Coping with emotion

The method used in teaching of Life Skills builds upon the social learning theory and on what we know of how young people learn from their environment; from observing how others behave and what consequences arise from behaviour.

It involves the process of Participatory learning using 4 basic components:

1. Practical activities
2. Feedback and reflections
3. Consolidation and reinforcement
4. Practical application to day to day life challenges.

2.7 Vocational Training and Independent Living

Approximately 156 million in the world (nearly 3% of world's population) are persons with intellectual disability. It is estimated that 1.8% (18.53 million) of total population constitutes Persons with disability in India. The prevalence of intellectual disability is

94 out of 1,00, 000 population (NSSO 2002). There is a paradigm shift in the approach to disability rehabilitation from charity mode to right based. This enables inclusion of persons with disabilities in all aspects of society. Inclusion of persons with disability in Employment is a trend being practiced all over the world. For many people who have disabilities, work is an important goal, but because of physical and attitudinal barriers in the workplace and society, they were denied productive work in competitive work environments. However, Persons with intellectual disability have been proving their skills in specific jobs. Department of Adult Independent Living (DAIL) of National Institute for the Mentally Handicapped (NIMH) strives towards improving quality of life of Persons with Intellectual Disability through vocational training and placement services. As part of these services, the Adult persons with intellectual disability are trained to acquire vocational and independent living skills. Independent living means living like anyone else with same limitations and same opportunities. Persons with intellectual disability also observe the same style of living like other individuals of their society. The ability of Persons with intellectual disability to be productive was linked to social behaviour and practice and bore very little relationship to their intelligence (Cornelius D.J.K, 2009).

The competencies and the instructional areas related to vocational training are listed below:

Competencies		**Instructional area**
Managing family finances	-	Identifying coins, rupee notes and making a change.
	-	Writing cheque.
Managing a home	-	Decorating and maintaining Classroom.
	-	Aware of basic home repairs.
	-	Planning balanced meals
	-	Eating proper food
	-	Understanding the need of vitamin
Caring for personal needs	-	Developing hygiene and grooming skills
	-	Learning common games

	-	Learning first aid skills
	-	Obtaining knowledge of common illness and when to seek medical attention.
Buying and preparing food	-	Mathematics- basic skills.
	-	Developing table manners
	-	Planning & preparing nutritious meals
	-	Obtaining knowledge about super market
	-	Storing food
	-	Kitchen cleanliness
Buying and caring for clothes		
	-	Reading & following label directions
	-	Using a clothes washing machine
	-	Ironing
	-	Selecting clothes (Choosing clothes, styles)
	-	Sorting clothes for laundry.
Engaging in civic activities	-	Social skills
	-	Identifying own country and state
	-	Aware of the right for voting.
	-	Aware of personal rights as a citizen
	-	Basic knowledge of politics – Chief- Minister, Governor, Prime Minister, President – Election.
Recreation and leisure time	-	Physical education

	-	Aware of community recreation
	-	Spectator sports.
Getting around the community	-	Reading transportation schedule
	-	Reading traffic signs.
	-	Understanding the function of traffic police.
	-	Planning a trip
	-	Riding a bicycle
Achieving self- awareness	-	Identifying values and emotions.
	-	Identifying conflicts and coping with stress
	-	Expressing feelings (anger, joy)
	-	Experiencing group interaction
	-	Developing awareness of body.
Acquiring self confidence	-	Understanding potential of Performance
	-	Developing awareness of strength and weakness.
	-	Awareness of personal behaviour
	-	Accepting praise and criticism
	-	Accepting teasing
	-	Listening actively to others
Achieving socially responsible behaviour	-	Developing acceptable behaviour during outings.
	-	Involving in activities to improve strength and overcome weakness
	-	Recognizing the rights of self & others.

	-	Expressing realistic ambitions and hopes.
Maintaining adequate interpersonal skills	-	Ability to develop and maintain friendship.
	-	Identifying different levels of friendship.
	-	Developing self organization in home, school and community
	-	Developing ability to listen, ask questions, and respond appropriately.
	-	Developing appropriate relationship with opposite sex.
Achieving independence	-	Completing assigned responsibilities
Achieving problem solving skills	-	Accepting consequences for personal action.
	-	Taking assistance in difficulties.
Communicating adequately with others	-	Recognition and responding appropriately during emergency situations.
	-	Realizing the need for reading and writing.
Knowing and exploring occupational Possibilities	-	Realizing the need of work.
	-	Developing an attitude to get trained and seek on employment.
Making appropriate occupational courses	-	Obtaining knowledge of various types of jobs.

	-	Identifying appropriate types of work.
	-	Identifying strength and weakness for the jobs.
	-	Identifying possibilities for entry level job.
Exhibiting appropriate work habits	-	Following written and verbal instructions.
	-	Aware of the team concept.
	-	Developing ability to take turns.
	-	Developing ability to agree/ disagree appropriately.
	-	Developing awareness of the importance of attendance, punctuality, quality of work, and productivity
	-	Realizing the need for physical exercise for well being and success toward work and community living.

Since the ultimate aim of education is to provide opportunity for employment, the vocational training is crucial for employability.

2.8 ‘‘Check Your Progress’’

1) Define Intellectual Disability. Briefly discuss the types and characteristics of Intellectual Disabilities.

.....

.....

.....

.....

2) Discuss briefly about the different assessment tools available in Indian context to assess the children with Intellectual Disabilities.

.....

.....

.....

.....

3) What are the promotional procedures of FACP?

.....

.....

.....

.....

4) What is assessment ?

.....

.....

.....

.....

5) Write a few examples for NRT and a few for CRT.

.....

.....

.....

.....

6) What are the purposes of assessment you find in your case of assessment for IEP?

.....

.....

.....

.....

7) Explain the need and importance of social skills training for persons with mental retardation.

.....

.....

.....

.....

8) Mention 5 social skills, which are to be taught at primary and secondary levels.

.....

.....

.....

.....

9) Define IEP. State the components of IEP.

.....

.....

.....

.....

10) Briefly discuss the importance of Vocational Training.

.....

.....

.....

.....

2.9 Let Us Sum Up

- *Intellectual disability* is a disability characterized by significant limitations in both **intellectual functioning** and in **adaptive behaviour**, which covers many everyday social and practical skills. This disability originates **before the age of 18**. (**American Association on Intellectual and Developmental Disabilities (AAIDD)- 2010)**
- Types and Characteristics of ID.

- Each Mentally Retarded child is unique in nature. Special Education can identify the unique need of each child through proper assessment and plan intervention activities as per the requirement. Assessment is a pivotal and the first step of rehabilitation programme for the Mentally Retarded children. The following points need to be attended by the students.
- Assessment is a collection and organisation of information for making administrative and/ or instructional decision for an individual or group.
- Assessment is carried out for various purposes. Some of these purposes are:- (a) initial screening and identification, (b) determining eligibility, (c) determination of current performance level and educational need, (d) decision about classification and programme placement, (e) determination and evaluation of teaching programmes and strategies, (f) development of educational programme, (g) monitoringstudents performance, (h) evaluating the effectiveness of educational intervention programme.
- Assessment report should be clear so that it will be useful both by the assessor and the assessee.
- There are different types of assessment. Based upon the manner of data collection it is formal and informal assessment and based upon the construction of test assessment could be Norm Referenced Assessment (Test) or Criterion Referenced Assessment (Test).
- NRA/NRT helps more in administrative decisions where as the CRA/CRT helps more in instructional purpose.
- Most of the psychological test such as Development Test, Intelligence Test and Aptitude Test are NRT in nature where as most of the behavioural scale used in Special Education are CRT in nature.
- For school age children, the first criterion referenced scale developed to suit Indian conditions is Madras Developmental Programming System (MDPS). Later, BASIC-MR and Functional Assessment Checklist for Programming (FACP) were developed. Similarly, with the emphasis on early childhood special education, Upanayan checklist and Portage kit, translated in Hindi and adapted to Indian culture are developed and are used for assessment and programming in early intervention programmes.

- Assessment tools are not without problems. The tester, testee variables play an important role in arriving at accurate assessment information. And the sociocultural factors and local practices play a major influence in standardizing a tool.
- The tester should be qualified and proficient in conducting a test and administering a tool, as it requires scientific understanding and objective interpretation of the information elicited.
- Functional Academics and Social Skill Training.
- Assistive Devices and Concept of IEP. Different components of IEP also discussed.
- Define Vocational training and Independent living skills.

2.10 References

1. Peshawaria, R (1992) Behavioural Approach in Teaching M.R. Children – A manual for teachers, NIMH, Secunderabad.
2. Myreddi, V. and Narayan J. (1998) Functional Academics for students with mental retardation – a guide for teachers, Secunderabad: NIMH.
3. Peshawaria, R (1995) Understanding Indian Families having persons with M.R., NIMH, Secunderabad.
4. Thressiakutty, A.T., and Rao, G.L., (2004) Curriculum for vocational education, Transition of persons with mental retardation from school to work, National Institute for the Mentally Handicapped, Secunderabad.
5. www.ilsi.net.au, ILSI Training manual.
6. Sarva Siksha Abhigyan, Training Module on Mental Retardation

For Further Studies

- Nanda, B. P. (2012). Challenged Children Problems and Management. Ankush Prakashan, Kolkata.
- Baroff, G. (2nd Ed.). Mental Retardation : Nature and Needs, Aemisphere Publication.