

SPECIAL EDUCATION

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SPECIAL EDUCATION

(According to the D.D.C.E Utkal University, M.A (Edn.) Syllabus.)

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CHAPTER-1

CONCEPT AND NATURE OF SPECIAL EDUCATION

Objectives of the Unit :

The students will be able to know about the following points when they will go through this unit.

- 1.1. Concept of Special Education**
- 1.2. Objective of special education**
- 1.3. Need and Importance of special education**
 - 1.3.1 Features of Need and importance**
- 1.4. The NPE 1986 and the Programme of Action Relating to Special Schools**
 - 1.4.1. Establishment of special schools**
 - 1.4.2. Vocational training centre**
 - 1.4.3. Training of teachers**
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 - 1.4.5. Training of vocational teachers**
 - 1.4.6. Modification of curriculum**
 - 1.4.7. Flexibility in examinations**
 - 1.4.8. Use of technology**
 - 1.4.9. Strengthening of existing special school**
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- 1.5. Types of special education**
 - 1.5.1. Special Schools**
 - 1.5.2. Special Class**
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 - 1.5.4. Special Methods**
 - 1.5.5. Different Projects**
 - 1.5.6. Different informal agencies**
 - 1.5.7. Special coaching**

1.6. Efficacy of mainstreaming or integration of special education

1.7. Summary

1.8. Questions for self study

1.9. Key words

1.10. References

1.1. Concept of Special Education :

Special education is a modified programme which involves some unique tools, techniques and research efforts in improving instructional arrangements to meet the need of exceptional children. It is not a total different programme which is assigned for the normal children. But it adds a sort of design proposed to assist the gifted children, physically and mentally handicapped and socially retarded children. As it is a planned and systematically mentioned arrangement, majority of average children are not grouped into this category of education.

Special education can be provided in general schools with some special arrangement or in special schools the early history of special education was largely a history of separate schools; especially for children who were blind or deaf, whatever the problem, the solution was to put the child in a class with other children having similar problems. This was nothing but to exclude the handicapped from the main stream of the society. Thus separate, became only one of the meanings associated with special education. But as society's response to the handicapped began gradually to shift away from education critics of special classes, began to express doubts and there came special education.

In accelerating the special education programme, extra time may be devoted by the same teacher or by an expert in the concerning field when a project is taken for a delinquent child the child may be directed

to attend his regular classes. He should also participate all the curricular and co-curricular activities carried out by the school. In addition to this he may be assigned with extra consultation hours in the school with the counsellor or school guidance officer or with the specific teacher to go through his special problems. The children with some difficulties may be included in this class but there is no necessity for the ordinary children to attend it. With such kind of designed programmes the exceptional children achieve a great deal success in their personal and academic endeavours.

1.2. Objective of special education

1. To develop motivational patterns in the handicapped that will produce achievement in school.
2. To develop a realistic self-concept in handicapped children.
3. To reach the maximum level of effectiveness in school subjects.
4. To pursue those curricular matters that strategically determine effective living or specific types of handicapped children.
5. To consider the mental as well as the physical hygiene of handicapped school children.
6. To produce in the handicapped a desire to participate in the activities of non-handicapped persons.

1.3. Need and Importance of special education :

Some people claim that children with mild learning and behavioural disparities who may present some problems to some teachers in the class, as some times, it is difficult to decide, in a hair-splitting manner whether a child can not read because he was an injured brain or that he had his brain injured and that is why he might be sent to special schools or classes. The teacher may not anticipate to get a clear-cut labelling to dictate the exceptional children always but more

mixed grouping rather than clear cut and perpetually isolated categories may come to his notice.

In U.S.A the estimated prevalence of exceptional children for special education is approximately 13.5% of the school going children between the ages of 5 and 19 years out of which there are estimated to be 3% gifted or creative with their superior cognitive abilities and 10.5% are handicapped children out of these 10.1/2% handicapped. The trainable and severely mentally retarded are 0.8%, 1.5% are the educable mentally retarded children 2% are the emotionally and socially disturbed or maladjusted, 3.3% have speaking and language problem, 6% are the deaf or partially deaf children, 0.1% have visual difficulties, i.e. blind or partially blind, 0.5% are physically crippled or disabled and 1.5% are noted to have reading or writing difficulties.

Out of this 10% who are educationally handicapped, 1.5% are noted to be severely disabled, out of which 0-1% are totally blind, 0.05% are socially maladjusted and 75% are severely retarded in mental capacities and 1% are noted to have severe cerebral palsy.

In a study published by UNESCO the percentage of children receiving special education in 15 countries are given as under.

8.5% Sweden, 4.67% Denmark, 3.98% U.S.A 3.47% Israel, 3.42% Canada 2.61% Netherland, 2.06% Czecho slovakia, 1.88% France 1.45% Newzealand, 1.24% Hungary, 1.15% Italy, 1.08% England, 0.8% Chile, 44% U.S.S.R, By 18/4 U.S.A itself there were a million children receiving special education where as in Canada they were no need to be 120 000

Keeping in view that human nature is the same all over the world and taking the figures of the extent of the different types of the

exceptional children in U.S.A. where the population is estimated to be about 24 crores and the school population of children near about 6 crores between the ages of 5 and 12 years. We in this Country where the total population is approximately 60 crores, i.e. 25 times the population in the U.S.A could think that there were 15 crores of school going children of the ages from 5 to 19. The figures of the various categories of the exceptional children in this country on the above basis then could be something as given under, although these figures are just tentative and can not be claimed to be very exact, but these figures given an idea or the extent of the problem we have of the exceptional children in this country.

1. Gifted children 50,000.
2. Severely mentally retarded (the idiots 75,000 and the imbeciles 11,25000) 12,00,000.
3. Monons or the mildly mentally retarded 22,50,000
4. Totally blind 15,000
5. Partially blind 1,35,000
6. Deaf 1,25,000
7. Partially deaf 13,75,000
8. Socially and emotionally mal-adjusted or delinquents 27,50,000
9. Crippled or disabled 6,00,000
10. Cerebral palsied 1,50,000
11. Language and speech defectives 52,50,000

From these figures it can be made out that there are approximately 2 corores children of school going ages who are exceptional and of the type sof mentioned here who need special provisions for their care and facilities for their maintenance, training and education. The problem, therefore as mentioned earlier colossal and

concerns a fairly good percentage of the population of the country and not just a few.

From another picture out of 4.3 million disabled children in the age-group 4-15 years in the country 12 millions have language handicap; 0.74 million have speech handicap, 0.63 million have hearing handicap 0.12 million have visual handicap and 10% have multiple handicaps. There are also 1-7 million mentally handicapped children. Thus the picture of disabled children in the age group 4-15 years is very alarming. But these children are so scattered throughout the country that at any point of time in any general school the number of disabled children are very negligible to warrant establishment of special schools for them. The number of disabled children in various categories in 20 schools covered and the IEDC given in Orissa is below.

Disability wise Enrolment in class I to X in IEDC Schools of Orissa.

Sl. No.	Types of Disabled Children	Enrolment in 20 IEDC School			
		1986-87		1987-88	
		Boys	Girls	Boys	Girls
1.	Blind	5	2	6	3
2	Partially Sighted	2	0	2	0
3	Deaf	-	-	42	7
4	Partially hearing	188	38	182	35
5	Orthopaedic	152	30	176	34
	Total	347	70	408	79

(Source : Director of Secondary Education, Odisha)

Above all the special educational facilities for the exceptional children should be provided make the adjusted in their personal and social lives. Now we may highlight the need and importance special education below.

1.3.1 Features of Need and importance :

1. The special education helps both the average children and exceptional children in special classes.
2. The gifted children are not satisfied in the normal classes. They do not and scope to exercise their cognitive abilities. They also feel the tasks very easy and complete it very soon than others for which they show behavioural problems. But their talent is daly recognised and the development of skills and potentialities take their full shapes while they are included in homogenous groups with a special treatment.
3. Sometimes the hearing impaired, visually impaired, orthopaedically handicapped and mentally retarded need special treatment. So special education helps them to keep pace with the academical activities are with their environment.
4. Special education is not only useful the exceptional children it assist the teacher to know the leaders and their learning difficulties.
5. Special education stimulates the children to participate in different co-curricular activities. This type of involvement provides the children to highlight their leadership qualities and creative urges.
6. Special education tends the children to a fresh their intellectual abilities and know the various streams of knowledge, which they feel difficult in normal class situation.
7. Due to facilities including special building features special equipment and special literary materials, special education prompts the children to be more motivated. It develops readiness and cowardness in learning.
8. As the different personals like teacher educators, consultants, psychotherapists, speech therapists and others are involved in this special education programme the learning becomes more meaningful and permanent. It wipes out the various emotional

problems of the children and make them more alert and quick in their thinking process.

9. Special education helps teacher to implement new methods, procedures tools and techniques in educational situations.
10. Special education condemns the interiority complex among the children. They also get more freedom to work together and achieve their goals.

1.4. The NPE 1986 and the Programme of Action Relating to Special Schools :

The National Policy of Education, 1986 has given emphasis on the education of the handicapped children. The following steps for the education of the handicapped are suggested in the POA.

1.4.1. Establishment of special schools :

Special schools will be established at the district and sub-district levels. It was felt that composite special schools may be established to start with. This decision is based on the geosscatter of the population of disabled children, reluctance of the parents to send children to schools located at distant places, sharing of specialist staff like therapists and psychologists to support the educational efforts, utilisation of vocational centres, for pre-vocational and vocational courses of the children in school as well as for post-education rehabilitation courses, meeting the needs of multiple handicapped children and the economic viability criteria. It was however felt that in a particular district if the number of children in a particular disability becomes large enough (60-70), separate special schools for that area of handicap can be established at later stage. In the composite special schools the children with different hancaps will be educated in different departments group class rooms.

400 special schools may be established during the seventh five year plan itself the schools should be established first in the districts which do not have any special school. Each of these special schools may have at least 60 handicapped children of all categories as the initial cohort.

In the eight five year plan another, 5000 special schools at sub-district level will be opened to bring the total number of these schools to about 7500. The number of these schools will have to be increased to 10,000 during the ninth five year plan.

1.4.2. Vocational training centre :

In each of the districts where a special school is setup, a vocational training centre either as a part of the school or as an adjunct to it will also be developed. This institution will provide vocational training to the students from the special schools and other severely handicapped persons for job. The emphasis will be on training craftsmen for locally available jobs.

Separate hostels will be provided for boys and girls. The capacity for the boys hostel should be 40 and that of the girls about 20. The hostels will cater to the students in the school as well as in vocational training centres.

1.4.3. Training of teachers :

Assuming that each special school will require 8-10 special teachers, about 3500-4000 special teachers will be required during the current plan. Training of special teachers disability wise has to be taken up immediately if the proposed special schools at district head quarters have to go functional at the suggested speed. This task of training

teachers is in addition to clearing the backlog of untrained teachers in special schools.

1.4.4. Training of Professionals :

Besides teachers, 400 psychologists and at least 2 doctors in each district needs to be specially oriented to the take of assessment and rehabilitation of the handicapped children. Similarly orientation programme for the medical staff for period of two weeks may be undertaken in addition other staff like physiotherapists, occupational therapists speech therapists will be needed. At least 400 each will be required.

1.4.5. Training of vocational teachers :

Orientation training for the vocational teachers may be organised by the National institutes and Regional College of Education on regional basis 3000 4000 teachers will have to be oriented during the current plan period. The orientation training will be two weeks duration.

1.4.6. Modification of curriculum :

The curriculum of these schools should be modified taking into account the specific learning problems arising out of a particular handicap. For examples, limitation of blind child for science practical and limitation of the deaf child to study more than one language needs to be adjusted in the curriculum. Caution should however be exercised that these children should not miss the curriculum component that they can.

1.4.7. Flexibility in examinations :

Flexibility in Examinations is a most severely disabled children, Evolution guides and tools for educational assessment should be made available to these schools. NCERT which has the expertise in the

technology of development of such tools and the National Institutes which have the expertise in disability may collaborate to produce this material.

1.4.8. Use of technology :

The use of technology in special education should receive attention. It involves unification adjustment and adation of the equipment and material and programuters so that handicapped persons also utilise the opportunities available for other children.

1.4.9. Strengthening of existing special school :

The existing special schools will be strengthened for increasing enrolment (wherever possible) and for improving effectiveness (800-1000) Grants to special schools should be given on the same basis as to regular schools with adequate provision to meet with adequate provision to meet special needs of the disabled children.

1.4.10. Ensuing effective supervision :

The weakest link in refers to the lack of supervision due to the absence of infrastructure for maintenance of standards of special education in the institutions. The Ministry of Welfare and Ministry of Human resources Development may co operatively develop an infrastructure for developing supervisory services to the specials. A panel of supervision may be introduced. The members of the staff at district level may de provided the knowledge and compete niices for carrying out such supervision. The members of staff from the district Rehabilitation Centres may also be associated with this work.

1.5. Types of special education :

While the general education finds difficulty to nourish the child in a planned way for a prospective future, there is obviously question of social education arises. India like other countries needs a well planned

system of special education to save the colossal waste of human energy and manpower. Though efforts have been started from different angles the very important issue is how to handle the disabled children for their individual handicaps. Let us discuss here the type of special education services which may fulfil the objectives assigned for the handicapped children and make the teachers, parents, doctors and specialists more confident in their ways or achievements.

1.5.1. Special Schools :

In special school students are admitted according to their ability, criteria of handicaps and impairment. The school impart instruction taking into view the trained and selected teachers. The system of education are feasible in residential schools. Some schools in metropolitan cities are taking this responsibility to make the children more useful for the society. Even now a days the Navodaya Vidyalaya in our country have taken a challenge in experimental basis to admit the superior children of rural and urban areas in their institutions. Besides, the visually, impaired, hearing impaired, speech defectives and mentally retarded can get suitable education with the assistance of technological aids, equipments and other necessary provision. For the disabled children the physical plant of the school is made more congenial to suit the individual child with his handicaps. The education imparted to the varied groups is considered from the general as well as vocational aspect to make them a more useful citizen of society.

1.5.2. Special Class :

In an ordinary school the special education may be given to the students through special classes. In this classes the children remain more busy than their normal classes. Because the special classes are grouped according to the mental abilities. For example and the partially blind students in their special classes can learn the use of brailled and

audio aids and some difficult concepts can be taught by the resource teacher. The hearing impaired and partially hearing impaired children know how to handle the electronic devices like audiometer and hearing aids. The orthopaedically handicapped gain knowledge how to adjust with normal peers and to their environment. The special classes may not be taken only by the resource teacher, the speech correctionist the physiotherapist, the occupational therapist the recreational therapists and the other specialists should be involved to give the specific directions required for the individual child when special class is taken ofr the disabled children more than to students should not be added to take the instruction by which each student can be well understood.

1.5.3. Hobby Clubs :

Special education can be given through hobby clubs. Now a days most of the schools in town such areas have such hobby clubs. The disabled children with varied handicaps can join various hobby clubs as suitable to them with the own interests free-dom is given to the child to cause his own hobby club and when he finds his suitable time may join there. There clubs adopt different projects which help the child in his academic career. So the children should be inspired by the parents and teachers to participate in the club activities. The child earns some good experiences attending the science club, literary clubs and other varieties where children from rich poor underprivileged community assemble there with their individual handicaps. The children develop self confidence and group spirit by involving them selves in hobby club.

1.5.4. Special Methods :

There may be the chance in teaching methods and new approaches should be adopted to satisfy the disabled children. The traditional teachers go in their age old methods to complete their assigned in the syllabus for the year. They do not take the strain to

elevate the hidden talents which lie in different children irrespective of their handicaps. More skilled and knowledgeable teachers should be involved in the teaching affairs by which both side can work enthusiastically. An intelligent, skilled and well trained teacher only can use variety of teaching methods in this purpose to deal with different types of physically and mentally impaired children.

1.5.5. Different Projects :

The teacher should learn the different types of handicapped children thoroughly. He should go through the emulative records of the children to be aware of their impairments abilities, skills, interests hobbies and achievements. The teacher should stimulate the interest of the children, selecting books and other learning materials useful for their progress. The creative pursuits can be handled by taking different projects in group basis. The children should be encouraged to participate and hobbyclubs, self, initiated learning and in other creative works which will excel their potentialities and calibre.

1.5.6. Different informal agencies :

Different informal agencies like libraries excursions, visit to historical places, study tours, field-trips, films, radio programmes and television programmes are of great need to impart special education. The children who are not visually impaired can enjoy the library facilities. The blind and partially sighted may be informal to attend the important radio and television programmes which has immense benefit to them. Besides resource centre, reading room and resource room facilities should be availed to the children which supplement the class room teaching.

1.5.7. Special coaching :

The modern society is going to be expanded in its various scientific and technological avenues. The disabled children adopt certain techniques to solve their day-to-day problems and adjustment difficulties segregation. In another aspect may be viewed for special coaching which will prepare the child to pace with the normal children to face different competitive examinations in state and national level the modern education system is carrying on various tests and competitions to test their abilities in the fields of games, sports, education, science. Literature, mathematics and other co-curricular activities. Hence special coaching should be provided to the students on different curricular and co-curricular activities to make their talent awaken.

1.6. Efficacy of mainstreaming or integration of special education:

The society in the U.S.A is becoming more complex with technological advances and so the disabled children taught in special classes find difficult for competitive taught. In special classes find difficult for complete employment. So some investigators have favoured enrolment of these children in regular classes in public schools and oppose special classes. They prefer the efficiency of mainstreaming or integration to special education. The argument to prohibit the special education has been favoured the following points.

1. The follow up studies of the products of special classes show that they lead a poor life and so some better alternatives are needed to prepare them for more successful living.
2. Special classes cost more at least twice as much.
3. Special class ideology belongs to an era when fixity of traits was advocated. Now intelligence can be stimulated by early intervention.

4. Now teachers are better prepared to handle children with greater range of individual difference with the help of ancillary services.
5. The sheltered and protective environment of the segregated special class does not prepare the disabled children for the realities of the competitive world.
6. Courts hold the ability grouping which is the basis of special classes is unconstitutional.
7. Learning disabled children gain more in a class which is more heterogenous with a broad range of individual differences than a homogenous class.

However, special classes can be neither uncritically sponsored nor can they be completely abandoned, special classes do seem to make sense for selected children. So in our country the need for mainstreaming or integration of education of the disabled children has been emphasised in the National policy on education and Programme of Action 1986. This integrated system of education has given equal educational opportunity to the disabled children by which privileges can be made for them for their better placement like the normal children we cannot solve the problems by labelling children because the fact that many children have

Several handicaps, so that categorising may be misleading and may misrepresent the issue. Above all, the mainstreaming has opened the new avenues to think the disabled children close to the society rather to segregate them from the normal sphere and to equip their mind with full confidence and assurance to maintain a happy and prosperous life as the legalised citizens of the country.

1.7. SUMMARY

*** Concept of Special Education :**

Special education is a modified programme which involves some unique tools, techniques and research efforts in improving instructional arrangements to meet the need of exceptional children.

*** Objective of special education**

- To develop motivational patterns in the handicapped that will produce achievement in school.
- To develop a realistic self-concept in handicapped children.
- To reach the maximum level of effectiveness in school subjects.

*** Need and Importance of special education :**

The special educational facilities for the exceptional children should be provided make the adjusted in their personal and social lives.

*** Features of Need and importance :**

- The special education helps both the average children and exceptional children in special classes.
- Sometimes the hearing impaired, visually impaired, orthopaedically handicapped and mentally retarded need special treatment. So special education helps them to keep pace with the academical activities are with their environment.
- Special education is not only useful the exceptional children it assist the teacher to know the leaders and their learning difficulties.

*** The NPE 1986 and the Programme of Action Relating to Special Schools**

- Establishment of special schools
- Vocational training centre
- Training of teachers
- Training of Professionals
- Training of vocational teachers
- Modification of curriculum
- Flexibility in examinations
- Use of technology

- Strengthening of existing special school
- Ensuing effective supervision

Types of special education

- Special Schools
- Special Class
- Hobby Clubs
- Special Methods
- Different Projects
- Different informal agencies
- Special coaching

*** Efficacy of mainstreaming or integration of special education**

- The follow up studies of the products of special classes show that they lead a poor life and so some better alternatives are needed to prepare them for more successful living.
- Special classes cost more at least twice as much.
- Courts hold the ability grouping which is the basis of special classes is unconstitutional.

1.8. Questions for self study

1. What is special education ? State its aims and objectives.
2. What is the need and importance of special education in the modern society ?
3. What do you mean by special education ? Discuss the different types of special education.
4. What is the programme of action regarding the special education according to NPE 1986.
5. Write short notes on :
 - a) Special education.
 - b) Special schools.
 - c) Special class.
 - d) Hobby clubs.
 - e) Efficacy of mainstreaming or Integration.

1.9. Key words :

1. USA- United State of America
2. UNESCO – United Nations Educational, Scientific and Cultural Organisation.
3. NPE- National Policy of Education
4. IEDC- Integrated Education for Disabled Children.
5. NCERT- National Council of Educational Research and Training.

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CHAPTER-2
CONCEPT AND NATURE OF INTEGRATED EDUCATION

Objectives of the Unit :

The students will be able to know about the following points when they will go through this unit.

- 2.1. Movement of Integrated Education in Western Countries.**
 - 2.2. Movement in India for Integrated Education.**
 - 2.3. NPE-1986 and Steps taken by the Government.**
 - 2.4. PWD Act-1995.**
 - 2.5. Design for an Integrated Strategy of Education.**
 - 2.6 Meaning of Integrated Education.**
 - 2.7. Definitions of Integrated Education.**
 - 2.8. Objectives of Integrated Education.**
 - 2.9. Scope of Integrated Education.**
 - 2.10. Characteristics of Integrated Education.**
 - 2.11. Education provision for the handicraft in Integrated Education.**
 - 2.12. Problems of Integrated Education**
 - 2.13. Summary**
 - 2.14 Key Words**
 - 2.15. Questions for self study**
 - 2.16. References**
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2.1. Movement of Integrated Education in Western Countries :

In the ancient time the handicapped children were considered as the unfit beings. They were deprived of all sorts of human rights and facilities existed in the society in stead of compassion people had some hatred tendency towards them. Even it was believed that the entally retarded were possessed by evil spirits. Sometimes of the devil. But most often they were left to die.

In the middle age such type of children were exploited and tortured in the society. For instance the dwarfs were used as clowns in the circus to amuse the public. The mental defective imbecile and idiots were assumed to be the fools and they would have to live on begging. If a child found suffered from mental retardation in a rich family, that family members and the neighbours felt pity on him. They were neither assigning any normal works to him nor behaving as the other children of the family. This type of temperament was making the child to remain mereisolated from other.

Time passed. After industrial revolution in Europe people developed a positive attitude to educate the disabled persons of the society. The idea of survival of the fittest declined and the revolution changed the shape and structure of the social norms and customs. The emerging society facilitated better education leisure time and merriment for all. The philanthropic institutions and church people showed their interest to give education to the disabled persons of the society.

Jean March Itard (1774-1838) a physicians at the institute for the deaf in Paris, first developed the idea how to deal with the mentally retarded children in about 1800 he found a 12 years old wild by victor from the forest of Aveyron in France. It might be the fact he presumed that the parents of the child had left him in that desolated forest being impatient of his behavioural symptoms. Itard also realised that after a logn tiem away from the human society the child must be looked after by the wolves. This might be the reason for which the boy showed animal behaviour. Itard was a sensationalist who believed the effect of sense stimulation and environmental effects brought about desired changes in the growth of an individual. So he gave the child sense training and applied various devices. He taught him even the Averyon boys language and certain skill. In spite of all his efforts the child

showed a little development in his behavioural aspect Itard was not success in his achievement only because the child was not deprived of environmental contacts and stimulation but he was severely mentally retarded from birth. However he is praise worthy for his first attempt to study the behaviour of the cerebral palsy.

Edward O Seguin (1812-1880) a physician in France, established the first public residential institution for the retard. With the help of blocks, coloured boxes, formboards, music and other sensory training, he thought to rectify the damaged nervous system by which the children can be re-educated. It brought out new horizon in the field and people followed his ideas and ideologies.

Samuel G Home was deeply impressed by the thoughts of seguin. So he established a residential school for the retarded in Mass, in U.S.A By and by; this type of insult was not alluring. The sensory or motor training became a futile one and it could not bring the normal level because from birth they lost their inherent capacity.

Johann J. Guggenbuhl (1816-1863) a physicians established his residential facility for the physically and mentally retarded children in Swiss Alps. He treated the physically handicapped children who were suffering from thyroid deficiency which was due to lack of iodine in the diet of these patients. He suggested a course of treatment consisted of open air, milk, and meat diet with iodine and aromatic baths and massages to the cretins. He also emphasised sense training and exercises. He anticipated with both medical and educational therapies, he could bring the children upto normal level. But it was not fruitful his more importance to environmental and physical devices and neglecting the inherent causes, made his achievement a faulty and defective. Towards the middle of 19th century in the U.S.A; people sent their

children to public schools but the severely retarded children were provided facilities residential schools in some states. Towards 1950 in U.S.A parents also gave education to their mentally defective children in their own parent sponsored schools or kept them at home. Though in U.S.A and U.K sporadic attempts have been taken for the exceptional children like the deaf and dumb the blind and gifted and delinquents, it is not paced with a serious effect. It needs more acceleration and more support.

The Western countries have done the vital role to bring to the notice of the teachers, parents, relatives, private agencies and Government agencies; the special difficulties of the handicapped children. So in foreign countries like Britain, America Government through legislation has been endowed with the responsibility of the handicapped children. Through parents are the natural caretakers of their own children, society too has a responsibility for the care and well-being of all its members.

A retrospect to the educational services for the handicapped children in the foreign lands tends towards the recent modes in education for the disabled which is executed through integrated education emphasising some special provisions. However, the current structure of the educational system of England and Wales was established by the Education Act, 1944, although there have been many changes and modifications since. The 1944 Act has assertion on the education of handicapped children and many of its statutes are still in operation. The act required that each Local Education Authority should ascertain which children in its area required special educational treatment, the age of entry in to education for handicapped pupils was, made the same as for normal children, that is at five years, where previously it had been seven years of age, except for blind and deaf

children. In order to ensure that every handicapped child received appropriate special educational treatment, the act further required that several new categories of handicap should be identified, and requested that Local Education Authorities make suitable provision for these. The categories thus defined were :

a) Blind Pupils :

Pupil's who have no sight or whose sight is so defective that they require education by methods not involving the use of sight.

b) Partially Sighted Pupil :

Pupils who by reason of defective vision cannot benefit from the curriculum of ordinary schools.

c) Deaf Pupils :

Pupils who have no hearing or whose hearing is so impaired that they require education by methods suitable for pupils with little or no naturally acquired speech or language.

d) Partially deaf Pupils :

Pupils who by reason of defective hearing cannot benefit from the curriculum of ordinary schools.

e) Educationally subnormal Pupils :

Pupils who by reason of limited ability resulting in educational retardation require a specialised form of education.

f) Epileptic Pupils :

Pupils who by reason of severe epilepsy cannot be educated under the normal require of ordinary schools.

g) Maladjusted Pupils :

Pupils who show evidence of emotional and Psychological disturbance and who require special educational treatment in order to effect their personal, social and educational adjustment.

h) Physically handicapped pupils :

Pupils who by reason of disease injury or crippling defect cannot be educated satisfactorily in the ordinary school.

i) Pupils suffering from speech defects :

Pupils who on account of lack of or defective speech, not due to deafness, require special educational treatment.

j) Delicate pupils and diabetic pupils :

Pupils who cannot without risk to their health be educated in a normal school.

The 1944 Act, also made it policy that handicapped children should be educated in ordinary schools wherever possible, unless their disability made this impractical or undesirable. There are many types of special educational treatment but the general categories are :

- a) Ordinary schools, special classes or units attached to ordinary schools.
- b) Special schools day or boarding.
- c) Schools attached to hospitals, community homes (where the child is other than living with parents)
- d) Individual tuition for children in hospitals or at home.

This fundamental structure of special education set so in 1944 has remained relatively unrelated. However a major change has

occurred regarding responsibility for the education of severely educationally subnormal children. In 1971, Local Education Authorities assumed responsibility for the education of their children following the education (Handicapped children) Act, 1970. This Act transferred responsibility for these children from the Health Authority to the Education Department, and the staff and buildings of the junior training centres were also taken over. In this way 24,000 children in junior training centres and 8,000 children in hospitals, ceased to be regarded as outside the sphere of education, and for the first time these children became entitled to special education, suitable for their needs.

In recent years there have been three major reports from committees set-up by the Government. The court Report was published in 1976 and recommended changes in the child Health Services. The Warnock report appeared in 1978 recommendations for far reaching changes in special education, and the Jay Report, 1979, recommended changes in the provision and care of mentally handicapped, people.

Besides, in 1975 the American Congress passed an Act for the Education for All Handicapped children. This act provided for main streaming or exceptional children. Mainstreaming means integrating physically and mentally handicapped children into regular class and providing specialised help there.

Integrated Education for the disabled children in India is an out growth of Main streaming movement in America.

2.2. Movement in India for Integrated Education :

The glimpse is found in India towards the middle of the twentieth century. Dadar School started the first experiment of this nature in 1940 in cooperation with the Hume High School, Bombay (Halder, 1943).

From this schools to students finishing their elementary education in blind school were sent to regular schools. In a class of 40 sighted children one boy student stood first in all is a examination. According to Chauhan (1989), the first attempt in implementation of integrated education in India was made during 1960 by the Ministry of Education and the Royal Commonwealth Society for the Blind. Due to lack of support of Government this step could not get its success. Mrs. Rehmat Fazelbhoj, a pioneer of integrated education in India, launched this scheme during June 1958 with the admission of two blind students in the New Activity School, Bombay. Taylor and Taylor (1970) also confirm of seven blind children being enrolled here in April 1967. The Palampur Experiment proved partial integration emerged in 1963. It had stated with four visually impaired boys and then it proceeded to admit more than 100 boy sand girls.

However the education commission report (1964-66) recommended for the placement of disabled children in regular schools. This commission suggested that “education of handicapped children has to be organized not merely on humanitarian grounds but also on grounds of reality.” The commission also emphasized that the education of handicapped children should be an “inseparable part of the general education system.” The Visnagar Project initiated for the rural blind children integration of rural blind children during 1981and 11 children for admitted in their venture. Then in 1990 in Gujarat 232 children were admitted in the regular rural schools and this effect inspite the guidance by which 600 children where enrolled after wards. Then The Central Scheme of Integrate Education for the Disabled was lunch by the Ministry of Social Justice and Empowerment (then Social Welfare Ministry)in 1974 and this scheme was transferred to the Ministry fo Education in 1982. in 1986, the National Policy on Education (NPE) was formulated which was revised in 1992. The NPE (1986/1992)

emphasized that “Wherever feasible, education of children with locomotor handicap and other mild handicaps will be common with that of others.” The NPE has viewed to send special schools for sometimes to develop their daily living skills, communication skills and basic academic skills by which they will be prepared to be integrated in regular schools. In this context NPE (1986/1992) states “The objective should be to integrate the physically and mentally handicapped with the general community, to prepare them for normal growth and to enable them to face life with courage and confidence”. In 1987, the Project of Integrated Education for the Disabled (PIED) was implemented by the Ministry of Human Resource Development, Government of India on a composite area approach to strengthen the Scheme of IEDC. About 13,000 children with disabilities in 8 states and 2 urban slums were benefited in the project. Over 9,000 teachers received training to work with disabled children in integrated setting (Azad, 1996).

In 1992 Rule of 6 of the UN Standard Rules for Persons with Disabilities emphasised “States should recognize the principle of equal primary, secondary and tertiary educational opportunities for children, youth and adults with disabilities in integrated settings. They should ensure that the education of persons with disabilities is an integral part of the education system. General education authorities are responsible for the education of persons with disabilities in integrated settings. Education of persons with disabilities should form an integral part of national educational planning, curriculum development and school organizations” (Quoted by Rao, 2003). However the District Primary Education Programme (DPEP) was launched in the country to promote the primary education system in which the importance was given to the integrated education for the disabled. The areas which were not covered under DPEP the Sarva Shiksha Abhiyan (SSA) was launched for universal elementary education in the country. The motive of SSA was

to provide elementary education to all by 2010 irrespective of also social and gentler gaves.

2.3. NPE-1986 and Steps taken by the Government :

The N P E 1986 underlines the fact that despite the enormous expansion of primary education in the post-independence period the population of disabled children has not been adequately served as a part of U.P, E, outlining the steps for ensuring equal educational opportunities for the handicapped the N.P.E steps that the objective should be to integrate the physically and mentally handicapped with the general community to prepare them for normal growth and to enable them to face life with courage and confidence it envisages that.

- i. Wherever possible education of children with locomotors handicap and other mild handicaps will be common with that of others. The children with severe handicaps are proposed to be enrolled in special schools with hostels at district head quarters.
- ii. As education in special schools is very costly it will be ensured that only those children whose needs cannot be met in common schools are enrolled in those school. As soon as the disabled children enrolled in special schools, acquite communication skills and study skills they will be integrated in to common schools. It is assumed that with the improved efficiency of the common school system the capacity of the common schools to cater to the needs of the disabled children will also improve.
- iii. Since special schools are costly and preparation of special teachers and other specialists will take time efforts should be made to increase enrolment of language handicapped and other mildly handicapped children and their retention in common schools by 25 per cent each year during the current plan period.
- iv. To achieve the above purpose.

- v. The POA envisages the following steps : Organising advocacy programme for administrators and teachers in the common school system.
 - a) Training of teachers on the management of disabled children.
 - b) Orientation of administrators
 - c) Providing supervisory services to the teachers managing this group of children.
 - d) Developing alternative learning materials for children and teachers hand book.
 - e) Supplying additional materials/equipments to the school.
 - f) Developing psychological services for the assessment of disability.
 - g) Mobilising support from the other departments such as health industry, social welfare and voluntary organisations.
- vi. The following provisions including incentive have been proposed in the POA.
 - a) Provision of aids and appliance in the area to be covered.
 - b) Adequate provision for the payment of transportation allowance (Rs.50/- per month) Provision for capital cost for capital cost for the purchase of school rickshaw in rural areas to an instruction which has atleast 10 handicapped children.
 - c) Removal of architectural barriers in school building where at least 13 handicapped children are enrolled.
 - d) Supply of text books and uniform free of cost as given to S.C. and S.T. students.
 - e) Attendance incentives as girls and S.T. children.
 - f) Arrangement for the preparation of these children in early childhood centres for education in schools. Provision for admission of children older than the eligibility (up to 8-9 years instead of 6 years).

- vii) Education of handicapped children either in special schools or in common schools their early identification, assessment of disability enrolment in school retention, specialized help and successful placement in a vocation and life is not limited to Primary Schools or Secondary Schools only. The scope of integrated education is very broad which covers preschool children. Children in elementary schools and students at the +2 stage of academic and vocational education. Effective implementation of integrated education depends upon the joint efforts and collaboration of various departments and voluntary organisation like. Education, Health, Social, Welfare, Industry, Voluntary, Organisation and Vocational and Rehabilitation centres.

2.4. PWD Act-1995 :

The Persons with Disability act (PWD Act) 1995, has made integration of students with disability a legal responsibility of the Government. The PWD Act (1995) states, among other things :

The appropriate Government and the local authorities shall ensure that every child with a disability has access to free education in an appropriate environment till he attains the age of 18 years (Article 26a); endeavour to promote the integration of students with disabilities in the normal schools (Article 26b).

The integrated education for disable children in India is highly essential for its huge population and its rural based demographically pattern. The views given by Stein 1995 for diserve our attention to understand the depth of the situation. His study reveals that three groups of individuals such as Visually Impaired Persons Themselves, progressive teachers of the Visually Impaired and parents of the Visually Impaired Children have given importance on integrated

education. The students viewed that they were not satisfied in special schools and took initiatives to read in regular schools with other sighted children. The teachers viewed special schools system was not suitable for the students rather integrated education would give chance to join in the mainstream. Lastly the parents were not interested at all to send their blind children to distance schools and they realised that their blind children could be educated among the sighted children. In this regard we shall have to go a long way to achieve our goals for the integration.

2.5. Design for an Integrated Strategy of Education

A design for an integrated strategy for education has to evolve from national priorities resource constraints and the essential inter dependence of different programmes.

Seen from this angle it appears that the national goals of development, integration, excellence and equity cannot be fulfilled without ensuring that every child in the country crosses a minimum threshold of educational attainment. Even for facing the challenges of today a minimum level of education is essential for the development of individual personality, appreciation of the constraints and potentials of environment internalising a value system, imbibing an awareness of social responsibilities and the acquisition of specific capabilities to deal with life. In the years to come a general spread of this level of education will become crucial to survival hence, universalisation of elementary education has to be one of the essential ingredients of a national strategy. The emphasis on universalisation is important for another reason. Unless it is there, concern with drop-outs will not assume the urgency it deserves.

At the other end of the scale, the national strategy of education has to ensure the availability of highly educated trained and motivated

manpower for dealing with the challenges which are inherent in the modernization and globalisation of the economy. India has to be able to compete with the most advanced countries in many fields of production to hold its own. Hence the inescapable need for setting up and maintaining institutions of excellence at all levels to tap the best talent and nurture it with care and competence.

A system of production and management based on highly sophisticated technologies cannot survive unless the service sector and the infrastructural facilities are also modernised. This requires large scale vocationalisation to produce a large body of skilled technicians trained in polytechnics, vocational streams of secondary education. I.T.I & Community polytechnics and other institutions appropriately organized and equipped with the requirements of the processes of training.

The educational objectives mentioned above and many other objects dependent on the values, attitudes and the participation of the people cannot be achieved in an atmosphere of ignorance and apathy, either to the value of education or to the requirements of population control, health and hygiene, ecology and environment, peace and order and other imperatives of national integrity and survival. A massive programme of Adult Education supported by all the media and all the educated citizens, therefore, becomes a crucial prerequisite. A total atmosphere for development, hard work and excellence can be built up only through a programme which involves every body as a promoter as well as a recipient of new attitudes and ideas.

In broad terms the task of evolving the New Education policy would consist of laying down a long-term strategy for education in which the requirements of universalisation of elementary education,

production of Sophisticated manpower in adequate numbers to deal creatively with new technologies diversified vocationalisation and the creation of an overall environment for change and development through adult and continuing education would be integrated with measures to improve the quality and outputs of all other educational sections. In this integrated strategy specific roles will have to be assigned to different agencies for drawing up and implementing detailed programmes. To ensure functional and sequential complementarities, it will be necessary to set forth the framework for interaction and integration.

2.6 Meaning of Integrated Education :

Integrated education facilitates the learning of the disabled children with specialised service in general schools when we think about the special education, the gifted and the other exceptional children get knowledge through special programme arranged. These children remain isolated from the normal classroom learners. But it is psychologically, socially, economically and educationally unhealthy. It creates inferiority complex among the disabled learners for which to segregate disabled children from other children of the community has been a controversial issue. So the psychologists and the educationalists have viewed to design the integrated education.

In our country the realisation of universalisation of primary education irrespective of caste, sex, creed, economic status and region is a commitment enshrined in the constitution. But with drop out rate ranging around 77% enrolment by itself, loses its meaning except as a frame of reference. The obstacles in the way cannot be abandoned here. The reasons that the country lacks success in its educational process are poverty, irrelevance of educational content. Unavailability of women teachers and allocation of inadequate resources. For which, new approaches such as setting up part-time and non-formal education

centres have been proposed to provide flexibility in the school routine to the non-attending children.

In spite of various scopes opened for achieving the objectives of providing equality of educational opportunity all the children, different factors are still unsolved in the case of the backward communities and disabled children. It has been felt that the weaker section of the society, the physically and mentally handicapped children can get proper guidance and motivation for learning through integrated children.

2.7. Definitions of Integrated Education :

1. Indian Education Commission (1964-66) :

The commission emphasized that the education of Handicapped children should be an “inseparable part of the general education system”.

2. Namgayel (1985) :

“Integrated education refers to meaningful involvement of children with disabilities into on-going regular education programme to the extent feasible and beneficial in a given instance, with the ultimate goal being optimal, academic, social as well as personal learning of each child”.

3. National Policy of Education 1986 :

“All those strategies and services which are designed to integrate the physically and mentally handicapped with the general community as equal partners, to prepare them for normal growth and to enable them to face life with courage and confidence”.

4. Krishansen (1989) :

“To be integrated means to be transferred from a segregated situation / setting to an ordinary environment with the rights and obligations that are linked to it”.

5. NPE (1986-1992) :

“The objective should be to integrate the physically and mentally handicapped with the general community, to prepare them for normal growth and to enable them to face life with courage and confidence”.

2.8. Objectives of Integrated Education :

1. To prompt the children for early stimulation.
2. To promote the educational provisions to meet the social and cultural needs.
3. To alert the children to be independent in their daily living skills and abilities.
4. To facilitate community education for healthy attitude.
5. To pave the ways for availability of habitation and rehabilitation services.
6. To prevent the child hood disabilities.
7. To diagnose the disabilities of the children easily and as early as possible.
8. To prepare the children for economic independence.
9. To develop democratic values in the children.
10. To develop self-confidence and courage to meet the challenges of life.
11. To make the education more meaningful and useful for all.
12. To determine the welfare of the individuals well as nation.
13. To provide the equal opportunities but not the identical opportunities to each one to develop to the limit his capacities.

14. To give a start to the skills and potentialities the disabled children in different fields.
15. To make the disabled children psychological socially economically and educationally sound.

2.9. Scope of Integrated Education :

1. **Growth and development :-** Gasell believed that the best way to understand problems of development is to gain a precise idea of normal development with which comparisons can be made. In this context integrated education helps the handicapped children who are progressing slowly, to learn the appropriate skill which should be next to develop. Through the help of checklist, we can also be able to chart the development of children note abnormalities patterns of maturation and thus in difficulties when they arise in an early stage.
2. **Environmental factors :-** The child's growth is governed by natural, in the process of the maturing nervous system. Through integrated education stress is paid to environmental factors which may influence development. The handicapped children encounter the social and learning problems which create hindrances in shaping their personality more generous in the community. So through the therapeutic care the sensitive understanding of children's feeling and the empathetic awareness of the way they perceive their difficulties can be marked clearly.
3. **Cognitive development :-** The handicapped children to their disability miss out the necessary experiences for forming certain concepts. In normal schools they develop the necessary experiences for forming certain concepts. In normal schools they develop the necessary conceptual frame work mixing with the

nonhandicapped children, by variety of play experiences, discussions, curricular and co-curricular activities. A piagetian approach to learning difficulties would therefore stress we should first look at the child's conceptual understanding and choose suitable tasks and learning experiences accordingly. In many cases there is a mismatch between what the child can understand and what is expected of him. Therefore the teachers must understand at what stage of thinking a handicapped child is operating and structure learning so that the child can make sense of his environment.

4. **Behavioural problem** :- Learning is viewed in terms of habitual responses. It is maintained that learned behaviour is a function of consequences the handicapped children when mixed with the normal children should not be restricted to age group or type of disability. In integrated education system they avail wide scopes to develop their own habits and when it gets gratification through reinforcement or rewards on behalf of the teachers and non-handicapped children. They make it more like to occur again in future. Many home and class room behaviour of the disabled with precise behavioural analysis. Clear objectives and a carefully worked out of system reinforcements are diagnosed and improved. It is also enough to analyse what satisfaction he is getting or failing to get from the present situation and change thing accordingly.
5. **Interpersonal relationships** :- When a child is described as a disabled one he may perceive himself as having a problem, his peers may think of him as a troublemaker and his teachers will interpret all they see and hear of him in these terms. Though integrated education system the specialists may pick him out to

assess and study and the child will be pressurised by a variety of unspoken expectations about the way he should behave. The Interactionalists like Cohen (1971), Becker (1977) and Hargreaves (1967), for this reason, stress that an explanation of deviant behaviour must be sought in terms of the social context and the child's interpersonal relationship. It has been claimed that in labelling or categorising a child in such a way as to denote he has a problem one immediately becomes the creator of it. So the problems in social context of the handicapped can be treated in the best way when these are ignored by their normal peers and teachers in an ordinary school.

- 6. Guidance and Counselling :-** The modern integrated education trend has made the disabled children to be away from the special or separate classes. It does not denote that special provisions should be abandoned if they will be admitted to an ordinary school. But there must be special units or classes in an ordinary school or a special school on the same site. The handicapped children must prevail the normal education among the non handicapped and in some extra classes or specific hours they should earn knowledge to provoke their skills and learn some techniques how to adjust in the environment. Many counselling techniques and psychotherapeutic methods may be adopted to treat the problems of the child. Moreover the child must be allowed to explore and express his feelings and develop a positive awareness of self, if personal growth and adjustment is to be possible.

2.10. Characteristics of Integrated Education :

1. Integrated education provides mainstream facilities for all disabled children.

2. It is a viable approach for achieving the objective of providing equality of educational opportunity to the disabled children.
3. It provides broader scopes to the disabled to live in a social world.
4. It helps to develop the individually experience.
5. It emphasises on the special needs of disabled children.
6. It provides education to blind, deaf, epileptic, speech, handicaps, mentally, handicaps and physically handicaps, with some special provisions.
7. The integrated education involves both the handicapped and non handicapped children in its system.
8. It provides special education to the disabled children in normal school for whom it is very essential.
9. Integrated education is improved school atmosphere.
10. It provides a natural environment for interaction with non-disabled peers, to learn to cope with the environment and to be accepted by their peers.

2.11. Education provision for the handicraft in Integrated Education :

When the disabled children rush in a great number into the ordinary schools, adequate facilities should be provided to them. Even the identification and assessment of their disability, qualitative improvement of education training of specialist teachers and provision of specialised help should ensured in integrated schools. Advantages of the educational provisions for the integrated education system is discussed below :

1. When the handicapped children learn in a normal school, they get the scope to mix with their per groups who are non-disabled. This environment develops a healthy atmosphere for personal, social and emotional development.

2. In a special school to deal with the disabled children costly equipments are required. It may be difficult to arrange all types of resource materials for all types of retarded children due to scanty funds. So in a normal school the teacher can teach the disabled children using the stock materials which escape to spare more amount for the handicapped.
3. The teacher does not accept the handicapped children as he thinks to meritorious and talented children of normal school. So giving admission to the disabled children into general schools, this kind of notion may be thrown out from the mind of the teacher.
4. When teaching the disabled children in normal school the teacher should try to develop the class environment which will suit to them. Children who have defects in their eye sight or those who cannot listen well may be arranged by the teacher in front benches.
5. Like wise the slow learners may be helped in the class room situation by the teacher. Slow learners are below the average children and they do not possess physical problems so repetition, over learning and vividly comprehension may help to these children.
6. The teacher should not anticipate the same behaviour from the handicapped as he desires from the normal children. The teacher will give the work load to the disabled children according to their abilities, interests and skills which develop their self confidence and selfesteem.

7. In integrated education system the teacher will give reinforcement to the disabled children to carry out a problem and when they get success they must be rewarded. It develops their sound personality and they became more inspired to solve their difficulties in personal and academic spheres.

2.12. Problems of Integrated Education :

1. Lack of co-operation of the parents.
2. Lack of the initiatives of the headmaster and other teachers.
3. Lack of interest of the teachers for quality education to the disable.
4. Non acceptance of the disable by the peer group and the teachers.
5. Lack of interest to enrolled the disable children.
6. Lack of community members.
7. Lack of provision of proper funds for the disability.
8. Lack of the interest of the resource teachers to visit the school.
9. Lack of provisions of resource rooms in the school.
10. Lack of co-ordination between parents and teachers.

2.13. SUMMARY

*** Movement of Integrated Education in Western Countries :**

Towards the middle of 19th century in the U.S.A; people sent their children to public schools but the severely retarded children were provided facilities residential schools in some states. Towards 1950 in U.S.A parents also gave education to their mentally defective children in their onw parent sponsored schools or kept them at home. Though in U.S.A and U.K sporadic attempts have been taken for the exceptional children like the deaf and dumb the blind and gifted and delinquents, it is not paced with a serious effect. It needs more acceleration and more support.

*** Movement in India for Integrated Education :**

The glimpse is found in India towards the middle of the twentieth century. Dadar School started the first experiment of this nature in 1940 in cooperation with the Hume High School, Bombay (Halder, 1943). From this schools to students finishing their elementary education in blind school were sent to regular schools. In a class of 40 sighted children one boy student stood first in all is a examination.

*** NPE-1986 and Steps taken by the Government :**

The POA envisages the following steps : Organising advocacy programme for administrators and teachers in the common school system.

- Training of teachers on the management of disabled children.
- Orientation of administrates
- Providing supervisory services to the teachers managing this group of children.
- Developing alternative learning materials for children and teachers hand book.

*** PWD Act-1995 :**

The appropriate Government and the local authorities shall ensure that every child with a disability has access to free education in an appropriate environment till he attains the age of 18 years (Article 26a); endeavour to promote the integration of students with disabilities in the normal schools (Article 26b).

*** Design for an Integrated Strategy of Education**

A system of production and management based on highly sophisticated technologies cannot survive unless the service sector and the infrastructural facilities are also modernised. This requires large scale vocationalisation to produce a large body of skilled technicians

trained in polytechnics, vocational streams of secondary education. I.T.I & Community polytechnics and other institutions appropriately organized and equipped with the requirements of the processes of training.

*** Meaning of Integrated Education :**

Integrated education facilitates the learning of the disabled children with specialised service in general schools.

*** Definitions of Integrated Education :**

➤ **Namgayel (1985) :**

“Integrated education refers to meaningful involvement of children with disabilities into on-going regular education programme to the extent feasible and beneficial in a given instance, with the ultimate goal being optimal, academic, social as well as personal learning of each child”.

➤ **Krishansen (1989) :**

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*** Objectives of Integrated Education :**

- To prompt the children for early stimulation.
- To promote the educational provisions to meet the social and cultural needs.
- To alert the children to be independent in their daily living skills and abilities.
- To facilitate community education for healthy attitude.

*** Scope of Integrated Education :**

- Growth and development

- Environmental factors
- Cognitive development
- Behavioural problem
- Interpersonal relationships
- Guidance and Counselling

*** Nature of Integrated Education :**

- Integrated education provides mainstream facilities for all disabled children.
- It is a viable approach for achieving the objective of providing equality of educational opportunity to the disabled children.
- It provides broader scopes to the disabled to live in a social world.

*** Education provision for the handicraft in Integrated Education :**

- When the handicapped children learn in a normal school, they get the scope to mix with their peer groups who are non-disabled. This environment develops a healthy atmosphere for personal, social and emotional development.
- In a special school to deal with the disabled children costly equipments are required. It may be difficult to arrange all types of resource materials for all types of retarded children due to scanty funds. So in a normal school the teacher can teach the disabled children using the stock materials which escape to spare more amount for the handicapped.

*** Problems of Integrated Education :**

- Lack of co-operation of the parents.
- Lack of the initiatives of the headmaster and other teachers.
- Lack of interest of the teachers for quality education to the disabled.
- Non acceptance of the disabled by the peer group and the teachers.

2.14. Key Words

1. POA- Programme of Action
2. I.T.I- Industrial Training Institute
3. U.P.E- Universalisation of Primary Education
4. PWD- Persons with Disabled
5. PIED- Project of Integrated Education for the Disabled
6. DPEP- District Primary Education Programme.
7. SSA- Sarbha Shikshya Abhiyan

2.15. Questions for self study

1. What do you mean by integrated education ? Discuss its importance in the present trend of education for the disabled children.
2. Define the concept integrated education. Discuss its objectives and scopes.
3. Discuss the nature and scope of integrated education.
4. What are important issues in integration ? Explain.
5. Sketch an integrated scheme of education of the disabled children.
6. Discuss the movements of integrated education in western countries.
7. Discuss the movements of integrated education in India.
8. Discuss the education provision for the handicapped children in integrated education system.
9. Discuss the steps taken by the Govt. in NPE-1986.
10. Write short notes on :
 - a) Integrated education.
 - b) PWD Act-1995
 - c) Integrated education in NPE-1986
 - d) Write five problems of integrated education.
 - e) Write five characteristics of integrated education.

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CHAPTER-3
EDUCATION OF VISUALLY IMPAIRED

Objectives of the Unit :

The students will be able to know about the following points when they will go through this unit.

- 3.1 Historical Background**
 - 3.2 Meaning of visually impaired**
 - 3.3 Definitions of Visually impaired**
 - 3.4. Integrating the visually impaired**
 - 3.5. Characteristics of visually impaired children**
 - 3.6. Degree of impairment :**
 - 3.7 Etiology of Visually impaired children**
 - 3.8. Less serious visual problem**
 - 3.9 Prevention :**
 - 3.9.1. Placement of the blind**
 - 3.9.2. Placement of the partially blind**
 - 3.9.3. Role of the family**
 - 3.9.4. Role of the school**
 - 3.10. Educational programmes of the visually impaired children**
 - 3.11. Role of the teachers in educational programmes**
 - 3.12. Summary**
 - 3.13. Key Words**
 - 3.14. Questions for self study**
 - 3.15. References**
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3.1 Historical Background :

Perhaps no other handicapping condition evokes as marked as emotional problem as blindness has historically been considered the most severe of all handicapping conditions.

Mankind attitude towards the blind has been sympathetic over the centuries as compared to other types of handicaps. This may be the reason why efforts to solve the problems of blind children started comparatively early. This first scientific and human attempt was made as far as in the 4th century A.D. St. Basil then established a home for the blind Caesarea in Cappadocia. Louis IX established a public institution at Paris around 260.

Efforts in this direction started late in India, Christian Missionaries opened Sharpe memorial school for the blind in Amritsar in the year 1887 for the first time. The work of opening of schools for the blind moved at a slow rate till independence. After independence Govt. has taken some measures for the blind children. In 1941, the Central Advisory Board had appointed a committee for designing one uniform faille code.

3.2 Meaning of visually impaired :

There are both legal and education definitions of visual handicap. The legal definition is based upon the measurement of visual acuity. The ability to distinguish forms clearly or discriminate details at a specified distance. In terms of visual acuity the child is blind if corrected vision in the batter eye is 20/200 or less. This ratio refers to distance and states that the child can see at a distance of 20 feet what a person with normal vision can see at 200 feet. The child may also be considered blind if the widest diameter of his or her visual field subtends an angle no greater than 20 degrees even through visual acuity in that narrow field may be better than 20/200. If the corrected vision in the better eye is 20/70 that is the child can at 70 feet, he or she is considered as partially blind.

Above all from the above discussion we may divide the visually impaired children mainly into two categories i.e., (i) Blind (ii) Partial blind or partial seeing.

The educational definition of visual handicap considers the extent to which a child's visual impairment affects learning and makes special methods or materials necessary. Educators often differentiate between blind and low vision student. A blind child is totally without sight. Most blind children learn to read Braille low vision child is able to read point.

According to N.Hewett and Steven R.Fornss, a four level functions system should be used for defining and classifying visual impairment.

The first level describes individuals who are unable to read and write even with the aid for optical or other enlarging visual devices unable to identify familiar objects and unable to maneuver safely through an unfamiliar environment without the aid of a long cane or sighted person.

On the second, functional level is a visual handicapped individual described as to read and write even with special aids, unable to identify objects but able to move safely through an unfamiliar environment without assistance.

The third level describes an individual who is able to read or write with without special able to visually identify object but unable to move safely through an unfamiliar environment without assistance.

3.3 Definitions of Visually impaired :

1. Legal Definition (Social Security Act 1935 USA) –

“A person who has no vision or who has central visual acuity of 20/200 (6/60) or less in the better eye with corrective glasses or a limitation in the field of vision such that the widest diameter of the visual field subtends an angular distance no greater than 20 degrees is blind.”

2. The joint Committee of Central Advisory Board of Education and Health set-up (1944) -

“One who cannot count the fingers from an outstretched hand held at a yard’s distance”.

3. NCERT Guidelines for Identification -

“All such children who cannot make use of print material and normal learning techniques are educationally blind. The actual visual acuity however should be determined by the visual screening tests.”

4. American medical Association (1976) -

“Blindness is central visual acuity of 20/200 (feet) or less in the better eye with corrective glasses or central visual acuity of more than 20/200 (feet). If there is a visual field defect in which the peripheral field is contracted to such an extent that the widest diameter of the visual field subtends an angular distance no greater than 20 degrees in the better eye.”

5. Healthnyou, Good (2000) -

“According to the NSSO a person who has no light perception and who is unable to count fingers on their hands correctly without using glasses from a three meter distance in good daylight with both eyes open is considered to be visually disabled.”

6. Encyclopaedia of Special Education -

“All those people are visually impaired who deviate from the normal to a great extent.”

3.4. Integrating the visually impaired :

Howe in 1866 has stressed to integrate the education of the visually impaired children. In the western countries like U.S.A and Britain are not giving weightage to segregated type of education rather alternative provision such as integration in the ordinary school or special units for the visually impaired have become more popular.

However in integrated system of education there should be provision of certain special visual aids which is very essential for the visually impaired children. For separate arrangement be way of curriculum, medium methods of reaching and material to be used for them, some educatory think that the curriculum for the visually impaired and the methods of instruction have to be same as for normal children while others think that both have to be entirely different.

However the curriculum can be the same for both type of children except that the impaired need more orientation and daily living skills. The objective of the education of both these types of children i.e. the handicapped and the normal could be the same that is to make as competent citizens as possible. The medium of education, however, can not be the same, it is to be different for the impaired who need large types the Braille and audio material to learn more by listening, and for the methods of education or instruction for them there is need for special aids and equipment in areas such as mathematics and sciences. Since learning to read Braille is for more complex than learning to read print and reading material is relatively difficult to obtain, current thinking encourage visually impaired children to use their remaining

visually impaired is very important. Nursery schooling is often comened at two years. So the child learn both intellectual and social, skill from early age.

While reading in the ordinary school the blind children have so many adjustment problems. Some times the normal sighted children do not give them to play with the visually imaped children or to accept them in their group activities. Normally, the blind felt that they are nuisances, especially to those of their own age. As a result they early develop withdrawal tendancies and maladjustments. So the teacher with much patience should redirect their attention and develop new sense of values among them. Helen Keller is the idol of this group. The influence of her work her progress in spite to many handicaps and her fine attitude towards life have done much to give encouragement to other handicapped persons.

In other countries the following programmes have been advocated to integrate the visually impaired with the normal.

One plan is that the teacher works as a consultant and these children are enrolled in the regular class in a school near by the teacher consultant. Another arrangement could be that the teacher gives more time for individual instructions and less indirect supervision. He goes to the child's home and gives instructions like a tutor, a course, at public expenses.

A third arrangement could be that the teacher works like a resource person who gives necessary instructions to these children in the subject room in the ordinary schools he has special maerial as needed in their work to coach them. By yet another arrangement children could be attached to a special material as needed in their work

to coach them. By yet another arrangement children could be attached to a special teacher for sometime who go to him, where as for most of the remaining time they attend regular lass with other normal children.

3.5. Characteristics of visually impaired children :

The individual receives impression of the world only through the senses. It is natural therefore that any deviation form normal vision has signficiance from the educational stand point. More impression reach the brain for interpretation through the sense of sight than through all other senses combined. As visual difficulties influence the life of the individuals from different angels, it will be easy to asses the characteristics of the visually impaired children from the following points of view.

1. Educational Characteristics :

Visually impaired children have learning difficulties because the concept formation fo the congenitally blind is restricted as they do not have all the necessary sensations. They also have difficulty in perceiving things in space or the third dimension. They will not have poor abstract, concepts, imaginativeness, spontaneous fantasy and dreams they cannot deal with random shapes less developed, because unless concepts are formed reasoning becomes handicapped.

2. Intellectual characteristics :

Poor intelligence is also problem of the visually impaired children and on certain tests of intelligence they are found to be poor as compared to the normal children concept formation largely depends upon the exploration of the environment. As these children are handicapped, they are unable to do so and perform poorly in intelligence tests.

3. Achievement characteristics :

As compared to the normal children, such children are noted to have defects in school achievement. There is some academic retardation by at least one to two years. They also have slow acquisition of information by observation with slow reading rate and lack of concreteness in instructional procedures.

4. Social and emotional characteristics :

The visual impaired children face the problems of social and emotional adjustment in the various aspects of their life. They are devalued or ridiculed by normal children and they leads maladjustment. The visually impaired children develop negative self concept as they are under estimated. From the study of the Bauman it is evident that the residential school subjects show higher anxiety and insecurity in difficulties related to the home and parents and in problems of social and emotional adjustment than the impaired children in the integrated group.

5. Behavioural Characteristics :

These children have poor self confidence for which they avoid the people and the situation. They are hardly treated and ridiculed by others they are very irritable due to social deprivation and neglect they show poor learning and backwardness as the visual impaired children do not receive stimuli from others the nonverbal body languages like smiling, looking, nodding, shaking hands are less developed among them.

6. Communication characteristics :

These children suffer from communication abilities they feel difficulty in reading. In this regard they take of the help of large print books or Braille besides they use magnifying glasses, contact lens,

telescope to improve their reading. They like oral then writing communication and do not take interest in reading and writing for a long time.

3.6. Degree of impairment :

The child with a serious visual problem is identified during the pre-school years. The partially blind is not identified until the child centers into the elementary school when vision becomes important in the performance of school work. There are a number of behavioural signs as possible indicators of visual defect.

1. Difficulty in reading or in other work requiring close use of eyes.
2. Covering one eye, tilting head or thrusting it forward when looking at near or distance object.
3. Blinking more than usual, crying of often and shows irritability when doing close work.
4. Stumbling over small object.
5. Holding books or other objects close to eyes.
6. Inability to participate in games.
7. Sensitive to light.
8. Complaint of not seeing, headache double vision etc.

The different causes of visual handicap has been denoted by panda (1978) in the following manner.

	Blindness	Percentage
1.	Parental causes	56.1
	i. Hereditary causes	14.3
	ii. Unspecified parental causes	41.1
2.	Poisoning	19.3
3.	Tumors	5.1
4.	Infectious	7.4
5.	Injury	4.9

6.	General	0.7
7.	Unspecified causes	6.5

Partial Blindness :

1.	Refractive carrots	48.7
2.	Developmental anomalies of structure	21.5
3.	Defects of muscle function	18.2
4.	Disease or defects of the eye	10.2
5.	Unspecified causes	1.4

There are number of conditions which affect the four functional system of the eye which may be congenital or environmental conditions like epilepsy, meningitis tumor etc. affect the visual process. These diseases affect the brain where vision take place. There may be certain other factors before the child is born which can create visual handicaps such as use of drugs, poisoning or infection in the mother during pregnancies. Similarly diseases like syphilis or tumor can lead to cataract before birth.

The behavioural science of visually impaired are stated (NCERT, Sharma, 1988) in the following manner.

1. Blinks eyes frequently.
2. Asks other children to read aloud when taking notes from the black board.
3. Holds objects including books close to his eyes.
4. Covers one eye and tilts the head forward.
5. Rubs eyes excessively.
6. Has the pupils of eyes in different sizes.
7. Has smaller eye-lids/ red-rimmed eye-lids.
8. Seems very sensitive to light.
9. Tenses his body to distinguish the distance of object.
10. Becomes inattentive during reading sessions.
11. Has watering eyes.

12. Has squint eyes.
13. Takes false steps while walking.

However the degree of visually impairment may clearly be marked from the table given below.

Type of Visually Impairment			
<i>Bettery</i>		<i>Worse Eyes</i>	<i>Percentage of Impairment</i>
Category Eye – 0			
I	6/9 – 6/18	6/24 – 6/36	20%
II	6/18 – 6/36	6/60 to Nil	40%
	6/60 – 4/60 or Field Vision 110 – 20	3/60 to Nil	75%
III	3/60 to 1/60 or Field of vision 100	F.C. at 1 for To Nil	100%
IV	F.C. at 1 fort to Nil or Field of Vision 100	Field vision 100	
One eyed Person	6/6	F.C. at 1 for To Nil	30%

Another classification of visually impaired children may be mentioned in four categories :

1. **Profoundly Impaired** – The children are totally blind having zero acuity in both the eyes.
2. **Severely Impaired** – These children are partially blind and their visually acuity in the better eye is less then 6/60 after maximum correction. Their only able to read the second letter on the visual acuity test board by their better eye.

3. **Moderately Impaired** – These children have the visual acuity in between 6/24 – 6/60. Their impairment is not show serious and they can do everything if properly guided.
4. **Mildly Impaired** – These children have a little less then normal acuity 6/9, 6/12. This visual problem is normal in nature and they have not any restriction in their visual field.

3.7 Etiology of Visually impaired children :

Fraser and Fried man (1968) made an extensive survey of 776 British children in special schools to determine the Causes of their blindness. There were five major categories like the following.

1. Hereditary genetic causes :

A number of hereditary diseases can result in serious visual impairment. Retinoblastoma, a malignant tumor of the retina, may either occur in infancy or be in herited. Another hereditary cause is infantile cataracts which could the lens of the eye. These can also be inherited, or may result from a disease such as diabetes, About 2 percent of the blind in Fraster and fried man’s study fell into these two hereditary categories. Abnormality of blind children in this study had genetically based defects.

2. Prenatal Cause :

Radiation and drugs may possibly cause blindness. Rubella and syphilis however are the most well known casual agents, about 6 percent of the children in the study being in this category.

3. Perintal causes :

Over one third of the children in the study were blind as a result of too much oxygen being given at birth to prematurely born babies, the result being retrolental fibroplasias. Improvement in ante and postnatal

care has led to its dramatic decline, once the cause was detected. Many children born between 1948-55 and have severe eye damage due to ignorance of this condition.

4. Post-natal cause :

In the study, about 11 percent of children and become blind as a result of accidents, infection or disease postnatal. Thus, the majority of children in this study had lost their sight before birth or in early infancy. However, it must be remembered that accident, degeneration and disease are most common agents of blindness in the old.

5. A combination of hereditary and environmental causes :

Similarly, in the third world, blindness can result from vitamin A deficiency, smallpox trachoma and ophthalmic in the new born. Another problem common in under developed countries is glaucoma where the fluid in the eye has difficulty circulating.

3.8. Less serious visual problem :

The vast majority of visual impairments are not seriously handicapping and curative spectacles or low vision aids, such as magnifiers can help the child considerably. However, some of the most common defects are mentioned below.

1. Myopia or short sightedness :

Myopia or short sightedness occurs when the lightbending process operates imperfectly because the eyeball is too long from front to back a clear image comes into focus in front of the retina rather than precisely on it. So short sighted people hold the books or other objects very close to eye.

2. Hypermetropia or farsightedness :

In case of farsightedness or hypermetropia, the eye-ball is too short causing difficulties in seeing close objects easily and clearly. However they can see distant objects clearly.

3. Astigmatism :

Astigmatism occurs from the irregularity in the shape of the cornea or lens which causes blurred vision for both distant and near objects.

4. Cataract :

A cataract is one which creates cloudiness of the lens and blocking the light necessary for vision. Vision may be incomplete and distorted.

5. Glaucoma :

Glaucoma is a disease marked by abnormal high pressure within the eye ball. It is very painful if it is not detected and cured it can cause total blindness.

6. Squints :

Squints, or strabismus are again relatively common, and may be of varying severity. Here one eye turns inwards or out, so the two eyes do not focus. Double vision can result, or a problem known as a lazy eye where vision from the weak eye is suppressed only monocularly apart from using the weak eye for peripheral vision.

7. Nystagmus :

Nystagmus is another disorder of eye movement, where the eyes oscillate in a jerky manner. Despite their odd appearance many of these

children manage quite well at school, although it may help these conditions.

3.9 Prevention :

The placement of the blind and partially blind can be made in ordinary school. But both the educational needs and vocational needs of the visually impaired are more adequately met today. The school and the family members must cooperate to open the avenues for the visually handicapped to be adjusted smoothly.

3.9.1. Placement of the blind :

The blind children have no impairment of intellectual functioning. They can learn with the normal children through the same process keeping the aims and objectives unchanged. For the blind the school should be centrally located for convenient movement and the physical environment of the campus should be more adequate. The curriculum should be framed more in vocational training, with the vocational stream then the general aspects viewing the interest and abilities of the visually impaired children. Most states have established schools for the blind in which personal and vocational adjustment is the aim of the educational programme.

3.9.2. Placement of the partially blind :

The partially blind children sometimes create problems in their adjustment inside and outside the school. In most of the cases it has been learnt that they do not report the extent of their seeing difficulty until they have suffered from unfortunate happenings which endanger their safety. Still, this group needs adjustment help similar to that given to the blind. They must be helped to understand that the attitudes of others will be different towards them from what it is towards seeing children. It is the responsibility of the teacher, the parent or the school to organize

games that are interesting to the child and within his vision possibilities. The partially blind children also can learn in the ordinary schools among the normal children and the former what to follow the pursuits of the later. It is also fact while including the partially blind children to accustom with the teaching programmes launched for the normal children preventive measures must be followed, the carefully printed textbooks improved school lighting, the education of parents, regular eye examinations of the preschool child and of the school child and special trained teachers.

3.9.3. Role of the family :

While the visually impaired children read in the ordinary school they remain with their parents in the family. Their skills, abilities habits and daily living pattern influence the development of their social, ethical and emotional values. So it is the responsible of the parent to take the usually handicapped to the doctor for proper examination and advice. Farms toy shops or other places of historical and cultural interest and community services. They should be inspired to explore the house, the kitchen, and the surroundings of the house so that they will get stimulation and gain self-confidence and self-assurance.

3.9.4. Role of the school :

The blind children need general education as well as vocational training. Through some blind children earn their education in the residential schools, they fell, that they are socially isolated which hampers the mental health of these children. So they should be encouraged to take admission in normal school with special provisions for their visual impaired like segregated class, the co-operative plan, the resource room and the itinerant teacher. The best opportunities should be arranged for them to over come their handicap from the school side.

3.10. Educational programmes of the visually impaired children :

In any case, for the care treatment training, or education of the visually impaired children, certain educational procedure should developed in order to make them efficient and competent citizens of the country. Started a school for the blind in 1866. da schools for the educationally blind began in 1900 in Chicago and in 1933. The first special class for partially blind children was started by Roxbury Mass.

According to Third All India Educational Survey Conducted by N C E R T in the year 1973, were 122 schools in our country Providing educational facilities for the blind children of these 13.1% were functioning in rural areas and about 60% were managed by private agencies. Most of these school were receiving grants from state/central Government.

The first concern of education is to prevent blindness and by discovering and putting into effective ways and means of eliminating them. The second responsibility is to make adequate provision for these children blind child may be classified according to one of the following groups but since a sharp demarcation cannot be drawn the needs of each child should be considered independently.

1. There are children who have deviation from the generally accepted visual norms but that tare amendable to medical treatment or that can be compensated few by optimal aids that may be included educationally and vocationally in the group of normal seeing.
2. There are children having such serious visual impairment that they can not use educational media provided for normal children yet they have too much sight for using the media provided to the blind.

3. In this category we can include such children who after receiving all needed medical care and optical aid are educationally and vocationally blind.

There is a necessity of discovering partially seeing children by having all children given through medical examination including an ophthalmologic examination. Before they enter school and at specified intervals throughout their school life where such procedure is not available visual screening may be done by the district Health officer of the state in order to discover children who are to be referred to ophthalmologic examination. It is also the responsibilities of the headmaster to follow throughout all referred cases in order that every necessary attention may be given. It is also the obligation of the parents to have their children medically examined but in case they fail to do so the headmaster should see that necessary attention is being provided.

Organisation of special classes for the partially seeing children is the best method of providing educational facilities. As the proportion of the partially seeing children is one to five/hundred of the school population, it is not difficult for the district Education Officer to judge at least approximately, the number of such pupils in their district and to decide whether the organisation of special classes is necessary or if other provision can be made. The first thing is that of broadening which will be subsidized by the state. Secondly the provision of assistance by the way of a special teacher who can give the needed assistance to the teachers in the rural areas, who have partially blind children in their classes.

Thirdly, special facilities may be provided to the primary school going children because the sooner the partially seeing child is given the needed assistance, the greater will be the hope of success. Besides

books printed in large, clear, pencils with thick soft aids and unglazed paper should be provided to children whose eyesight is too weak seating arrangement should be done in such way that the child can see satisfactorily. Arrangement for sufficient light should be made. Chalk boards, bulletin boards, graphs, charts etc. should be provided.

Visually impaired children should obtain retain an enormous amount of information by hearing it. Much time in school therefore should be develop to speaking and listening to others. They can also use recorded materials particularly in the latter grades. A child may use a tape recorded to take notes and listen to a record, tape or person reading aloud a lengthy reading assignment.

Learning to listen activities can take an almost unlimited variety of forms. Young children for example may learn to discriminate between sounds that are near far loud and soft, high and low. A teacher may introduce a new word into a sentence and ask the child to identify it.

Some educators suggest that academic achievement has traditionally been over emphasized at the expense of important basis living skills. Helton in the year 1976 argued that the most urgent attention be given to such topics as cooking, grooming financial management, recreational activities, personal hygiene etc. instruction in these skills can facilitate the students independence as an adult.

He further recommended that if necessary the visually impaired student should be taught how to deal with strangers how to interpreter and explain his visual impairment to others and how to make conversation with other.

Another to pick of concern is sex education sight children learn a great deal about human sexuality through vision since this is not available to the visually impaired, they may develop misconception about sex and reproduction therefore some specific instruction should be offered to them.

For blind children going to school means admission to a residential school. Fundamentally the blind school is meant for assisting the blind child through the use of specific methods and aids in this adjustment to the world in which he lives. Braille class supplies only such supplementary assistance as is necessary to enable the child to participate in regular class room instruction a programme under which he does not change his home environment.

Social adjustment is the most important aim of education for the blind schools should provide for their individual. Social activities such as dancing, scouting, literary and dramatic art clubs etc. blind children should have as many contact as possible with sighted boys and girls and with people in general. Particularly on holidays and vocations blind children should be given opportunity to participate with the social life of their age groups and the community special provision should be made for handicrafts Physical education and music instruction.

For the education of the blind children special equipment and medium as well as application of special principles are necessary. Since blind children vary almost exclusively upon their senses of touch and hearing particular attention should be given to practice on the regular type written because it permits written communication with the sighted, in the teaching of mathematics mental number work should be stressed. For importanting educational experience visits to museums and use of

especially prepared models should be provided in general it can be side that like normal children all subjects can be taught to the blind children.

Regarding creative activity the teacher can do something for the blind children it is generally sen that blind children are creative in some way or other. For them drawing and painting may not be possible but modelling can very well be used. Many blind children show considerable talent in it and derive much pleasure from working with clay and plastics. Therefore teaching should encourage the children in this field.

The blind children not only enjoy the enriched programmes of study but also be given music in all of its forms. Training for the vocation of piano tunings encouraged, for those who have the interest and talent. Sewing and needle arts are be pursued and a sense of accomplishment should be developed through them. For that they should be given training in eating, dressing bathing, grooming doing house hold work, making change, lightening a cigarette or pouring water or bring tea for guests in the home. They can be made to tie their shoelaces or put on their clothes or even to work in the kitchen. But they should not be over protected and confined to small rooms or in the house which lead to retardation is motor and muscular development.

Blindness refrains the individual's physical activities. Therefore, gymnastics, corrective postural work such as sports, running, swimming, climbing, wrestling, pulling the rope and other kinds of out door activities should form as integral part of phsycial education programme of the blind children. But precautions should be take as there is possibility of accident in games and teacher should not allow to play the games is vigorous manner.

3.11. Role of the teachers in educational programmes :

The teachers of the blind children should follow certain special principles of teachers for these children. These principals are based up on following research evidences.

1. Concreteness :

The blind children gain knowledge of the world around him through actual perception. As he has visual impairment learning will sever as a greatest value as a social contact medium and as a source of descriptive information. Blind children should have as many concrete experiences as possible. They should be provided observe the object as such as replicas on which they can observe the characteristics features. It is of most importance that the blind children should be acquainted with the objects and materials of their environment but it should not be verbal rather of direct observation. This can help the blind children to have concrete experience.

2. Unified instruction :

Due to visual impairment the blind child is at a disadvantageous position to experience thing and situation in their totality. He may hear and smell something he may feel the air currents on temperature changes, he may have touch contact with some part of an object or situation but these impressions are discrete, scattered and remain as unless experience for him. Such a unit plan treatment must supply them with informational experiences which they cannot gain by chance observation and should help them to organize their experience into a structured whole by insight topics should be taken from every day experiences such as grocery and other stores, the shoe repair shop and workshops the post office and other public institutions, the municipality and other organisations.

3. Additional stimulations :

These are mainly two ways in which additional stimulation can be supplied to the blind children. The pupils can be taken to the experiences such as study excursions, field trips, visit to museum or the experience can be brought to them such as the radio programme. Educational experience should also be extended in improving individuals own ability to get about and secure stimulation for himself it is necessary that blind children should learn to move about easily familiar grounds and should acquire facility in the most efficient use of cane they should know about the possible aids such as guide dogs, human aids and all means of transportation.

4. Self-activity :

Lack of sight limits the blind child in receiving, activating stimulation from the outside world and makes limitation based on visual observation impossible. Though the basic patterns of the developments are same for the blind and sighted it is to be expected that the rate of development of the blind in areas like walking talking socialization etc is slower. Self-activity is an essential part of the training which will enable him to live as a blind person in the world of seeing. The blind child should be encouraged to do as many things for himself as possible and desirable with a well conceived time economy.

3.12. Summary :

*** Historical Background :**

The first scientific and human attempt was made as far as in the 4th century A.D. St. Basil then established a home for the blind Caesarea in Cappadocia. Louis IX established a public institution at Paris around 1260. Efforts in this direction started late in India, Christian Missionaries opened Sharpe memorial school for the blind in Amritsar in the year 1887 for the first time.

*** Meaning of visually impaired :**

In terms of visual acuity the child is blind if corrected vision in the better eye is 20/200 or less. This ratio refers to distance and states that the child can see at a distance of 20 feet what a person with normal vision can see at 200 feet.

*** Definitions of Visually impaired :**

American medical Association (1976) -

- “Blindness is central visual acuity of 20/200 (feet) or less in the better eye with corrective glasses or central visual acuity of more than 20/200 (feet). If there is a visual field defect in which the peripheral field is contracted to such an extent that the widest diameter of the visual field subtends an angular distance no greater than 20 degrees in the better eye.”

- **Healthnyou, Good (2000) -**

“According to the NSSO a person who has no light perception and who is unable to count fingers on their hands correctly without using glasses from a three meter distance in good daylight with both eyes open is considered to be visually disabled.”

*** Integrating the visually impaired :**

However in integrated system of education there should be provision of certain special visual aids which is very essential for the visually impaired children. For separate arrangement be way of curriculum, medium methods of reaching and material to be used for them, some educatory think that the curriculum for the visually impaired and the methods of instruction have to be same as for normal children while others think that both have to be entirely different.

*** Characteristics of visually impaired children :**

- Educational Characteristics
- Intellectual characteristics
- Achievement characteristics
- Social and emotional characteristics
- Behavioural Characteristics
- Communication characteristics

*** Degree of impairment :**

- Difficulty in reading or in other work requiring close use of eyes.
- Holding books or other objects close to eyes.
- Inability to participate in games.
- Sensitive to light.
- Complaint of not seeing, headache double vision etc.

*** Etiology of Visually impaired children :**

- Hereditary genetic causes
- Prenatal Cause
- Perinatal causes
- Post-natal cause
- A combination of hereditary and environmental causes

*** Less serious visual problem :**

- Myopia or short sightedness
- Hypermetropia or farsightedness
- Astigmatism
- Cataract
- Glaucoma
- Squints
- Nystagmus

*** Prevention :**

Placement of the blind :

The blind children have no impairment of intellectual functioning. They can learn with the normal children through the same process keeping the aims and objectives unchanged. For the blind the school should be centrally located for convenient movement and the physical environment of the campus should be more adequate.

Placement of the partially blind :

The partially blind children sometimes create problems in their adjustment inside and outside the school. In most of the cases it has been learnt that they do not report the extent of their seeing difficulty until they have suffered from unfortunate happenings which endanger their safety still, this group needs adjustment help similar to that given to the blind.

Role of the family :

While the visually impaired children read in the ordinary school they remain with their parents in the family. Their skills, abilities habits and daily living pattern influence the development of their social, ethical and emotional values. So it is the responsibility of the parent to take the usually handicapped to the doctor for proper examination and advice.

Role of the school :

The blind children need general education as well as vocational training. So they should be encouraged to take admission in normal school with special provisions for their visual impaired like segregated class, the co-operative plan, the resource room and the itinerant teacher. The best opportunities should be arranged for them to overcome their handicap from the school side.

*** Educational programmes of the visually impaired children :**

Special facilities may be provided to the primary school going children because the sooner the partially seeing child is given the needed assistance, the greater will be the hope of success. Besides books printed in large, clear, pencils with thick soft aids and unglazed paper should be provided to children whose eyesight is too weak seating arrangement should be done in such way that the child can see satisfactorily. Arrangement for sufficient light should be made. Chalk boards, bulletin boards, graphs, charts etc. should be provided.

*** Role of the teachers in educational programmes :**

- Concreteness
- Unified instruction
- Additional stimulations
- Self-activity

3.13. Key Words :

1. Visual Impaired – Those children whose vision have been damaged.
2. Prenatal – Before Birth
3. Perinatal – At the time of birth
4. Post-natal – After birth
5. Learning to listen – When one learns anything by listening.
6. Stimulation- To arouse or to excite.

3.14. Questions for self study

1. Who are the visually handicapped children? How can you integrate the visually impaired ?
2. The different aspect of visual impairments of visually handicap children.
3. Discuss the etiological aspects of visual impairment.
4. Discuss the prevention and placement of visually impaired children in our society.
5. Discuss the important characteristics of visually impaired children.
6. Discuss the educational programme for the blind and partially seeing children.
7. What measure roles a teacher can do to assist the partially sighted children while teaching?
8. Write short notes on :
 - a) Myopia
 - b) Hypermetropia
 - c) Squints
 - d) Nystagmus
 - e) Visual Impairment

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CHAPTER-4

EDUCATION OF THE HEARING IMPAIRED

Objectives of the Unit :

The students will be able to know about the following points when they will go through this unit.

4.1 Introduction

4.2 Meaning of hearing impaired

4.3 Definitions of Hearing Impairment

4.4. Characteristics of hearing impaired children

4.5 Degree of Hearing Impairment

4.6. Etiology of Hearing Impairment :

4.6.1. The Etiology of hearing impairment may be categorised mainly under these two heads.

4.6.2. Some other etiological aspects of hearing impairment

4.7. Integrating the hearing impaired

4.8. Educational Programmes of hearing impairment

4.9. Prevention of hearing impaired

4.10. Role of the teachers in the Educational Programmes of hearing impairment

4.11. Summary

4.12. Key Words

4.13. Questions for self study

4.14. References

4.1 Introduction :

Hearing is vital in every aspect of our daily existence, if one is unable to hear, he would at best find it difficult to participate in his school or college, his job, his community and family unless some special adaptations are made.

Most children learn through their hearing from a very early age. A new born infant responds to sounds by starting or blinking. At a few weeks of age, the infant listens to quiet sounds, recognises his mother's voice and begins to enjoy hearing his own vocalisations. During the first year of life, the normal infant learns to recognise sounds. He is able to discriminate meaningful sound from background noise, loud sound from soft etc.

As the child grows, he develops language by constantly hearing language used around him. He associates the age sounds with innumerable activities and events and this feels the importance of sound.

There are so many children in school and others of school going age who have mild or severe hearing disabilities. A study of hearing disabilities is essential for the help of the disabled children because this disability deprives them of learning language which in turn leads to serious educational backwardness or causes certain drawbacks in the individual. Without a language an individual is not better than an animal. It is through hearing that the child acquires information and knowledge of the world outside him and the happenings within the immediate physical environment.

Hearing disabilities may be of a milder or a severe nature. Some suffer from loss of hearing which is so severe from birth that they are unable to hear anything. Such children may be known as the totally deaf. There are some others whose loss of hearing is not so severe as to completely disable them to learn any language. It is rather of a milder nature and they are known as partially deaf. They are able to learn spoken language.

4.2 Meaning of hearing impaired :

There is no legal definition of hearing impaired, when we speak of a person with normal hearing we generally mean that he or she has enough hearing to understand speech. A person with normal hearing does not need to really on any special device to interpret speech in everyday situation.

The term deafness may be used as to denote any hearing loss: it does not necessarily mean that it is total. It is a term used by National deaf Children's Society, and is less cumbersome than hearing handicapped.

The disability of deaf children may range in severity form mild to profound. A profoundly deaf person is usually understand to be someone whose disability precludes him from processing linguistic information (with or without a hearing aid) through the sense of hearing.

In terms of sensitivity, those whose loss in the range of 30-50 decibels, are often classified as moderately deaf, 50-80 decibels as severely deaf, and those who donot respond to sound lower than 80-100 decibels, as profoundly deaf.

Examples of what these decibel ranges mean may give some indication of the problems of deaf children.

An ordinary conversation is about 65 d b. A telephone ring about 85 db Loud Pop music is about 110 db.

The pain threshold for most people is 130 db.

The degree of handicap caused by deafness will depend in part on the severity of the loss, and whether the loss takes place before or after the acquisition of language is also important. Children who are hearing impaired from birth or infancy are likely to have many more problems than those who become deaf post lingually. In this case, although speech may deteriorate, language competence is likely to be maintained.

However a deaf person is one who is not able to use his or her hearing to understand speech. Even with a hearing device he or she is unable to understand speech. In this case he is deprived of any language development in him.

A hard of hearing person has a significant hearing loss, but it is not so severe. The person of hard of hearing is able to use hearing to understand speech with the use of a hearing aid. Both deaf and hard of hearing children are said to be hearing impaired.

It is important to consider whether a hearing impairment is congenital or adventitious. A child who is unable to hear from birth, the speech of others will not be able to speak spontaneously as children with normal hearing do. A child who acquires a severe hearing loss at the age of 6 when speech and language are well established, may gradually lose those abilities if he does not receive special help. Another important distinction is made between prelingual and postlingual hearing impairment, prelingual impairment is what which is present at birth or occurs before the development of speech and language. Postlingual impairment occurs after the person has developed speech and language. But a person of postlingual impairment can have the ability to speak if he has special aid.

4.3 Definitions of Hearing Impairment :

1. Moores- 1987 -

“A hard of hearing person is one whose hearing is disabled to an extent (usually 35-70 db) that makes difficult but does not preclude the understanding of speech through the ear alone with or without hearing aids.”

2. Good Healthnyou- 2000 -

“Another sense is hearing and a person this disability is unable to hear at all or can hear only loud sounds when shouted or spoken directly next to the person speaking.”

3. Alice strong-

“The child who is born with litter or on hearing or who has suffered the loss early in infancy before speech and language patterns are acquired is said to be deaf. One who is born with normal hearing and reaches the age where he can produce and comprehend speech but subsequently loses his hearing is described as deafened. The heard of hearing are those with reduced hearing acuity either since birth or acquired at any time during life.”

4.4. Characteristics of hearing impaired children :

Sometimes the characteristics of hearing impaired children are not so easy to detect as they migha have other handicaps. Above all the auditory handicaps posses the following characterises which can be student by the teachers, resource personnels and parents in a sincere efforts.

1) Educational characteristics :

The deaf children when enters school, faces the problems of developing language through the use of senses other than that of hearing. Since they lack the abilities to imitate the voices of others. Their imitation is limited to an observation of the facial movements of a speaker or the study through eyes and touch of the movements of their own throat, lips and tongue in attempted speech. They much prefer to create the impression that they are unable to master the work or that they are dull. So the teacher should help the hearing impaired children to overcome these difficulties.

2) Intellectual characteristics :

The average of the profound deaf children is some ten points below the norm. it may be varied on the basis of the nature of the tests designed for the hearing. Due to the close relationship between language and thinking deafness is likely to hinder the development of complex thought. Studies show considerable differences in the structure and content of the language of deaf compared with hearing children. Normally the deaf or the partially deaf are handicapped in their stimulation of the nerve centres in the brain cortex because of the difficulty in their hearing. Hence they are likely to acquire less experience of the outer world or less conceptualisation and have some deficiency in the store of knowledge.

3) Personal and social characteristics :

Deaf children may well have difficulty in forming relationships, both at home and at school when children or parents become unresponsive to one another, emotional problems may well result.

It is evident from the studies that children upto the age of 15 or so are noted to have 10 percent retardation in their social maturity as

compared to hearing children and this handicap increases by 15 to 20 per cent as the child grows up to the age of 21 because the degree of inferiority goes on increasing as the child is made to feel more and more inadequate handicapped and incapable in comparison with the hearing children. The handicap in the development of the language of the hearing impaired children creates a barrier for normal communication with other children or adults and this barrier obviously plays an important part in the personal and social development of these children as of any other human being.

4) Behavioural characteristics :

Deaf children also have an under proportion of behavioural problems since they have difficulty in making themselves understood and in comprehending others, this is likely to lead to frustration emotional instability temper tantrums or withdrawn behaviour. Their lack of responsiveness may be falsely interpreted as stubbornness, or emotional disturbance. This is a further reason why teachers and parents should be quick to notice the symptoms seat the child where they can hear the teacher and see his face and seek further professional advice. Deaf children of deaf parents usually have exposure to some sort of manual communication therefore their emotional problems may be less facture than deaf children of hearing parents who have no mutual basis for communication.

5. Communication characteristics :

Generally language and communication abilities are marked between to individuals by each one's interaction. As hearing impaired children are unable to interact it others the language abilities are retarded they are language abilities are retarded further. Besides people do not like to top with a hard of hearing child as he requires sounds of high frequency and speech automatically deaf and hard of hearing

lose the capacity of interaction with others sometimes when the hearing impairment is severe in nature in this case the verbal communication ability might be zero.

4.5 Degree of Hearing Impairment :

Conference of executives of American schools for Deaf (1974) has defined aurally handicapped children in terms of threshold and according to their educational adaptability. In the below the degree of empowerment is mentioned accordingly.

- 1. Mildly Retarded (24-54 db loss)-** These children feel difficulty in hearing distance sounds. They require hearing aids and microphone with loud speakers for their daily living skill. These children can read in normal school among the regular students with special services. Besides with consultation of the specialist and guidance workers they can be provided with the required materials to promote their lessons.

- 2. Moderately Retarded (55-69 db Loss)-** These children feel difficulty in hearing distance sounds and near sounds of low frequency and pitch. If they can be provided with special training and hearing aids both. They can be integrated in regular schools. In case of integration in regular settings some special classes may be arranged for a better service to them in order to promote their studies.

- 3. Severely Retarded (70-89 db loss)-** These children can neither hear distant nor near sounds of high normal frequency. As they are hearing impairment is profound they are unable to attend integrated classes because they do not get any benefit as the average students for the children special classes and special schools are very essential with special materials and techniques.

4.6. Etiology of Hearing Impairment :

4.6.1. The Etiology of hearing impairment may be categorised mainly under these two heads.

A. Conductive Loss :

Anomalies are some defect in the middle or the outer ear of the individual signify impairment of the conductive system which implies obstruction to the transmission of sound vibrations through the sound conducting apparatus of the ear which is essentially the outer ear or the pinna. The auditory canal may be blocked by ear-wax or there may be some damage to the eardrum due to insertion of some prickly object such as a pin or any other object. The outer ear or the middle ear cavity may be affected by some virus or bacteria of some disease.

An illness like adenoid can cause infection in the middle ear and chronic infections of this type will deposit some sticky type of stuff on the eardrum making the sound transmission system less flexible. This can put hindrance in proper hearing.

B. Sensoryneural loss :

A sensory neural hearing loss results from impairment to the auditory nerve or the inner ear nerve endings. Sound may not be delivered to the brain at all or may arrive in a highly destructed parts of the ear. Such children are likely to be deaf to certain wave frequencies only.

4.6.2. Some other etiological aspects of hearing impairment :

Besides the above categories the etiology of hearing impairment may vary from region to region. According to Maves in 1978 there are five major causes of childhood deafness.

1. Heredity :

It has evidence that congenital deafness is found out in some families it is transmitted to children by parents who carry the genes for deafness. It has been seen that 16 to 30% deaf children have deaf relations.

2. Maternal Rubella :

Rubella can cause deafness and a variety of other disabilities when it affects a pregnant women. Masland in 1968 reported that in U.S.A nearly 80% of child bearing age women had no immunity against this disease.

3. Pre-maturity :

Pre-mature birth of the child also leads to deafness and other handicapping conditions.

4. Meningitis :

An important cause of adventitious deafness in meaning it is. It is a bacterial or viral infection. Which can destroy the sensitive apparatus of the inner ear.

5. Blood Incompatibility :

Deafness and other disabilities may be caused if antibodies in the mother's system destroy cells in the developing fetus. This is generally caused due to blood in compatibility in the woman during pregnancy.

6. Prelingual Deafness :

These children become deaf before the development of language and speech. Their language and speech is retarded throughout their life.

7. Post lingual Deafness :

These children become deaf after the development of language and speech. Education should be provided to these children by which their placement in the society will be suitable.

8. Toxoplasmosis :

It is caused by a virus, affects the fetus. Due to this problem sensory neural hearing loss is marked.

9. Intoxication :

During the pregnancy period if the mother is indulged to intoxication the damage of auditory senses of the child is found.

10. Otitis Media :

It is a conductive hearing loss and is caused by the infection of the middle ear and the accumulation of fluid behind the ear drum.

11. Some other Disease :

Some diseases like influenza, throat infection, measles, mumps, tuberculosis and whooping cough hearing impairment in the children.

4.7. Integrating the hearing impaired :

Contemporary progresses are being made to impart instructions to the hearing impaired children in integrated way since the advancement of the science and technology and significant works have been done in the field of disabled children by the scholars both the teachers and parents should co-operate the enunciated programmes organised. Besides, emphasis should be given to the following.

1) Special class teaching :

Though integrated education has become a beneficiary to the hearing impaired still the special instructions cannot be totally abandoned. Normally the children who are deaf, have a profound hearing loss, either congenitally or accidentally after they have an experience of speech. They need to acquire their language concepts and skills in speech and speech reading, through special instructions i.e. lip reading. The need of specialized instruction in a class for the hearing impaired children depends on (i) the degree of hearing loss, (ii) the age when the loss occurred, (iii) amount of special training already received and (iv) the amount of language speech and speech reading proficiency attained. This kind of provision may be given to the children in a special school attached to the normal school or in some extra classes taken in the leisure hours.

2) Normal school teaching :

When the hearing impaired children read among the non-handicapped peers both parents and teachers should be aware of the following facts.

- i) The teacher should help the hearing impaired children in setting of the hearing aid and for this he must be well trained.
- ii) Group discussion should be maintained inside or outside the class through gestures, symbols or signs.
- iii) Medical check-up of the disabled children must be done regularly.
- iv) Special instruction and training should be provided to those children who are dictated as deaf.
- v) Children should be given the knowledge of using their individual hearing aids.
- vi) Guidance programme should be arranged for the parents in the school to know their children better and the adjustment devices.

3) Resource Personnel :

The resource teacher is the mainarch of integrated education system in a normal school. He should under stand the problems of the hearing impaired children with patience and should create the environment to mix with non handicapped children freely. The social effectiveness of deaf children depends upon their ability to make social contacts with others their ability to make social contacts with others of their own group and with persons in other groups so the resource teacher can do much for the social development of the deaf. He should assist the other teachers, headmaster, administrator and parents to understand the difficulties of the disabled children.

4) Resource room :

To accelerate the integrated education system there should be a resource room in the normal school. The resource teacher should be in charge of this.

It should be big room with affluent aids and equipments. The room for the purpose should be selected in a side of the building by which the noise of the campus should not interrupt the testing works. Different kinds of aids and essential materials i.e. pictures charts, written materials to meet the need of language and speech deficiencies, type writers and the modern electric hearing aids must be kept in the resource room. There should be provision for the hearing impaired children to sit in the room by which they can practise through the hearing aids to overcome their individual difficulties.

4.8. Educational Programmes of hearing impairment :

Both the teachers and parented should co-operate for identification of hearing handicapped children but the majority may not be detected since they hear conversations speech and learn to talk at

an average age. A loss of 30 or 40 decibels often goes unnoticed and the deviant behaviour that develops may be attributed to low intelligence or emotional problems.

The hearing loss is suspected when the teacher finds the symptoms such as the child has a slight speech defect, the child is lazy, the child seems dull. The child ignores or confuses the directions, the child shows a day dreaming attitude and the child is educationally retarded. But it is essential that hearing problem should be recognized very early in the child's life as the first years are crucial for the development of speech and understanding.

It can be difficult to assess young children's hearing and crude methods are often used for screening purpose such as whispering. Soundery bells and turning folks and watching for the child's orienting response. Audiometer can be used to define the child's hearing loss in decibels, the resulting audiogram demonstrates the weakest sounds the child can hear at various levels of pitch. However, the child's co-operation is needed to get an accurate measure and more over he must be able to understand instructions.

Still, it has been recommended that a periodic group screening test of all school children should be conducted. After this screening an individual evaluation should be done for the who appear to have hearing impairment. This should be done by physician who will determine the exact nature of the hearing difficulties and prescribe for the treatment the physician should also determine the type of hearing aid that will improve the child's hearing or recommended a special treatment programme.

The proper placement of the hearing impaired Children is a very responsible factor. In advanced countries like the USA the education of the handicapped children is in the hands of the local schools and these schools have to accept the responsibility of and to make necessary provision for their education and training. Though our country to give the best arrangement is a long way off, still prails are taken in a large scale under these two type of placements is (1) Educational placement and (ii) vocational placement.

i) Educational placement :

The hearing impaired child should start his successive education from family till he completes the school or college education. The different steps followed on the pattern are mentioned below.

A) Family :

The parents should assist the child to some extent in language development and adjustment affairs before going to school. The hearing impaired child should know that he is loved by his parents and needed by the family members. Parents have to talk of the child and allow others to talk to him as much and as feely as possible. The good behaviours and success of the child should be reinforced and rewarded, Parents should spare time for him to co-operate with the doctor, the health examiner, the education specialist that teacher and the head of the school.

B) Nursery school :

Pre-school is very essential for the hearing impaired children so they should be admitted into nursery or kinder garten schools at the age of 3 in order to develop the communication skills through talks and verbal requests of the teacher to jumps to stop, to work and to dance. The child also learns to take the advantages of his residual hearing thoughts the use of hearing aids and amplified sounds. The improvement of language and speech reading occurs in this stage.

C) Elementary School :

In the elementary school the child is instructed through oral method. The child gets training in speech reading and all other activities. If the child does not learn by oral method or instruction manual method i.e. sign language and finger spelling may be used. The system planned and organised to suit the children.

D) Secondary School :

While the child is in an ordinary school in secondary classes he becomes an integrated member of the normal community. With the help of resource teacher he develops abilities and the resource room is also a great use to him overcome his practical difficulties. He learns with normal children in the regular classes but some special classes arranged for him. The deaf children may go for higher education and attend the normal classes with the non-ha capped peers.

ii) Vocational placement :

The deaf adults have abilities equal to those of searing and hearing persons and have interests commensurate with their abilities. It is evident that both the hard of hearing and deaf engage themselves in vocational training longer and in a more systematic manner deaf adult also adjust successfully in skilled and semi-skilled jobs many business and industrial personnel departments are now able to help in the placement of disabled individuals.

Some companies are noted for their attention to the vocational needs of the handicapped the good year tire and rubber company in akoron for any years has made it a practice to employ deaf and dumb people. Their example has been followed by many other large companies, notably the westing house company, the ford motor

company, and general motors, working together makes it possible for the deaf to have a social life while they are on the job and gives them a chance to develop an attitude of self-respect and pride in workmanship.

4.9. Prevention of hearing impaired :

As compared to education of the blind efforts for the education of the deaf started a little later. The first attempt in this direction was made around 691 A. D by venerable Beda. He taught a deaf child to speak or read the lips. This instance gave encouragement to various individuals and charitable agencies to educate deaf children. As a result number of centres were established in Europe during 16th century where deaf children were educated in lip reading, writing etc. Paliu Bonet a Spanish published the first book in 1620 for the education of the deaf, Braioid wood started the first school in U.K. in 1760.

In India such schools started late. The first school for deaf and dumb was established by Rt. Rev. Dr Leo Meurin in 1885. Another school the Calcutta deaf and dumb school was established in 1873, in Calcutta. There were 7 schools in 1920. In 1931 deaf schools were added and out of these 10 there were 7 private and 3 Government schools.

According to Third, All India Educational Survey in the year 1973, conducted by N.C.E.R.T there were 95 schools in our country providing educational facilities to deaf, dumb and mute children out of these schools 95% schools were located in rural areas about 61% of the were being managed by private agencies.

There were 7738 students were enrolled in 95 schools. Enrolment of girls constitute 33.7% of the total enrolment there were 938 teachers working in these schools.

The number of deaf schools in India in negligible loss of hearing may be present at birth or may be acquired at anything during a person's life span. There for it is necessary that the hearing loss should be identified soon to facilitate medical and educational assistance which may help the child to assume his place satisfactorily in the society of which he is a part.

Kirk in the year of 19758 has described the education of the deaf as the most special of all areas of education unique ingenious and highly specialised. The effects of deafness particularly if present from birth are so complex and pervasive that special techniques, materials and people are indeed called for.

In planning any educational programme for a hearing handicapped child, the importance of parents cannot be over emphasised. Since the child's task of mastering language is so complex, as much time as possible must be devoted to as it him or her. Infact as acknowledge and understand the child's problem and to co-operate the educational efforts is important when assessing the degree of learning handicap the child actually has and when planning an educational programme.

Educationalists, scientists, philosophers and parents, both hearing and deaf have for many years debated over the most appropriate instructional methods for the deaf children. To day this controversy is as lively as ever.

The controversy concerns the extent to which the deaf children should express themselves through speech and perceive the communication of others through speech reading and residual hearing

some educators are of the opinion that purely oral approach is the best for helping deaf children to develop speech and language skills they discourage the use of sign and gestures. On the contrary other educators feel that signs gestures, cues, finger. Spelling and other manual means used along with speech are more natural way of communication. They say that this will enable the deaf child to express himself and understand others fully.

The oral approach programme gives emphasis on speech as essential part for the deaf persons integration into the hearing world. Much attention is to be given amplification auditory training. Speech reading and above all talking. Children are prohibited from pointing spelling or using gestures to communicate. It is required that they should express themselves and understand others through speech.

Programme which gives emphasis on total communication use a variety of methods to assist the deaf child in expression and language development. Speech is supplemented by one or more manual communication techniques. Meaningful communication is encouraged between teacher and students and among students.

The controversy over instructional methods for the hearing impaired is likely to continue since research has not provided any definite answer to the question of which communication method is the best in future the research findings will decide about the improvement of the situation.

The specialised needs of children with severe hearing impairment make some special services necessary in all case. The following may be some of the special service for the hearing impaired children.

- i) Small class size.

- ii) Regular speech language and auditory instruction from specialists.
- iii) Amplification system.
- iv) Special seating in the class-room to promote speech reading.
- v) Captioned films.
- vi) Services of an interpreter if the child use manual communication.
- vii) Reduction of general noise level.
- viii) Instruction for teachers and non-handicapped students in communication methods used by hearing impaired students.

Some other measure preventions :

Moreover some essential preventions may be taken for the hearing impaired children as mentioned below :

- i) Early identification of the deafness and providing proper medical treatment.
- ii) Early diagnosis of diseases and their treatment.
- iii) Regular check-up of the child bearing women during their pregnancy period.
- iv) Balanced and proper diet during pregnancy period.
- v) Immunization of mother during her pregnancy period.
- vi) Proper steps to be taken for the possible diseases.
- vii) Drugs and alcohols should be strictly denide.
- viii) Constant medical check-up during pregnancy.
- ix) Parents should take the advice of etiologists to avoid defective children in future.

4.10. Role of the teachers in the Educational Programmes of hearing impairment :

The teacher should help the hearing impaired children in the following ways.

1. The teacher should make the children interested to take part in oral recitations.
2. The teacher should provide them good examples of speech which they can imitate.
3. The teacher should stand in front of the children and speak clearly not by biding his lips or face because the children supplement their defective auditory by watching lip movements and facial expressions.
4. The teacher should keep his hands away from his face, so that the lips and the facial expressions are quite visible and can quite easily be interpreted.
5. The teacher should speak more naturally rather than fast or too slow.
6. The teacher should take care to encourage the children and to appreciate their attempts at speech and not indulge in ragging or criticism.
7. The teacher should encourage the hearing impaired child to use hearing aids according to necessity.
8. The teacher should use audio-visual aids for the advantage of the hearing impaired children.
9. The teacher should not engage these children for longtime as they became easily fatigued.
10. The teacher should help for the periodic medical checkup of the hearing impaired children.
11. The teacher should have to talk to the child and allow other non-handicapped children to talk to him as much as and as freely as possible.
12. The teacher should allow the child to do things by himself.
13. The child is to be given every chance and facility by the teacher to develop his interests and special abilities and only that which is

possible according to his age and mental level should be expected from him.

14. The teacher should speak full sentences and not single word or telegraphic language.
15. The teacher should have undergone the requisite training to teach the hearing impaired children.

4.11. Summary :

*** Introduction :**

Hearing disabilities may be of a milder or a severe nature. Some suffer from loss of hearing which is so severe from birth that they are unable to hear anything. Such children may be known as the totally deaf. There are some others whose loss of hearing is not so severe as to completely disable them to learn any language. It is rather of a milder nature and they are known as partially deaf. They are able to learn spoken language.

*** Meaning of hearing impaired :**

The term deafness may be used as to denote any hearing loss: it does not necessarily mean that it is total. It is a term used by National Deaf Children's Society, and is less cumbersome than hearing handicapped.

*** Definitions of Hearing Impairment :**

➤ Moores- 1987 -

"A hard of hearing person is one whose hearing is disabled to an extent (usually 35-70 db) that makes difficult but does not preclude the understanding of speech through the ear alone with or without hearing aids."

➤ **Good Healthnyou- 2000 -**

“Another sense is hearing and a person this disability is unable to hear at all or can hear only loud sounds when shouted or spoken directly next to the person speaking.”

*** Characteristics of hearing impaired children :**

- Educational characteristics
- Intellectual characteristics
- Personal and social characteristics
- Behavioural characteristics
- Communication characteristics

*** Degree of Hearing Impairment :**

- Mildly Retarded (24-54 db loss)
- Moderately Retarded (55-69 db Loss)
- Severely Retarded (70-89 db loss)

*** Etiology of Hearing Impairment :**

The Etiology of hearing impairment may be categorised mainly under these to heads.

- Conductive Loss
- Sensoryneural loss

Some other etiological aspects of hearing impairment

- Heredity
- Maternal Rubella
- Pre-maturity
- Meningitis
- Blood Incompatibility
- Prelingual Deafness
- Post lingual Deafness
- Toxoplasmosis

- Intoxication
- Otitis Media
- Some other Disease

*** Integrating the hearing impaired :**

- Special class teaching
- Normal school teaching
- Resource Personnel
- Resource room

*** Educational Programmes of hearing impairment :**

➤ **Educational placement :**

The hearing impaired child should start his successive education from family till he completes the school or college education. The different steps followed on the pattern are mentioned below.

- Family
- Nursery school
- Elementary School
- Secondary School

➤ **Vocational placement :**

The deaf adults have abilities equal to those of searing and hearing persons and have interests commensurate wwith their abilities. It is evident that both the hard of hearing and deaf engage themelseves in vocational training longer and in a more systematic manner deaf adult also adjust successfully in skilled and semi-skilled jobs many business and industrial personnel departments are now able to help in the placement of disabled individuals.

*** Prevention of hearing impaired :**

- Early identification of the deafness and providing proper medical treatment.

- Early diagnosis of diseases and their treatment.
- Regular check-up of the child bearing women during their pregnancy period.
- Balanced and proper diet during pregnancy period.
- Immunization of mother during her pregnancy period.

*** Role of the teachers in the Educational Programmes of hearing impairment :**

- The teacher should make the children interested to take part in oral recitations.
- The teacher should provide them good examples of speech which they can imitate.
- The teacher should speak more naturally rather than fast or too slow.
- The teacher should take care to encourage the children and to appreciate their attempts at speech and not indulge in ragging or criticism.
- The teacher should encourage the hearing impaired child to use hearing aids according to necessity.

4.12. Key Words :

1. Auditory- Concerned with Hearing.
2. Amplification- Increase the strength of sound.
3. Manual- Done with hands.
4. Prelingual- Before the child speak the language.
5. Genetic- About heredity

4.13. Questions for self study

1. Who are the hearing impaired children ? define the different types of hearing impairment.
2. What do you mean by hearing impaired children ? Define the degree of hearing impairment.
3. Discuss the etiological aspects of hearing impairment.
4. Discuss the characteristics of hearing impaired children.
5. Define how will you integrate the hearing impaired children in the present trend of education.
6. Explain how the provisions can be made for the hearing impaired child to give proper education.
7. Discuss the prevention of the hearing impairment.
8. What is the role of teacher in assisting the hearing impaired children in education programme ?
9. Write short notes on :-
 - a) Conducting loss
 - b) Sensory neural loss
 - c) Meaning of hearing impaired.
 - d) Degree of hearing impairment.
 - e) Prevention of hearing impairment.

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CHAPTER-5

EDUCATION OF THE ORTHOPAEDICALLY HANDICAPPED

Objectives of the Unit :

The students will be able to know about the following points when they will go through this unit.

- 5.1 Meaning of orthopaedically handicapped**
 - 5.2. Definitions of Orthopaedically Handicapped**
 - 5.3. Types of Orthopaedically Handicapped children**
 - 5.3.1. Types of Orthopaedically Handicapped according to Self and Stow**
 - 5.4. Characteristics of orthopaedically handicapped children**
 - 5.5. Etiology of Orthopaedically Handicapped**
 - 5.6. Integrating the orthopaedically handicapped**
 - 5.7. Identification of the orthopaedically handicapped children**
 - 5.8. The Crippled child**
 - 5.8.1. Causes of crippling**
 - 5.9. Prevention for Orthopaedical Handicapped Children**
 - 5.9.1. Prevention at Home**
 - 5.9.2. Prevention at social level**
 - 5.9.3. Prevention in school**
 - 5.9.4. Prevention in Indian Labour Law**
 - 5.10. Educational Programmes of Orthopaedically Handicapped Children**
 - 5.10.1. Educational programmes for the crippled children**
 - 5.11. Role of the teachers in the educational programmes of orthopaedically handicapped**
 - 5.12. Summary**
 - 5.13. Key Words**
 - 5.14. Questions for self study**
 - 5.15. References**
-

5.1 Meaning of orthopaedically handicapped :

The orthopaedically handicapped children have a heterogeneous group of disabilities. The crippled and poliostricken children also belong to this category. The orthopaedic impaired children are affected by their muscular or skeletal system and central nervous system. In this case the children lose their mobility and movement in daily life. In Indian context the children due to the onset and infection of polio myelitis most of them are being paralysed creates serious problems in society. Most of those children face problems either in their legs or in their hands. Normally their term as crippled children with mild impairment adjust themselves in learning process and in their life situation. But the severe disability take require special furniture devices and materials to be adjusted in their daily living skills and in schools.

5.2. Definitions of Orthopaedically Handicapped :

1. Pankajam-2009 –

“According to the Individual with Disabilities Education Act (IDEA) the definition of orthopaedic impairment as an ailment that can be caused by congenital anomaly including diseases or impairments caused by cerebral palsy, amputations, fractures, etc.”

2. Another comprehensive definition may be presented here, orthopaedically handicapped are those who suffer from a defect that is accompanied by one or another type of deformity that inhibits the normal exercise of his/her muscles, joints or bones.

5.3. Types of Orthopaedically Handicapped children :

The orthopaedically handicapped children can be categorised into two i.e. the mild crippled and the severally crippled.

1. The mild crippled :

The mild crippled children are those who have orthopaedical impairment like congenial anomalies such as dislocated hips or joints, clubbed feet, spina bifida and poliomyelitis, tuber culosis of the bones or joints.

2. The severely crippled :

The severely crippled children are those who require hospitalisation, on either temporary or permanent basis.

5.3.1. Types of Orthopaedically Handicapped according to Self and Stow:

According to L. Self and L Stow, the orthopaedically handicapped children are divided under following headings.

1. Neurological impairments.
2. Musculoskeletal conditions
3. Congenital malformation.
4. Disease and accidents.

1. Neurological impairments :

This type of impairment occurs due to the damage to the central nervous system, that is the spinal cord or the brain brain damage may occur in the area of the brain controlling motor co-ordination or the spinal cord may be damaged, which means that nerve impulses will no longer be sent to the brain. When the nervous system is damaged for whatever cause, muscular weakness or paralysis is a likely consequences.

2. Musculoskeletal conditions :

The orthopaedical impairment in this category is due to the defect or disease of the muscles or bones. Most of the conditions affecting the

musculoskeletal system of the child may be either congenital or acquired after birth as a result of disease or injury. For example, clubfoot is a well known congenital problem where one or both feet are turned at the ankle in an abnormal way. Curvature of the spine or scoliosis, is another condition which can be congenital but also acquired through poor posture.

3. Congenital malformations :

The western study has showed that possibly 6 per cent of the population have a congenital defect which is noticed by the first year of life. Some common congenital malformations are congenital dislocation of the hip, congenital malformations of the face and head, congenital malformations of the heart and congenital malformation of the limbs.

4. Disease and accidents :

Children possess this type of impairment due to the diseases like cystic fibrosis diabetes, haemophilia, cancer, asthma Besides many children acquire crippling condition in accidents every year, children also commonly damage themselves by falling, burning and poisoning. The vast majority of these problems occur through thoughtless action.

5.4. Characteristics of orthopaedically handicapped children :

The characteristics of the orthopaedically handicapped children can be studied well, if the following problems with them can be detected well. Some of those factors are discussed below.

1. Cerebral palsy :

Sometimes the cerebral palsied children are seemed to be severely handicapped for which they show various problems for their family. The condition in this case is defined as a disorder of movement

and posture resulting from a permanent non progressive defect or lesion of the immature brain : The Childs physical handicaps are thus the result of permanent damage to the developing brain, usually before or during birth. It has also been seen that the motor problems of the orthopaedically children are accompanied by other effects of brain injury, such as intellectual handicap and speech or sensory deficits.

2. Spina bifida :

A child born with spina bifida has a congenital malformation of the spinal column where the arches of one or more of the vertebrae have failed to fuse causing a gap in the column encasing the spinal cord. The term spina bifida refers to two main conditions. This causes varying degree of paralysis and intellectual ability is also rarely affected.

3. Polymyellitis :

Normally the child is affected by polio between the age of six months and five years but it would strike at the age of 30. It is caused due to drinking water or other liquids. Its incidence is more during May to September as water in these months is more polluted due to rains and the polio virus is found more in water than air. In its most advanced stage it attacks the neurones of the spinal cord and causes paralysis.

4. Epilepsy :

Epilepsy is defined as fits or Seizures which are caused by abnormal discharge of electrical activity in the brain. Some fits are mild and may appear to be mere lapses of concentration, others are severe and involve convulsions and writhing movements. It is difficult to give a definite prevalence because many people have only one fit in their life time, although for others it is more frequent.

5. Hydrocephalus :

Hydrocephalus results when there is too much cerebrospinal fluid in the ventricles of the brain. The brain tissue becomes impacted and permanent damage can result if the pressure is not relieved. In a baby the head may become grossly enlarged by a few months of age if no action is taken. The areas of brain controlling limb movement may be affected, paralysing the lower and sometimes also the upper limb. The child's sight is also often affected if the condition is not treated; he may experience fits and may ultimately die when the lower areas of the brain become damaged.

6. Muscular dystrophy :

Muscular dystrophy is a hereditary disease where there is a progressive degeneration of the muscles as the fibres swell and become replaced by fibrous tissue and fat. There are two main types of muscular dystrophy. The muscles enlarge in the thighs and calves. Those in the pelvis upper arm and shoulder are also often affected. The child becomes severely crippled until he can no longer move the muscles in his body, he may die in late adolescence. Boys only are affected.

7. Malnutrition and other ailments :

Malnutrition is noted to lead to low vitality, sluggishness incapacity to learn and also other physical handicaps such as rickety legs. Since physical handicaps due to malnutrition are more prevalent in the under developed and poor countries, the victims of malnutrition are found in abundance in India. Besides, a number of children are noted to suffer from tuberculosis of the bones or of the joints. There are also rheumatic fever, asthma diabetes, hepatitis which is a disorder of the liver and other ailments which are noted to impair the child's stamina and capacity to learn.

5.5. Etiology of Orthopaedically Handicapped :

The etiology of orthopaedically handicapped are mentioned below.

1. Congenital cause :

Congenital defects are those that are present at birth. Most common among congenital defects are club foot, dislocation of hip, missing bones, bowley, webbed fingers etc. most of them are the result of infection, nutritional deficiency X-ray, glandular disorder of the mothers material mainourishment etc.

2. Hereditary cause :

Hereditay defect is one that passess down from generation to generation because of some sort of disturbances in the working of inherent gene mechanism. It is however not worthy that a particular condition may be hereditary and yet it may not manifest itself at birth or might not have appeared before in the individuals immediate family.

3. Acquired cause :

Acquired defects are due to birth injury, accidents, nutrition, deficiency, defective of bones and joints virus infection etc.

5.6. Integrating the orthopaedically handicapped :

The orthopaedically handicapped children should get education like the normal children in the ordinary school. This kind of treatment helps to the disabled children to over come their psychological problems. They earn equal right to enjoy the opportunities of the society like other peers. It leads them to develop their self-esteem and independent attitude.

In the integrated system of education a healthy relationship develops between the handicapped and nonhandicapped children. It is also a less expensive system education than the special boarding school. The disabled children should be enabled to receive the occupational and educational information's in general schools in order to learn skills with maximum efficiency and have as much educational attainment as possible.

The physically handicapped children need only to attend special school when it is considered that it would be detrimental to their health or educational development to go to ordinary schools. But the choice of where the child should be educated will depend on the individual's particular problems and needs, as well as local provision. Many older children could attend a comprehensive school on a part or full-time basis if practical problems can be overcome and if teachers in the ordinary schools are willing to help. Otherwise a social involvement with the ordinary school may be possible, since many young people and their parents would greatly welcome more integration with their more fortunate peers.

5.7. Identification of the orthopaedically handicapped children :

The orthopaedically handicapped children are identified due to the following significant reasons :

1. The orthopaedically handicapped children have poor motor control or co-ordination.
2. They move in a shakey fashion.
3. They show postural and writing defects due to skeletal deformities.
4. Due to less strength and vitality they show low ability in school work.
5. They walk awkwardly or with a limp.

6. They show signs of pain during physical exercise.
7. They lack either completely or partially, the power of manipulation or locomotion.

5.8. The Crippled child :

The crippled child normally complains in his limbs, muscles and joints. Crippling may also occur due to the congenital reasons, accident or the effect of diseases. The white house conference gives a definition of a crippled child as the crippled child in the orthopaedic sense, is a child that has a defect which causes a deformity or an interference with normal function of the bones, muscles or joints. His condition may be congenital or due to disease or accident. It may be aggravated by neglect or by ignorance.

5.8.1. Causes of crippling :

The crippling problems may be due to the following reasons.

1. Traumatic conditions such as burns, fractures and amputations of the legs or arms.
2. Defective postures.
3. Infections diseases, like tuberculosis of the bones or joints.
4. Congenital anomalies such as defects of nerves, muscles or bones due to inheritance or defect in development during the pre-natal period.

5.9. Prevention for Orthopaedical Handicapped Children :

The involvement of the home, society and schools is very essential for the prevention of the orthopaedical handicapped children and to develop their self confidence to leave in society with necessary comforts. These aspects are discuss below :

5.9.1. Prevention at Home :

- i. The orthopaedically handicapped children should get special care at home by all the family members.
- ii. The parents should train the orthopaedically handicapped children to adjust to their handicap and to develop a wholesome attitude towards themselves and towards those about them.
- iii. The parents should help the disabled children to develop a proper attitude towards their infirmity.
- iv. The deformity of the child should not be the centre of discussion.
- v. An undue amount of attention should not be drawn for the child's cripple condition.
- vi. The parents should keep in mind that the orthopaedically handicapped children are human beings and they have aspirations and desires as the average and gifted.

5.9.2. Prevention at social level :

- i. The orthopaedically handicapped children should get training to excel their social activities that are possible for them.
- ii. They should not be discouraged or prohibited.
- iii. They must develop as much self care and self-service as they can attain.
- iv. The orthopaedically handicapped children should get the chance to carry out their own work by which their associates do not feel their presence among them unduly burdensome.
- v. The orthopaedically handicapped children are very sensitive about caring for their own needs. So unnecessary or awkward attempts should not be taken to offer them assistance which neither they require nor prefer.
- vi. The orthopaedically handicapped children resent badly expressed pity or sympathy. So such type of behaviour should not be shown to them which hampers their personal and social relationship.

5.9.3. Prevention in school :

- i. While the orthopaedically children get their education in a regular school or special classes arranged in the school there must be certain adjustments in the physical plant. For example there should be spacious, classrooms, wide hallways ramps, elevators, sturdy equipment, wide doors for movement of wheel chairs, rounded corners, non slipping floors, better toilet facilities and drinking taps so planned that children with crutches or in wheel chairs could also be able to use them.
- ii. Attention should be given to provide special types of furnitures to the orthopaedically handicapped children like special chairs and table to suit to individual children, foot rests, and book stands etc.
- iii. There should be provision for the younger disabled children in their pre-school stage to equip them with manipulative material such as games and devices that develop their eye hand coordination, peg boards for boards take apart toys, coloured blocks puzzles etc.
- iv. The handicapped children should be made to feel that they are to adjust not so much to the devices, gdgets or ancilliary services to make things easier for them in the schools or in the institution but to learn to cope with the outside world and be ready to face it in the best manner possible.
- v. The school counsellors, school psychologists and the resource teacher should be aware of the case history and the causes of the problems of the orthopaedically handicapped children.
- vi. There should be an occupation center for the handicapped for the occupation therapy and to learn some crattor vocation.
- vii. The services of a psysiotherapist or speech therapist should be arranged for the disabled children to provide varied teaching learning experiences.

- viii. The transportation facilities should be provided to the sever handicapped children on behalf of the school. These children should be assisted to enter in to the bus and their seats should be arranged for comfort.
- ix. The school should involve the medical authorities in its day-to-day programme to solve periodically complains and normal health problems of the disabled children.
- x. Individualised instructions should be provided to each of the orthopaedical handicapped children for physical security, emotional security and social security.

5.9.4. Prevention in Indian Labour Law :

The Indian labour laws provide special provisions for the benefit of disable workers in job kota reservation adjustment of working conditions, concessions in the performance and output and in the case of relief. This law aims at establishing harmonious relation between the management and workman along with their health and security. Besides, this law emphasises for the pay, allowances, timings of work, travel back and fourth to work medical attention and entertainment of the disabled. Here some provisions of Indian level law for the benefit of disabled are stated below :

- i) One cannot be discriminate in the same type of work due to his disability.
- ii) If a person met accident in his/her working place and will not perform his/her work, he/she may be replaced to other ty peof the work in the same institute, which is suitable to his/her conditions.
- iii) One cannot be terminated or suspend by the job due to his/her disabled conditions.
- iv) There are 3% reservations in the jobs in all the factories and workplaces.

- v) The workers who become disabled during the course of employment are entitled to compensation as per the workmen's compensation Act, 1930 and are entitled to treatment under the Employees State Insurance Act, 1948.
- vi) Every person including the disabled person has his/her life and liberty guaranteed under Article 21 of the constitution.
- vii) There can be no traffic in human beings, including the disabled and beggar and other forms of forced labour are prohibited and the same is punishable in accordance with law- Article 23.
- viii) Article 24 prohibits employment of children, including the disabled, below the age of 14 years to work in any factory or mine or to be engaged in any other hazardous employment.
- ix) Article 25 guarantees to every citizen, including the disabled, the right to freedom of religion. He/she has the freedom of conscience to practice and propagate his/her religion subject to proper order, morality and health.
- x) No disabled person can be compelled to pay any taxes for the promotion and maintenance of any particular religion or religious group.
- xi) No disabled person will be deprived of the right to the language, script or culture, which he/she has or to which he/she belongs.
- xii) There are some other provisions made in the Indian constitution to support the persons with disabilities in a healthy and positive way like Income Tax Act, Property and Land Act, Law of Civil Procedure Code, Criminal Procedure Code, Service Rules etc.

5.10. Educational Programmes of Orthopaedically Handicapped Children :

The placement of the orthopaedically handicapped children should be done in the normal classes in order to solve their problems.

For a better adjustment, their disability, needs and capacities should be considered duly and arrangements must be done in the following ways.

- i. The method adopted for the normal children in teaching learning process should be followed for the orthopaedically handicapped children. But as they are heterogenous in their nature, they have to be given more individualised attention.
- ii. Though the aims and objectives of the disabled children satisfy their goals a like the normal children in the same type of curriculum still, their educational needs should be realised on the point of view of their impairments or the handicaps of milder or of severe nature, as well as of the special type of handicap.
- iii. The orthopaedically handicapped in some severe cases may get pre-school education in nursery schools to be trained or educated or cured of their deformities.
- iv. Some of them may attend hospital classes or some may lateron, even attend day classes in ordinary schools after their physical handicap has been attended to or treated and they have been provided with necessary equipment or facilities in the case of polio children.
- v. The teacher should be specially trained to educated the various type of handicapped children and understand their physical and psychological problems.
- vi. The orthopaedical handicapped children may be placed in common schools by which they can be benefited to join in mainstreaming. In this case the teacher should be vigilant to collect the information given below in the General Record Card.

General Record

1. Name of the student
2. Sex
3. Date of Birth student

4. Name of the Father/Guardian
5. Educational qualification of father/guardian.....
6. Profession of father/guardian
7. Name of the mother
8. Educational qualification of mother.....
9. Profession of mother
10. Date of admission to the school
11. The Nature of the school in which admitted.....
12. Aids and necessary articles used.....
13. Parent's yearly income.....
14. Parent's problems
15. When the case detected

5.10.1. Educational programmes for the crippled children :

The problems of the crippled children should be dealt with specially. As their cases are basically concern with medical problem suitable educational programme should be given to them. They should be provided with proper equipments and materials for their movement and the class structure placement of hostel and campus should be congenial to them. The following precautions should be taken carefully for the education of crippled children.

- i) Residential Institution class
- ii) Centre for crippled in regular schools.
- iii) Special school for various types of handicapped.
- iv) Home Instruction.
- v) Sanatorium class
- vi) Hospital class
- vii) Convalescent Home class
- viii) Special school for the crippled.
- ix) Single Mutligrade class for crippled children in the regular schools.

5.11. Role of the teachers in the educational programmes of orthopaedically handicapped :

In order to integrate the orthopaedically handicapped children in normal schools teacher should have to consider the following points.

1. The class rooms must be larger than those for regular pupils.
2. The teacher should see that the educational progress made by these children must be according to their mental and physical limitations.
3. Needs of each individual child must be met effectively.
4. School equipment must be adjusted to his deformity i.e., table, chair etc may specially designed.
5. The orthopaedically hadnicaped may be gives vocational training.
6. Liberal widow space should be provided in each class room.
7. The auditorium lunch room etc. must be within the reach of the orthopaedically handicapped child.
8. Health and physiotherapy programmes must be very regular in these schools.

5.12. Summary :

*** Meaning of orthopaedically handicapped :**

The orhtopaedically handicapped children have a hetrogenous group of disabilities. The crippled and poliostricken children also belong to this category. The orthopaedic impaired children are affected by their muscular or skeletal system and central nervous system. In this case the children looses their mobility and movement in daily life.

*** Definitions of Orthopaedically Handicapped :**

➤ Pankajam-2009 –

“According to the Individual with Disabilities Education Act (IDEA) the definition of orthopaedic impairment as an ailment that can be caused

by congenital anomaly including diseases or impairments caused by cerebral palsy, amputations, fractures, etc.”

*** Types of Orthopaedically Handicapped children :**

The orthopaedically handicapped children can be categorised into two i.e. the mild crippled and the severally crippled.

- The mild crippled
- The severally crippled

*** Types of Orthopaedically Handicapped according to Self and Stow:**

According to L. Self and L. Stow, the orthopaedically handicapped children are divided under following headings.

- Neurological impairments.
- Musculoskeletal conditions
- Congenital malformation.
- Disease and accidents.

*** Characteristics of orthopaedically handicapped children :**

- Cerebral palsy
- Spina bifida
- Polymyellitis
- Epilepsy
- Hydrocephalus
- Muscular dystrophy
- Malnutrition and other ailments

*** Etiology of Orthopaedically Handicapped :**

The etiology of orthopaedically handicapped are mentioned below.

- Congenital cause
- Hereditary cause

- Acquired cause

*** Integrating the orthopaedically handicapped :**

The orthopaedically handicapped children should get education like the normal children in the ordinary school. This kind of treatment helps to the disabled children to overcome their psychological problems. They earn equal right to enjoy the opportunities of the society like other peers. It leads them to develop their self-esteem and independent attitude.

*** Identification of the orthopaedically handicapped children :**

The orthopaedically handicapped children are identified due to the following significant reasons :

- The orthopaedically handicapped children have poor motor control or co-ordination.
- They move in a shakey fashion.
- They show postural and writing defects due to skeletal deformities.

*** The Crippled child :**

The crippled child normally complains in his limbs, muscles and joints. Crippling may also occur due to the congenital reasons, accident or the effect of diseases.

*** Causes of crippling :**

- Traumatic conditions such as burns, fractures and amputations of the legs or arms.
- Defective postures.
- Infections diseases, like tuberculosis of the bones or joints.

*** Prevention for Orthopaedical Handicapped Children :**

*** Prevention at Home :**

- The orthopaedically handicapped children should get special care at home by all the family members.
- The parents should train the orthopaedically handicapped children to adjust to their handicap and to develop a wholesome attitude towards themselves and towards those about them.

*** Prevention at social level :**

- The orthopaedically handicapped children should get training to excel their social activities that are possible for them.
- They should not be discouraged or prohibited.

*** Prevention in school :**

- The school counsellors, school psychologists and the resource teacher should be aware of the case history and the causes of the problems of the orthopaedically handicapped children.
- There should be an occupation center for the handicapped for the occupation therapy and to learn some craft or vocation.

*** Prevention in Indian Labour Law :**

- One cannot be discriminated in the same type of work due to his disability.
- If a person meets an accident in his/her working place and will not perform his/her work, he/she may be replaced to other types of the work in the same institute, which is suitable to his/her conditions.
- One cannot be terminated or suspended by the job due to his/her disabled conditions.

*** Educational Programmes of Orthopaedically Handicapped Children :**

- The orthopaedically handicapped in some severe cases may get pre-school education in nursery schools to be trained or educated or cured of their deformities.
- The teacher should be specially trained to educate the various type of handicapped children and understand their physical and psychological problems.

*** Educational programmes for the crippled children :**

- Residential Institution class
- Centre for crippled in regular schools.
- Special school for various types of handicapped.

*** Role of the teachers in the educational programmes of orthopaedically handicapped :**

- The class rooms must be larger than those for regular pupils.
- The teacher should see that the educational progress made by these children must be according to their mental and physical limitations.
- Needs of each individual child must be met effectively.

5.13. Key Words :

1. Orthopaedic – Curing or treatment bones or muscles
2. Neurological- Study of nerve systems and their disease.
3. Cripple- Permanently lame person
4. Anomaly- Deviation from the general rule.
5. Muscular Dystrophy- hereditary weakening and wasting of the muscles.

5.14. Questions for self study

1. Who are the orthopaedically handicapped children? Discuss the types of their handicap.
2. How can the orthopaedically children be identified? What provisions can be made for their placement?
3. Discuss how the orthopaedically children can be given integrated education.
4. Discuss the etiology of orthopaedically handicapped.
5. Discuss the characteristics of orthopaedically handicapped.
6. Discuss the educational programmes that can be arranged in an ordinary school to educate the orthopaedically handicapped children. What is the role of teacher to assist them?
7. Write short notes on :
 - i) Crippled child
 - ii) Cerebral palsy
 - iii) Spina bifida
 - iv) Poliomyelitis
 - v) Causes of crippling

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CHAPTER-6

EDUCATION OF THE GIFTED CHILDREN

Objectives of the Unit :

The students will be able to know about the following points when they will go through this unit.

- 6.1. Meaning of Giftedness**
- 6.2. Definitions of giftedness**
- 6.3. Types of Gifted Children**
 - 6.3.1. The Highly Gifted Children**
 - 6.3.1.1. Identifying the Highly Gifted Children**
 - 6.3.2. The underachieving Gifted Child**
 - 6.3.2.1. Causes of Underachievement**
 - 6.3.3. The Gifted with a handicap**
 - 6.3.3.1. Prevention and Comperensive Programme**
 - 6.3.4. Magnifico's Division of Gifted**
- 6.4. Characteristic of Gifted Children**
 - 6.4.1. Characteristics of Gifted Children according to Lewis Terman**
- 6.5. Needs and Problems of Gifted Children**
- 6.6. Identification of the Gifted Children**
- 6.7. Education of the Gifted**
- 6.8. Present Position about the Gifted in India**
- 6.9. Recommendations by the Indian Education Communication (1964-66)**
- 6.10. Objectives of Education for Gifted Children**
- 6.11. Duhr's Suggestions for Teaching The Gifted**
- 6.12. Holling Worth Suggestions for teaching the gifted**
- 6.13. Educational Programmes for the Gifted Children**
 - 6.13.1. Acceleration**
 - 6.13.2. Segregation**

6.13.3. Enrichment

6.14. Role of the teachers in the Education Programme

6.15. Summary

6.16. Key Words

6.17. Questions for self study

6.18. References

6.1. Meaning of Giftedness :

A gifted child is mainly an exceptional child. According to Kirk the exceptional child is that child who deviates from the average or Normal child in mental, physical, or social characteristics to such an extent that he requires a modification of school practices or a special educational service, in order to develop to his maximum capacity. From this definition it is presumed that all the gifted, back ward, physically handicapped and mentally retarded, belong to the category of exceptional children.

Normally gifted children are superior in reasoning power to that of other children. They show promise in music, dancing poetry, creative writing, dramatics, graphic arts, creative scientific exteriority and an unusual imagination. They do not find intellectual stimulation in the traditional class-work, school books, syllabus and methods of teaching adopted for the average children.

The gifted children loose their talent when they are bound to pace with the normal school curricular programmes. Due to their special abilities they show significant achievements in learning rate, reading aspect. Memorization and span of attention. Their vocabulary range is very wide and they like to adopt independent works and complex directions. The gifted children show their progress when they work with the children of high I.Q and intellectually superior children, most of the

gifted children are victimized in the age old system of education system, chronological age grouping and traditional examination pattern.

The gifted children are found in all state of society irrespective of racial, ethic, religions, rural or urban groups, high or low position of social and economic status. Giftedness; although is not confined only to economically of social groups even they may come from very poor and minority communities like scheduled castes and scheduled tribes. However the gifted children are those who show their greater intellectual superiority and capacity in achieving high standards of attainment in any worth while line of endeavour.

6.2. Definitions of giftedness :

- i. Lucito- The gifted are those children whose potential, intellectual powers and abilities are at such high ideational level in both productive and evaluative thinking that it can be reasonably assumed that they could be future problem solvers, innovaters and evaluators of the culture if adequate educational experiences are provided to them.
- ii. W.B. Kolesnik- The term gifted has been applied to every child who, in his group is superior in some ability which may make him an outstanding contribution to the welfare and quality living in our society.
- iii. R.J. Having Hurst – Gifted children are those individuals form kindergarten through high school age who show unusual promise in some socially useful area and whose talent might be stimulated.
- iv. Kirk (1952)- From practical points of view gifted children are those who have superior ability to deal with fact, ideas or relationships. That giftedness (ability) come from high intelligence of high creativity.

- v. Witty- Those whose performance in a worth while human endeavour is constantly remarkable as well as those who are academically superior.
- vi. Getzels and Bakson- The highly creative children may or may not have high intelligence. The highly creative children (not high intelligence) achieve equally the children of high intelligence (not high creativity)
- vii. Terman- The gifted children are superior in development, intelligence and personality.
- viii. Prem Pasricha- the gifted child is the one who exhibits superiority in general intelligence or the one who is in possession of special abilities of high orders in the fields which are not necessarily associated with high intelligent quotient.
- ix. The 57th Year Book of the National Society for the Study of Education (1958, Part II)- A talented or gifted child is one who shows consistently remarkable performance in any worth while line endeavour thus, we shall include not only intellectual gifted, but also those who show promise in music, the graphic arts, creative writing, dramatics, mechanical skills and social leadership.
- x. Fliegler and Bish (1959)- The term gifted encompasses those children who possess a superior intellectual potential and functional ability to achieve academically in the top-15 to 20 percent of the school population (or) talent of a high order in such special areas as mathematics mechanics science, expressive art, creative writing, music and social leadership, and a unique creative ability to deal with their environment.
- xi. Guilford (1959)- Gifted Children possess a high mental ability of productive thinking, creativity and evaluation to such an extent that given appropriate environment and education they will be

able to solve all problems, discover new things, and evaluate their culture effectively in future.

- xii. Simpson and Lucking (1960) – Gifted children are those children who possess a superior central nervous system characterised by the potential to perform task requiring comparatively a high degree of intellectual abstraction or creative imagination or both.
- xiii. Office of Education, U.S.A 1969- Gifted and talented children are those, identified by professionally qualified persons, who by virtue of outstanding activities are capable of high performance. These are children who require differentiated educational performance and/or services beyond those normally provided by the regular school programme in order to realise their contributions to self and society. High performance might be manifested in any one or a combination of those areas i.e. (1) General intellectual ability, (2) Specific academic aptitude, (3) Creative or productive thinking, (4) Leadership ability, (5) Visual and performing arts (Psychomotor ability).

6.3. Types of Gifted Children :

There are three types of gifted children such as (1) The highly gifted child (2) The under achieving gifted child and (3) The gifted child with a handicap.

6.3.1. The Highly Gifted Children

The most important categories of the gifted children is the highly gifted children.

They possess an I.Q. of 170 and sometimes it has been found once in a million who have I. Qs above 190. Different studies by the psychologists have contributed a lot to identify the highly gifted. Terman and his colleagues published a book entitled Mental and physical characteristics of one thousand gifted children in 1925; a year later

Holling Worth published book Gifted children; their nature and nurture and in 1942 L.S. Hollign Worth published another book on children above 180 I.Q. of over 180 has shown that the gifted tend to read a great deal. Let us that how a highly gifted child is picked up among his friend.

6.3.1.1. Identifying the Highly Gifted Children :

1. The highly gifted children is rejected by his peers due to his peculiar activities.
2. He is found accelerated in academic achievement.
3. He develops divergent ideas regarding the value system in the existing society.
4. An ordinary teacher and the ignorant parents do not understand his needs, interests and curiosity.
5. He faces problems in personality and social adjustment.

6.3.2. The underachieving Gifted Child :

Due to the authoritarianism by parents and poor uses of time and energy the gifted children suffer a lot. Having the high intellectual ability they do not show well in their school lessons. Sometimes their progress in various fields hamper than the average. These children are known as the gifted underachievers.

6.3.2.1. Causes of Underachievement :

- i. The underachiever shows a sense of irresponsibility.
- ii. He is disinterested in other people.
- iii. He is lack of dominance, persuasiveness and self confidence.
- iv. He is weak in controlling his ego.
- v. He does not show interest in clearness and definiteness of academic and occupational choice.
- vi. He is apathetic and withdraws view of life.

- vii. He possess the attitude of withdrawal and self sufficiency.
- viii. He is found with neurotic tendencies.
- ix. He does not give weight age to the value of time and money.
- x. He cannot face the impossible demands by parents.

6.3.3. The Gifted with a handicap

There are some gifted children who are physically handicapped. Hellen Keller though both deaf and blind, she was superior in intelligence. Like wise Franklin D. Roose velt was also crippled with poliomyelitis.

6.3.3.1. Prevention and Comperensive Programme :

- i. The prevention and comprehensive programme for the gifted with a handicap requires co-operation between many persons.
- ii. The teachers, parents, guidance officers and medical officers should be vigilant to the problem.
- iii. The desires and ambitions of gifted child with a handicap should be fulfilled immediately.
- iv. Necessary educational opportunities which are suited to his capacity should be provided.
- v. The curriculum should be planned in such a way which will cause no strain on his limited physically capacity.
- vi. Medical and surgical care should be provided properly.
- vii. Care should be taken for emotional adjustment and removal of feelings of inferiority.

6.3.4. Magnifico's Division of Gifted

L.X Magnifico divided the gifted into two groups. The two main divisions of the gifted are those of unusual metnal faculties and those who possesses a special talent. The two types may be (1) a child whose ability, as indicated by an intelligent test, is within the range of

upper 2 or 3 percent of the population. (2) a child having outstanding ability in a given field, like music or art.

6.4. Characteristic of Gifted Children :

The gifted children when read with the average children they find the task of the class uninteresting and unstimulating. They show special type of behaviors. The studies of the various psychologists have proved that they are top in their intelligence. Terman and order point out that gifted children are high above than the average in physique, social adjustment, personality traits school achievements and varieties of interests. However let us discuss the following chief characteristics of the gifted children.

1. Intellectual abilities.
 2. Physical characteristics.
 3. Personality traits.
 4. Academic achievements.
1. **Intellectual abiltieis** :- The gifted children show superiority in different aspects. They possess better ability to organise, analyse, memorise, synthesis and reason out things. They have extensive rapidity in learning and comprehension and quick as well as clear in self expression. They are good in abstract thinking, insight, imagination power, original ideas, understanding and comphrensive power. They can not minute details for which accurate and keen onservation power is found with them. The gifted children show specific abilliteis in much, art, science, vocabularly, social relations, general knowledge and arithmetic.
 2. **Physical characterstics** :- It has been presumed that the gifted children are good in their physic and growth. They are better in their weight, eyesight and speech. They are not undersized but

maintain good health. According to Hallingworth, Bladwin and Terman the gifted children are taller than the ordinary children.

A gifted child is a purely heavier than the ordinary children. He starts walking a month and a half earlier, than ordinary children and starts speaking 2 to 3 months earlier. They develop interest in outdoor games, good food and health habits.

- 3. Personality traits :-** According to Terman the gifted children are kind, honest and altruistic. They are superior in character and mix with friends of higher age and class. Though they are sincere, dutiful, trustworthy and high achievers in the class, they do not show prodigiousness. Usually they are humorous, cheerful and generous. Witty finds that the gifted children are better than normal children in play, natural spontaneity, friendship and such other qualities. They like laughing and are of bright nature. They are also fond of participating in discussion, debates and putting reasonable questions in the classroom.
- 4. Academic achievements :-** normally the gifted children enter schools and universities at an early age in comparison to the average children. The achievement quotient and educational quotient of the gifted children are high. They need lesser directions and their memory, imagination, reasoning and power of determination are well developed. They are very punctual, enthusiastic and they have the power of sustained attention. They participate in various literary competitions, debates and general knowledge tests and award prizes and certificates.

6.4.1. Characteristics of Gifted Children according to Lewis Terman:

Lewis Terman (1925) made a 30 year longitudinal of 1500 gifted study in California. The more important results of his study are follows. These statements apply to gifted students as a group (I.Q135 and above) compared with the entire student Population as a group.

- 1. Physical** – They were, as a group, taller, heavier and well developed. Their general health was above average and continued to be upto adulthood. Their health habits and personal appearance where generally above average.
- 2. Socio economic-** Their parents, as a group, have had much more schooling and were of higher intelligence than the average of the population. Their parents were much more after that the general population, in professional or other higher occupations though gifted students were to be found in every socioeconomic class. Their homes were on the whole, provided with superior, cultural and intellectual stimulating facilities.
- 3. Social and Emotional-** They were socially more mature than other students of their age. They were rated higher by their teachers of social and emotional characteristics. They preferred games requiring reasoning and judgment and that are favored by students older than themselves. They were seldom regarded as eccentric and unpopular.
- 4. Learning and Education-** They learned to walk and talk earlier than the average. They used a large vocabulary and their general language development was accelerated. They were unusually perceptive and required information well after entering school

they had a strong interest in reading and in the more abstract school subjects. Their interests were verified. They could concentrate for longer periods than most students are able to. The average child of Terman's group had mastered the school subjects about two grades beyond the one in which he was enrolled (by age).

- 5. Fulfilment of promise-** They did not decline and become average persons as they grow older. On the contrary, they maintained their intellectual superiority as measured by psychological tests and by educational progress. About 70% of men and 67% of women of the term an gifted group graduated from college, these figures being eight times as great as for the general population of California.

From the above study the nature of the gifted are learnt though there are individual differences among the gifted children. The cases like personality defect, social maladjustment behaviour problem and physically handicapped might be there. But the characteristics which are common to the majority of the gifted children are reported in the studies.

6.5. Needs and Problems of Gifted Children :

The gifted children are reared up in family, social and school environments. When they develop their attitudes, interests and habits in an unusual way, restrictions are made on behalf of parents, teachers and elders. They feel discontent for the unsatisfactory desires and create some mischievous activities, by which parents get complaints from the neighbours, teachers and others about their children. So the needs and the problems of the gifted children should be realized properly which are described below.

1. **Development of independent study-** The gifted children show superiority in their studies. They underestimate to their fellow students for which they fall a prey to jealousy. They cannot pace with the average child of the traditional class and feel bore and restless in normal routine works.
2. **Need of knowledge and understanding-** the gifted children are not satisfied with the simple comprehension of teacher when presenting the materials. They want more knowledge and more understanding. To a particular idea, they consider from different angles and put embarrassing questions to teachers. This kind of curiosity tends towards new knowledge and innovation. Some time the teachers and parents feel perturbed by the repeated questions and snub them vehemently which also hurt the gifted children.
3. **Acquisition of efficient learning techniques-** When the gifted learn among the average children they do not acquire the right study habits. As a result their students of achievement deteriorate and they get discouraged and try to work and the methods of teaching. Their broader intelligent traits do not find stimulation with the confined syllabus and the text books.
4. **Orientation in methods of research and problem solving-** The gifted children develop solitary pursuits like reading, making collections and scientific experiments. Their queer interests are found in science, arts, literature, dramatics and social relationship. They perceive the complex thoughts and due to intellectual questions they solve the problems what the adults might think. Instead of accepting the suggestions and statements of the

teachers they draw their own conclusions and findings basing on their reasonable power.

- 5. Need for creativity and ingenuity-** A higher order of need develop among the gifted children which are rejected by the peer groups with whom he is acquainted in daily life. The sense of appreciation of beauty, that evolve in their mind sometimes, discouraged by the teacher due to lack of time and facility. The gifted children need adequate appreciation of their ingenuity scientific or creativity in arts but they do not get the proper stimulation which subsequently intend them to in security and rejection.
- 6. Development of special abilities –** The gifted children show varied exceptional symptoms on the performance of their skills and abilities. They also show a marked aptitude in painting in music, in composing poetry in elocution and debate. Though the gifted children are superior to the associates of their own age group in intellectual ability, their skills and specific abilities are manifold. Normally skills with words, skills in numbers, manipulative skills and reasoning and other cognitive abilities are marked on the gifted child which need proper attention and nourishment.
- 7. Need for self expression or self actualisation-** According to Maslow a self realizing persons is one who is in general strongly focused on problems outside himself he has feeling for making a genuine desire to help the human race. His inter personal relations are deeper and more profound. For the younger these are the far-reached goals. However the gifted children need

proper directions and motivations to achieve their aims and objectives and they should be aware of their own potentialities.

6.6. Identification of the Gifted Children :

The gifted children are the brain of the society, whose contributions are harnessed for its prosperity and progress. The tremendous social, cultural, financial and scientific achievements occur due to their sincere efforts and innovations. So it is the responsibility of a country to identify the gifted children in their early school stage and plan special system of education for them.

It has been presumed that the gifted children have their I. Q. ranging from 130 and above. According to normal distribution they are top percent of the student population. The criterion is quite arbitrary. Others suggest that gifted children possess I. Q of 140 or higher than that. If it is taken at I Q. of 140 they are the top 1% of the students population.

But research studies conducted after 1958 has developed a new relationship between giftedness and creativity i.e. a high I.Q. is not the sole determiner of giftedness. In this connection Guilford (1959) gives a scientific definition that gifted children possess a high mental ability of productive thinking, creativity and evaluation to such as extent that given appropriate environment and education they will be able to solve all problems discover new things and evaluate their culture effectively in future. From different observations it has been referred that the highly creative are usually intelligent (above I.Q. 115 to 120) but vice versa may are highly creative but not highly intellectual achieve the same academically as children who are highly intellectual but not highly creative.

However it is the major task of the teacher to identify the gifted children. The following means may be adopted for the purpose.

1. **Intelligence tests-** The first means by which the gifted children are identified is mental tests like intelligence tests. A mentally gifted child scores high in intelligence tests. The gifted are mentally alert and quick. These tests are most effective single instruments.
2. **Aptitude tests-** The gifted children have certain special abilities which are not identified by intelligence tests. For example those who are gifted, they show outstanding proficiency in art, drama, music and other non-academic areas. To measure these qualities aptitude test may be used.
3. **Achievement tests-** Experienced and skilled teachers may use standardized achievement tests for identifying the children with superior academic abilities.
4. **Views of parents-** While parents are likely to be biased in establishing the intelligence of their children, their views are often of considerable value in identifying gifted children.
5. **Observation of teachers-** The teacher takes an excellent position to observe the child and evaluate his performance. When the teacher is given the responsibility for making this kind of decision, he should use an objective criterion of evaluation as much as possible.
6. **Personality tests-** Some gifted children are introvert and some are extrovert. Very often the potentiality of the introvert are not

duly recognised. Though personality tests the talents of the gifted may be taken into consideration.

7. **Remarks of classmates and companions-** Friends and classmates comment the unusual behaviour of the gifted. Although varied symptoms of the gifted are not appreciated by the peers, the teacher should wisely go through these remarks to identify the giftedness.

De Hann and Kough (1956) have given the following list to identify the gifted.

1. Learn rapidly and easily
2. Uses of great deal of common sense and practical knowledge.
3. Reasons things out. Thinks clearly, recognizes relationships, comprehends meanings.
4. Retains what he has heard or read without much rote drill.
5. Knows about many things of which most students are unaware.
6. Has a large vocabulary, which he uses easily and accurately.
7. Can read books that are one or two year in advance of the rest of the class.
8. Performs difficult mental tasks.
9. Asks many questions. Has a wide range of interests.
10. Does some academic work one or two years in advance of the rest of the class.
11. Is original in his thinking, uses good but unusual methods.
12. Is alert, keenly observant and responds quickly,

James M. Dunlop has given the following positive and negative characteristics of gifted children.

Positive Characteristics :

1. Learn rapidly and easily.
2. Retain what they learn without much drill.
3. Show much curiosity in questioning.
4. Rich vocabulary marked by originality.
5. Enjoy reading.
6. Show interest in words and ideas.
7. Reason things out.
8. Greater ability to generalize.
9. Know and appreciate things of which normal children are unaware.
10. Be interested in the nature of man and universe at early stage.
11. Seek older Companions.
12. Possess a good sense of humour.
13. Have a desire to excel.

Negative Characteristics :

1. Restless, distributing in attentive.
2. Careless in handwriting.
3. Indifferent to class work.
4. Out spokenly critical.

Terman and Holling worth mention certain characteristics to identify the gifted children which are given below.

1. They generally come from families of superior intelligence.
2. In general habits and physical features they are superior to children of average intelligence.
3. Mentally they are always much ahead of their years.
4. They may show various talents like interest in music, art, literature or science.
5. They are curious and ask very intelligent questions.

6. They begin to understand abstract ideas at a much earlier age than counter parts.
7. These children are generally superior in various personality traits like character, tenderness, philanthropy, truth and honesty.

Besides Bhalt (1966) views that the gifted children show better performance, in the following areas than the non-gifted children. Those are-

1. Intellectual pursuits.
2. Regularity in studies.
3. Leadership qualities.
4. Originality.
5. Understanding.
6. Self-confidence
7. Politeness
8. In choice of companions

6.7. Education of the Gifted

The gifted child feels embarrassed in the curriculum method of teaching, books and other school conditions which are meant for the average. They possess intense individuality and versatility. The ordinary teacher faces problems as the gifted are not satisfied with much detailed explanation and simple representation of the facts. In a study by H.A Carroll it has been viewed that the gifted children have superior ability to reason, to generalize and to synthesise. According to Gesell and his colleagues, superior infants are emotionally sensitive to their environment and display intelligent behaviour.

Martinson has referred that when the gifted are admitted in an ordinary school, they make only a little more progress than the normal children. Because they relapse into a normal scheme for which most of them become even backward. Various studies have shown that the

gifted are curious, intuitive, lover of independent judgement and advanced knowledge in many fields. Parents of gifted children have also reported certain characteristics like quick understanding, insatiable curiosity, retentive memory, large vocabulary, unusual interest in numbers and relations. So there is a greater need of planning the education of the gifted which will utilize their potentialities and avoid wasting their energy.

6.8. Present Position about the Gifted in India :

The Indian Education Commission (1964-1966) has analysed the position thread bare. It has generalized as follows.

1. A good deal of potential talent never enters school. Talent is normally distributed in the population and as the whole group of children does not enter school, many talented amongst the group remain deprived of schooling.
2. Even those talented who enter the school are not discovered and located.
3. The present method of discovering talent through examination marks is defective. A gifted may have talent in one subject and may be weak in other subjects.

6.9. Recommendations by the Indian Education Communication (1964-66) :

1. The universities and Colleges could select talented students from the school in different subjects at an appropriate stage, say, in the age group 13-15, and help them to develop their knowledge in special fields through individuals guidance, provision of laboratory facilities etc. over and above work.
2. All the gifted Students (at least top 15 percents of all students) Who complete primary or secondary education should be enabled

to study further in higher institutions and large number of scholarships provided for them.

3. Enrichment programmes should be introduced for brighter students, who should be allowed to progress their own speed. Their achievement should be recognized and recorded in special certificates.
4. A variety of extra-mural programme should be introduced.
5. Well-planned visits may be arranged to laboratories and museum etc.
6. Hostel or day centres may be available for those whose home environment is not conducive for proper study.
7. Teachers must be trained to deal with the talented and create an atmosphere of free expression and creative work.

6.10. Objectives of Education for Gifted Children :

The education of the gifted children are planned keeping on the view the following objectives.

1. It helps to develop alertness, initiative and creative power.
2. It develops leadership quality.
3. It helps to evoke power to work independently.
4. It helps to increase the range of knowledge and skill.
5. It helps to develop an attitude of critical thinking.
6. It helps at maximum development of all the potentialities.
7. It helps all round development i.e. physical intellectual social and emotional development.
8. It helps to develop varied interests and abilities.
9. It develops desirable reading skill and attitudes.
10. It helps in better personal and social adjustments.

Panda (1978) views two specific objectives of the education of the gifted below.

1. The gifted child should be so educated that he will be able to discover new facts, evaluate various phenomena and solve various complex problems.
2. The gifted child should be provided with such learning experiences and trained in such a way that he will be able to contribute to the society by solving various social problems from realistic points of view.

6.11. Duhr's Suggestions for Teaching The Gifted :

- a) The programme for gifted should represent an extension of general educational objectives.
- b) The programme must provide a stimulating learning environment.
- c) Programmes for the gifted should place a special emphasis.
- d) The programme should also promote for basic fundamental skills.

6.12. Holling Worth Suggestions for teaching the gifted :

L.S. Holling worth says about education for the gifted children that to take their unique places in civilized societies, it would seem therefore, that the intellectually gifted need specially to know the evaluation of culture as it has been. And since at eight or nine years of age, they are not yet ready for specialization, what they need to know is the evolution of culture as it has affected common things. Among the common things are included food shelter, transportation, and the like. Though these media thinking can be stimulated and intellectual curiosity can be satisfied the areas may be clarified in systematic manner below.

- a) Study of civilizations.
- b) Study of biographies
- c) Study of modern languages.
- d) Training in special abilities.

Besides, the above suggestion the following hints may be referred here.

1. Schools should provide for extra coaching for fast learners.
2. There must be arrangement for separate division.
3. Schools should help the gifted in appearing for scholarship examinations.
4. There may be special study camp arrangement.
5. School authorities should encourage the gifted to widen their sphere of interests by making respective provisions in schools.
6. Special classes for the gifted should be arranged on both the elementary and the secondary level.
7. While teaching to the gifted, drill must be reduced to the minimum.
8. Project methods may be applied while training the gifted.
9. To teach the gifted, Particularly, able teachers are required who are themselves of high intelligence, well informed and acquainted with the psychology of the gifted.
10. Flexibility in choosing the subject may be provided.
11. Regular special classes may be held for some subjects e.g. if a child is gifted in mathematics, he/she may be allowed to attend a special class in mathematics and for other subjects he/she may study in regular class. However, the following are other suggestions for teaching the gifted.
 1. Explore the possibility of giving accelerated promotions to the rapid learners. In considering accelerated promotions the maturity of the child non-intellectual areas should also be taken into consideration.
 2. Provide horizontal or vertical enrichment. Horizontal enrichment means giving a rapid learner who has finished an assignment ahead of every one else more material at the general level of difficulty. The vertical enrichment

involves giving a more advanced work of the same general type.

3. Encourage rapid learners to take up individual study projects you may set up such projects in the form of a learning contract. For example if the class is studying Japan the teacher may assign a special study project to the rapid learner to study the Japanese industries or Japanese family pattern.
4. Stimulate them to make supplementary reading and writing.
5. Foster the development of creative hobbies and interests.
6. If there are willing persons in the area of the interests of the gifted who can guide and allow him try to bring them in contact with each other. The gifted can learn much from them.

6.13. Educational Programmes for the Gifted Children :

The gifted child needs special help due to his high intellectual capacity. Some studies have shown the need of more freedom in the choice and completion of courses by the gifted child. It helps to fulfil the typical needs and develop his special talents.

In our country, most of the schools are meant to support the education of the average children. But for the gifted child, the co-operation of the parents and the teachers are highly essential for the adaption to the usual school programme. To maintain a full and well-rounded life, the gifted child needs guidance to utilize his potentialities and modify his interests in relation to his experiences.

The gifted child renders his worth while contribution to the different fields of knowledge of the society. According to Plato in a democratic country, we require leaders to progress in all fields of life. The leadership qualities thrive among in educational aspects. Hollign Worst recommends for a special educational programme for the gifted,

particularly at the primary level. Hence the gifted child should be nurtured carefully for his physical, social, emotional and intellectual development in a congenial atmosphere in the society, which will prop a pine sapling into a giant tree.

The guiding suggestions are here for the education of the gifted.

6.13.1. Acceleration :

Acceleration means the various provisions in a school that help a gifted child more through school at speed according to his ability and thus complete his formal. Education earlier than would normally be expected. In the Dictionary of education C.V. good refers acceleration is.

1. The process of progressing through the school grades at a rate faster than that of the average child. Either by skipping grades or by rapidly mastering the work of one grade and moving on to the next higher grade.
2. Advancement in mental growth or achievement beyond the average for the individuals of chronological age.
3. A general term including all administrative practices which result in completing a school programme in less than the usual time allotted.

The different provisions for acceleration are mentioned below.

- i. **Early entrance into school-** The child who shows better performance in physical skills, vocabulary and other experiences before he reaches at the age of 5, should be admitted to the first grade soon. This entry at an earlier age accelerates the varied activities of the child in different places.

- ii. **Sripping grades-** The gifted child shows academically superiority for which grade skipping or double promotions provision should be facilitated. It is found that the gifted child finishes the course curricula assigned for the year earlier and there is the possibility of covering the course curricula of the next higher class in the remaining portion of academic year. In this case the child should be promoted to the next higher class in the middle of the session. The leadership quality of the gifted child may not get its full shape as he meets new friends every tiem and social contacts among as he meets new friends every time and social contacts among them became very formal. Above all the skipping may be more useful and effective if it is accomplished by logical and resoning procedures.
- iii. **Squeezing course-** The squeezing courses is to squeeze the courses of a few classes meant for a few years of work for normal children into compact wor spread over a smaller number of years. But this system of education is not possible in our country.
- iv. **Special course-** According to Wilson the gifted child does not feel content with the class room text books. So a special course may be permitted to a gifted child for example, a 6 years high school programme in 5 years or to enable. A younger child to skip a grade during regular school year. His types of provision may be done bringing the college level courses into the secondary school syllabus.
- v. **Non-graded class-** In this system of education the gifted child proceeds according to his own pace. There should not be compartmentalisation in grading system in his area of study. The gifted child may acquire the various kinds of knowledge according to his own mental ability in which he is interested.

6.13.2. Segregation

Segregation means the gifted children should be divided into different groups on the basis of their abilities. It should be homogenous grouping of children where much difference between their abilities should not be found. There are various types of segregation, mentioned below.

- i. **Special classes-** In special classes the gifted children are segregated from the children of average and below average ability. This kind of intellectually superior children grouping might be done according to their abilities within a school or within a class. William Stern calls them elite-class. Varied experiments have shown that it has become successful in all respects. Full time special classes for gifted pupils have been in operation for more than a third of a century. One of the oldest is the Major Work Programme in Cleveland which began as single class in 1922, and has developed city-wide at all grade levels.

Special classes have some limitations. It is an undemocratic plan as it creates intellectual aristocracy. It develops inferiority complex among the children. The children take undue superior air and become ego-centric. Besides; the harmonious social life at school and in the community is defeated. In spite of this and advantage of special classes deserve more weightage. The gifted child in special classes remain more busy and lacks habit of carelessness.

- ii. **Special schools-** There might be segregation for the gifted children to have their entry into special schools on the basis of ability. The school should impart instruction taking into view the selected teachers. This system of education is feasible in residential schools. Provisions have been done for the merit scholarship holders on behalf of the government to have their entry into some selected high standard schools. The standard of

education, competency of teachers and physical resources of their schools are much higher than the normal schools situated for the average children.

But the children on such schools develop an air of superiority as they feel, they are products of a special type schools meant for few selected children only. This types of attitude tends them to be less sensitive to the requirements of the society and less democratic in their outlook. So the moral side of education and development of a feeling of responsibilities towards society in such schools should be handled carefully.

iii. Provision for Honours Programme- Provision of honours programmes might be given to the school students as it is provided in college spheres. This kind of honours programmes in schools require more talented teachers, extra rooms, more library facilities and tother physical resources. But in honours programmes the students should be added with these extra courses basing on the results of attitude tests. This type of education might not be possible ingeneral schools rather the high standard schools can intiate this programme with their abundant facilities.

iv. Special Coaching- The modern society is going to be expanded in its various scientific and technological avenues. The superior child adopts certain techniques to face the challagnes of the day. In segregation another aspect may be viewed for special coaching which will preoare the child for different competitive examinations. In state and national level, the modern education system is carrying on varied tests and competitions to test their abilities in the fields of games, sports, elocution, science, literature, mathematics and other co-curricular activities.

The school also take credit when their students are awarded and it is considered as the prestige of the school. Hence special coaching should be provided to the students in different curricular and co-curricular activities to make students in different curricular and co-curricular activities to make their talent awaken. It requires the special efforts of the teachers.

v. Hobby Clubs- Kovner suggests activities beyond the classrooms for gifted and talented children are more useful. This can be provide through hobby clubs. most of the schools in town areas have such habby clubs. The gifted children according to their interests mjay join in various habby clubs. There is no compulsories for attendance. Freedom is given to the child to choose his own hobby club and when he finds his suitable tiem he may join there. So the children should be inspired by the parents and teachers to participate in the club activities. According to Wilson, the gifted children lead in creative activities. They should be guided cunningly when face problems now a days schools have science clubs, literary clubs, sports clubs and other varieties where students from rich, poor, underprivileged community assemble there. The gifted child may represent to any society but his delicate problems should be solved intelligently that will not be caught by the peers. The gifted child develops a group spirit and possesses more self-confidence when he involves himself in hobby clubs.

6.13.3. Enrichment

Enrichment programme facilities the gifted child to study a subject more sincerely and disciplined manner than the average child in the class. Gossard and Wilfson also prefer enrichment to acceleration in the

education of the gifted. Enrichment activities are a of varied types and those are discussed below.

- i. **Individual enrichment-** When the gifted child is taught in a normal classroom situation his wide range of abilities, skills, interests and specific needs are not fulfilled. So enrichment activities should be arranged for the gifted child which he can carry out by himself at his desk. In some cases, he may be allowed to learn individually while he is in a small group.
- ii. **Group oriented method-** Sometimes the bright child feels bored with the routine work. He finds no challenge and motivation to excel in different areas. So a problem should be analysed through a group discussion, students assemblies and conferences. The teacher should guide them in order to plan their works, solve the difficulties and evaluate the performances. Group leaders should be selected among the growth of leadership ability and imagination of the gifted children.
- iii. **Reorganisation of Curriculum-** The gifted child becomes careless about the school curriculum meant for the average students. It happens to be very easy for him and it does not provoke his imagination power. So the teacher should observe that which lessons are completed by the gifted child early and which portion needs less drill to master on fundamental process in his part. By a critical analysis of the gifted child's behaviour the curriculum should be organized here reorganisation of the curriculum should be done by the teacher with the activities consultation of the students. The curriculum must be constructed to develop the interest of the child in school work and stimulate his mental abilities.

- iv. Variety of the teaching methods-** There might be the change in teaching methods and new approaches may be adopted to satisfy the gifted children. The traditional teachers go in their age-old days to complete their lessons assigned in the syllabus for the years. They do not take the strain to elevate the hidden talents which lie in the gifted children. More skilled and knowledgeable teachers should be involved in the teaching affairs of the gifted children where both side can work enthusiastically.
- v. Assistance of informal agencies-** The gifted child should be inspired to read through the assistance of informal agencies like libraries, excursions, visit to historical places, study tours, field trips, films, radio programmes, television programmes etc. a gifted child should get maximum freedom to enjoy the library facilities. The time of the opening of the library may be fixed keeping eye on the leisure of the children. Besides, resource centre and reading room facilities should be availed to the child which may supplement the class room teaching. The child should be guided also how to use reference books and encyclopaedia which is helpful for in time-saving.
- vi. Creative pursuits and projects-** The teacher should learn the gifted child thoroughly. He should go through the cumulative records of the child to be aware of his abilities, interests, hobbies and achievements. The teacher should stimulate the interest of the child, selecting books and materials useful for his progress. The creative pursuits can be handled by taking different projects in group basis the gifted children may be encouraged to participate in hobby clubs, self-initiated learning and in other creative works which will excel his creative talents.

vii. Use of community- The community resources are good means of enrichment. The gifted children should take the profit of it. The different talented persons of the community may be invited to the school in different occasions to give their first hand experiences to the students. Besides, the gifted children may be given with chances to mix with the staff of near by institutions to gain more knowledge and experience.

6.14. Role of the teachers in the Education Programme :

The importance of the teacher to initiate the different programmes for the gifted children cannot be avoided. The role of the teacher may be kept in mind as following.

1. The teacher should possess the knowledge of psychology of the gifted children.
2. The teacher should know the special methods of teaching for these children.
3. The teachers should have rich kind of information.
4. The teacher should have varied interest in different areas and hobbies.
5. The teachers should be inquisitive minded.
6. The teacher should have the knowledge how to initiate the group discussions and workshops.
7. The teacher should have good academic qualification and sound mental health.
8. The teacher should have charming personality and good adjustment capacities.
9. The teacher himself should be gifted in nature.
10. The teachers should be flexible person to allow the gifted children time to make new discoveries.
11. The teacher should be dynamic to give freedom to the children to work according to their own accord.

12. The teachers should provide inspiration, encouragement and opportunity to the gifted children to test their potentialities and original ideas.

6.15. Summary :

*** Meaning of Giftedness :**

A gifted child is mainly an exceptional child. According to Kirk the exceptional child is that child who deviates from the average or Normal child in mental, physical, or social characteristics to such an extent that he requires a modification of school practices or a special educational service, in order to develop to his maximum capacity. From this definition it is presumed that all the gifted, back ward, physically handicapped and mentally retarded, belong to the category of exceptional children.

*** Definitions of giftedness :**

- Witty- Those whose performance in a worth while human endeavour is constantly remarkable as well as those who are academically superior.
- Getzels and Bakson- The highly creative children mat or may not have high intelligence. The highly creative children (not high intelligence) achieve equally the children of high intelligence (not high creativity)
- Terman- The gifted children are superior in development, intelligence and personality.

*** Types of Gifted Children :**

There are three type sof gifted children such as (1) The highly gifted child (2) The under achieving gifted child and (3) The gifted child with a handicap.

- The Highly Gifted Children
- The underachieving Gifted Child
- The Gifted with a handicap

- Magnifico's Division of Gifted

*** Characteristic of Gifted Children :**

The gifted children when read with the average children they find the task of the class uninteresting and unstimulating. They show special type of behaviors. The studies of the various psychologists have proved that they are top in their intelligence. Terman and order point out that gifted children are high above than the average in physique, social adjustment, personality traits school achievements and varieties of interests. However let us discuss the following chief characteristics of the gifted children.

- Intellectual abilities.
- Physical characteristics.
- Personality traits.
- Academic achievements.

*** Characteristics of Gifted Children according to Lewis Terman:**

- Physical
- Socio economic
- Social and Emotional
- Learning and Education
- Fulfilment of promise

*** Needs and Problems of Gifted Children :**

- Development of independent study
- Need of knowledge and understanding
- Acquisition of efficient learning techniques
- Orientation in methods of research and problem solving
- Need for creativity and ingenuity
- Development of special abilities
- Need for self expression or self actualisation

*** Identification of the Gifted Children :**

However it is the major task of the teacher to identify the gifted children. The following means may be adopted for the purpose.

- Intelligence tests
- Aptitude tests
- Achievement tests
- Views of parents
- Observation of teachers
- Personality tests
- Remarks of classmates and companions

De Hann and Kough (1956) have given the following list to identify the gifted.

- Learn rapidly and easily
- Uses of great deal of common sense and practical knowledge.
- Reasons things out. Thinks clearly, recognizes relationships, comprehends meanings.

Positive Characteristics :

- Learn rapidly and easily.
- Retain what they learn without much drill.
- Show much curiosity in questioning.

Negative Characteristics :

- Restless, distributing in attentive.
- Careless in handwriting.
- Indifferent to class work.
- Out spokenly critical.

*** Objectives of Education for Gifted Children :**

The education of the gifted children are planned keeping on the view the following objectives.

- It helps to develop alertness, initiative and creative power.
- It develops leadership quality.
- It helps to evoke power to work independently.

*** Educational Programmes for the Gifted Children :**

*** Acceleration :**

- Early entrance into school

- Stripping grades
- Squeezing course
- Special course
- Non-graded class

*** Segregation**

- Special classes
- Special schools
- Provision for Honours Programme
- Special Coaching
- Hobby Clubs

*** Enrichment**

- Individual enrichment
- Group oriented method
- Reorganisation of Curriculum
- Variety of the teaching methods
- Assistance of informal agencies
- Creative pursuits and projects
- Use of community

*** Role of the teachers in the Education Programme**

- The teacher should possess the knowledge of psychology of the gifted children.
- The teacher should know the special methods of teaching for these children.
- The teachers should have rich kind of information.
- The teacher should have varied interest in different areas and hobbies.
- The teachers should be inquisitive minded.

6.16. Key Words :

1. I.Q – Intelligence Quotient

2. Gifted- Talented
3. Underachieving gifted- Having the high intellectual ability who do not show well in their school lessons.
4. Acceleration- The process of progressing through the school grades at a faster rate.
5. Enrichment- The types of activity devoted to the further development of gifted children.

6.17. Questions for self study :

1. What do you mean by gifted children ? Discuss the types of gifted children.
2. Discuss the characteristic of gifted children.
3. What do you understand by gifted children ? Discuss the identification of the gifted children.
4. Discuss the education programmes of the gifted children.
5. Discuss the role of the teacher in conducting educational programme.
6. Write short notes on :
 - a) Mention three definitions of gifted children.
 - b) Mention two characteristics of gifted children.
 - c) Enrichment programme.
 - d) Acceleration
 - e) Segregation

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CHAPTER-7

EDUCATION OF THE CREATIVE CHILDREN

Objectives of the Unit :

The students will be able to know about the following points when they will go through this unit.

- 7.1. Meaning of Creativity**
 - 7.2. Definitions of creativity**
 - 7.3. Creativity and Intelligence**
 - 7.4. Creativity and personality**
 - 7.5. Characteristics of Creativity**
 - 7.6. Identification of Creative Children**
 - 7.7. Stages in creative thinking**
 - 7.8. Educational Programmes for the Creative Children**
 - 7.9. Summary**
 - 7.10. Key Words**
 - 7.11. Questions for self study**
 - 7.12. References**
-

7.1. Meaning of Creativity :

Creativity has a predominant role in the field of human knowledge. The world has ever seen the explosion of ideas in the field of science, arts, literature, social science from the primitive structure of the human race on it and the present interest of man to accumulate knowledge about the space is nothing but an extraneous stimulation to deal with novelty in creative thinking. The creative people born in any social, cultural, economical or political background in any time work to bring a significant change in man's process of thinking and living to that time.

The term creativity is very difficult to define. However, who thinks creatively is a creative thinker. It is a capacity of the individual to think differently which was previously unknown to the person concerned and others. The resultant force in the process of such type of thinking leads one to a novel domain and awakes him to think properly and purposefully to reach and uncommon goal.

Everyone is a creative thinker to a certain level. Creativity is not confined to a cluster of individuals or nations. It cannot be predicted in which circumstances one becomes a creative person. Even in the past, the great poets, scientists, philosophers and painters who were dropouts ridiculed by their elders and teachers as backward students have brought tremendous changes in the society through their noble and precious contributions and shared the human miseries without any hesitation. The modern age in no way awaits the creative talents, unless the progress of the new generation will be nothing but a fad.

7.2. Definitions of creativity :

Psychologists have viewed differently regarding the concept of creativity. So universal statement cannot be attributed to the term creativity. However, the various aspects of creativity have been emphasised and interpreted in manifold by the researchers. In 1911, the tests conducted by Binet on creativity have resulted to go through its varied nature and dimensions. Rhodes suggested about 50 definitions on creativity and laid stress on-

- i. Creativity as a power.
- ii. Creativity as a product and
- iii. Creativity as a process.

In 1953, Morgan used 25 definitions and viewed the uniqueness of creativity. But it was criticised by the scientist later on.

Creativity as an important area, requires the study of its definitions in detail as given below:

1. **Torrance** : I have chosen to define creative thinking as the process of sensing gaps or disturbing, missing elements, forming ideas or hypotheses and communicating the results, possibly modifying and retesting the hypotheses.
2. **Skinner** : Creative thinking means that the predictions and/or inferences for the individual are new, original, ingenious, unusual. The creative thinker is one who explores new areas and makes new observations, new predictions, new inferences.
3. **C.V. Good** : The factors of creativity are tentatively described as associate and ideational fluency originality, adaptive and spontaneous flexibility and ability to make logical evaluation.
4. **Stagner and Karwoski** : Creativity implies the production of a totally or partially novel identity.
5. **Guilford** : Creativity sometimes refers to creative potential sometimes to creative production and sometimes to creative productivity.
6. **Drevidal** : Creativity is the capacity of a person to produce compositions. Products or ideas which are essentially new or novel and previously unknown to the producer.
7. **Mednik** : Creative thinking consists of forming new combinations of associative elements.

8. **Wilson Guilford and Christensen** : The creative process is any process by which something new is produced an idea or an object including a new form or arrangement of old elements. The new creation must contribute to the solution of some problem.
9. **James Rhodes** : Creativity is an act in two parts. The first part consists of getting an idea and the second part involves articulating, i.e. putting each idea into form.
10. **James Drever** : Producing an essentially new product constructive use of imagination where a new combination of ideas or image is constructed strictly when it is self initiated, rather than imitated, also of thought synthesis where the mental product is not a mere summaration.
11. **Carl Rogers** : Perhaps the most fundamental condition of creativity is that the source or locus of evaluative judgement is internal.
12. **Morires** : Creativity as a process that results in a novel work that is accepted as tenable or useful or satisfying by a group at some point in time.
13. **S.I. Hayakawa** : Another characteristic of the fully functioning personality is that he is a creative individual, sometimes in the usual sense; just as often creative in smaller but equally genuine ways.. to improvise for the particular materials hand unique and original solution of a problem... this is what I mean by creativeness.

14. **Mc Kinnon** : Creativity is a process extended in time and characterized by originality adaptiveness and realisation.
15. **Eric Fromm** : Creativity.. requires the capacity to be puzzled. The capacity to be puzzled is indeed the premise of all creation, be it in art or science.
16. **Taylor** : A process is creative when it results in a novel work that is accepted as tenable, useful or satisfying by a group at a point in time.
17. **Travers** : Creative thinking applies to a thought process that constructs original answers, solutions or ideas. Usually creativity is associated with responses that are novel to the society as well as to the individual. Problem solving entails the correct answer. For creativity there is no correct response. It is new or original and unique.
18. **Ghiselin** : There is yet no settled agreement upon exactly what modes of behaviour and what characteristics of products can with clear justification be called creative.
19. **Herbert Fox** : It would seem, then, that there is no unique entity identifiable as the creative process. All we can identify is the product. And it is from the product that we infer the existence of a process.
20. **Losswell** : Creativity is the disposition to make and to recognize valuable innovations.

21. **Barron** : Creativity is characterized by originality uniqueness and even sometimes idiosyncratic ways of doing things or showing problems.
22. **Simpson** : Creativity is the ability to break away from the usual way of thinking and then from altogether a different pattern of thought.
23. **Rollo May** : Creativity is the encounter of the intensely conscious human being with his world.
24. **Wallach and Kogan** : Creativity is the individual capacity or ability to generate cognitive associations in quality and uniqueness.
25. **Thurstone** : An act is creative if the thinker reaches the solution in a sudden closure which necessarily implies some novelty to him.

7.3. **Creativity and Intelligence :**

Creativity and intelligence are not synonymous. It is presumed that a creative individual may be highly intelligent but all intelligent persons may or may not be creative thinkers. Though the highly intelligent and the highly creative individuals are treated as gifted, they differ in their abilities to such extent that the discrimination between them obvious easy.

In research study it has been found that there is zero correlation between creativity and intelligence. The varied abilities that one possesses as a whole are neither related to creativity nor intelligence. Some are related to creativity and others are related to intelligence.

Normally the teachers like the intelligent students than other and anticipate good results from them. From this point of view it is clear that the highly creative students give weightage to their abilities which they feel more useful to them and to their endeavours to achieve the specified goals.

In 1952 Getzels and Jackson developed a systematic study between creativity and intelligence on adolescents. For this they had taken two groups of students out of which one group contained high creative abilities with low intelligence and another group was selected with high level of intelligence having low creative traits. But in 1965 Wallach and Kogan viewed that creativity is different from intelligence which was accepted by Ward (1967), Cropley (1968) and Wallach and Wing (1969). The inference drawn to this content is that some traits which are inclined to creativity are not found in the traditional concept of intelligence.

7.4. Creativity and personality :

The highly creative and highly intelligent individuals differed both in their mental traits and in temperament. Taking into view to this assumption psychologists have emphasised the relation between creativity and personality. Sigmund Freud first time developed a systematic study to establish a relationship between creativity and personality although it got due approval of Kris (1952), Klein, Bellak and Kubie (1958) later on. The creative persons solve their own problems in a very tacful way and even more mental tension leads to higher creativity. Besides, self-expression, functional autonomy and struggle with the environment are the some aspects of the personality of a creative individual.

Galton pointed out that the famous and genius people possess their own original ideas. The most important traits of personality like freedom, social adjustment, self confidence, leadership, sensitivity and balanced temperament are found with the people who have achieved great grand success in different areas of their lives. Above all, creative persons are more sensitive, more thoughtful and more ambitious than the average.

7.5. Characteristics of Creativity :

The meaning of creativity has been revealed from different tangles differently. The characteristics of creativity can be derived from its definitions as follows :

- 1. Creativity emphasises on the newness :** The creative individual is not satisfied with the facts and ideas he has gone through the experienced. He always ponders over new ideas and new methods. He wants to solve the problems in new ways. He may face difficulties but for his strong desire and courage, he achieves the goal. The originality that he earns; develops his self-confidence to work in an another field successfully.
- 2. Creativity is often associated with giftedness :** Normally creativity correlates high with divergent thinking and intelligence correlates high writh convergent thinking. Although the studies of Getzels and Jackson have shown that creativity and intelligence have low correlation. They have selected two groups of gifted children but one group scored high on creativity test and low on intelligent test whereas another group scored high on intelligence test and low on creativity test. So the creative people may possess some aspects of intelligence but all the intelligent persons may not have creative abilities.

3. **Creativity is spontaneous** : Creativity is not bound with any time, place or person. It may be marked with an individual in an early stages or middle or in the later part of his life. Creativity is only a flash if insight that comes to the mind of the individual and needs the media for its expression.
4. **Creativity is a special aptitude** : Just like musical aptitude creativity is a special aptitude. Each individual is a creative one. If he is properly nourished and guided with right type of education and training the crative talents will come out to take shape without any hindrance.
5. **Creativity does not involve single trait** : Creative traits and abilities are varied in their forms. Those are originality, flexibility, fluency, novelty, unconventionality, perosnstence, sensitivity to problems, elaboration and openness to experience.
6. **Creativity is novel to society and individual** : A creative individual though his inventions and discoveries brings necessary changes in the pattern of social living culture, thoughts and religion. He gets immense pleasure and feels happy due to his worthy contribution for the human race.
7. **Creativity is expressed in many ways** : As society is changing with the pace of the time, the new creative ideas are focussed in different ways. The people may manifest their creative talents through painting, music, dance, sculpture, poems, stories, drama social leadership, business and other professions. Even the scientific inventions and discoveries have extended the area of creativity in enormous ways.

8. **Creativity can be measured** : Creativity is a trait of personality. It can be measured through tests of creativity. In order to test the creativity aptitude of the primary and secondary school students Torrance tests can be used. Some traits like originality, fluency, flexibility and elaboration can be measured with Torrance tests of verbal and figural activities.
9. **Creativity is both a product and a process** : Without product there is no creativity; the product follows the process also. A child develops a process to put on his own school dress and a musician selects his own process to compose an excellent combination of tuning for a song. So Herbert fox views that it is from the product that we infer the existence of a process.
10. **Creativity involves divergent thinking** : Divergent thinking is a very important aspect of creativity. It is also called as open thinking whereas convergent thinking is told as closed thinking. In convergent thinking people think in traditional method and act accordingly. But in divergent thinking the thinker thinks independently. The continuity, flexibility and originality aspects are reflected in his activities. In the works of great poets, scientists, social reformers, artists and philosophers divergent thinking is presumed easily.
11. **Creativity is a natural endowment** : Though creativity has been treated as natural endowment, it is geared up through sincere efforts and practices. A number of researches by the psychologists have been taken and different opinions have been found out to know what traits can be treated as creative traits with an individual. However, by proper education and training creativity can be extended and multiplied.

- 12. Handicaps do not affect creativity :** Handicap or disability in any physical aspect does not hamper the creative talent of a child. Helen Keller who was dumb, blind and deaf had given a good deal of contribution for the adjustment of the handicapped children in their daily life and to lead a normal life in the society. Very recently the author has gained a good experience while watching T.V. that a dumb person of Bhadrak district in Orissa has practised only to sing very beautiful Bhajans (mythological songs) and during his singing hour if any one asks any question he can answer through composing songs. But by his sincere effort, he has been able to sing only but he cannot speak or exchange his views in speech or by taking like a normal man.
- 13. Creativity is independent of any drugs or drinks :** Drugs which cause intoxications neither increase nor decrease creativity. Creativity is always free from the addiction of drugs. Any creative person might have such bad habit but it does not tend to lead his creative urges from any side.
- 14. Creativity and achievement are not correlated :** A creative child may not show good achievement records in his school subjects. The child who is more involved in creative activities is not prone to his school examination and performances in school activities.
- 15. Creativity includes dynamic thinking :** Creative people are well adjusted to the changing situations and are capable of giving their commands over the contemporary affairs. They take the risk and find the necessary solutions very soon. They are seasoned person to change their thinking frequently to find out innovative ideas and ideologies in a new domain.

16. **Creativity involves curiosity** : Creative people are not satisfied what they find in the latest form. Creativity tends to develop more achievements in the field. Due to curiosity the poets, artists, scientists and philosophers take new ventures for hazardous tasks and seek to adopt new methods.
17. **Creativity leads towards useful results** : Most of the time creative people remain aloof from the society and involve themselves with their favourite activities. They work and think for the progress of the society and its different aspects. When successes comes they get immense pleasure out of it. For that, creativity gives useful results through divergent thinking.
18. **Creativity leads to go beyond the existing environment** : A creative child is found different when he is among his peer group. Even his response and behaviour have some novelty to start any type of work or to interact to any situation. They want always to remain advanced among their peers and they possess the ability to go beyond the existing circumstances.
19. **Creativity keeps harmony with abnormal and relevant thinking** : Creativity develops the level of anxiety and strengthens the ego perception of the child. It enhances the ability of the child to reply badly and creatively to a problem. The creative children are more accommodated with abnormal and relevant thinking than the normal children.
20. **Creativity develops the ability to see problem from a new point of view** : a problem viewed by a creative child is found unique in its approach. Any challenge accepted by him is realise through strong reasoning and imaginative power. He develops a

constant thinking and becomes motivated to find out a new solution to the problem. As a creative child is a broad thinker and more stable in his personality he takes commitments to show significant achievements in his area of reinterpretation of the problem or its part.

7.6. Identification of Creative Children :

Creative children are normally divergent in nature and they seem to be sometimes lazy and sometimes talented for this reason some teachers do not like them. In a general class it has been viewed that 15% to 20% student are talented and creative. It has been felt that the writers, musicians, actors, artists and leaders are burn out of these students. The students in the class causes different kinds of abilities like creative, leadership, artists, dramatic, writing, musical, intellectual, mechanic, scientific and physical skills. However the identification of the creative students as stated below :

1. Intellectual ability : Robert F. DeHann and Jack Kough have stated the identification of creative students basing on there intellectual ability as stated below :

1. Learns rapidly and easily.
2. Uses a great deal of common sense and practical knowledge.
3. Reasons things out. Thinks clearly. Recognizes relationships. Comprehends meaning.
4. Retains what he has heard or read without much rote drill.
5. Knows about many things of which most students are unaware.
6. Has a large vocabulary, which he uses easily and accurately.
7. Can read books that are one to two years in advance of the rest of the class.

8. Performs difficult mental tasks.
9. Asks many questions. Has a wide range of interests.
10. Does some academic work one or two years in advance of the class.
11. Is original in his thinking. Uses good but unusual methods.
12. Is alert, keenly observant and responds quickly.

2. Scientific ability : Robert F. DeHaan and Jack Kough has mentioned the identification of creative children for scientific ability which include :-

1. Expressing himself clearly and accurately either through writing or speaking.
2. Reads one to two years ahead of his class.
3. Is one to two years ahead of his class in mathematical ability.
4. Has greater than average ability to grasp abstract concepts and see abstract relationships.
5. Has good motor co-ordination, especially eye hand co-ordination. Can do fine, precise manipulations.
6. Is willing to spend time beyond ordinary assignments or schedule on things that are of interest to him.
7. Is not easily discouraged by failure of experiments or projects.
8. Wants to know the causes and reasons for things.
9. Spends much of his time on special projects of his own, such as making collections, constructing a radio, making a telescope.
10. Reads a good deal of scientific literature and finds satisfaction in thinking about and discussing scientific affairs.

3. Leadership ability : Leadership ability of the creative students are marked in following :-

1. It is liked and respected by most of the members of the class.
2. It is able to influence others to work towards undesirable goals.
3. It can take charge of the group.
4. It can judge the abilities of other students and find a place for them in the group's activities.
5. It is able to figure out what is wrong with an activity and show others how to do it better.
6. It is often asked for ideas and suggestions.
7. It is looked to by others when something must be decided.
8. It seems to sense what others want, and helps them to accomplish it.
9. It is a leader in several kinds of activities.
10. It enters into activities with contagious enthusiasm.
11. It is elected to offices.

4. Creative ability : In a classroom it has been found that 10% students show creative ability. This can be identified in the following manner :

1. They always seem to be full of new ideas pertaining to most subjects.
2. They invent things of creative original stories, plays, poetry, tunes, sketches, and so on.
3. They can use materials, words or ideas in new ways.
4. They are able to put two or more ideas together to get a new idea.
5. They see flaws in things, including their own works, and can suggest better ways to do a job or reach an objective.
6. They are willing to experiment to get answers.
7. They ask many questions in the class on any event to the teacher.

8. They show a great deal of intellectual curiosity.
9. They are flexible and open-minded.
10. They are willing to try one method after another and to change their mind if need be.
11. They are not afraid of new ideas and will examine them before rejecting them.

5. Artistic ability : The students of artistic ability can be marked in the following way :

1. They cover variety of subjects in their drawings or paintings.
2. They take art-works seriously and seem to find much satisfaction in these.
3. They show originality in choice of subjects, technique and composition.
4. They are willing to try out new materials and experiences.
5. They fill extra time with drawing, painting and sculpturing activities.
6. They use art to express his own experiences and feelings.
7. They are interested in other people's art works.
8. They can appreciate, criticize and learn from other's works.
9. They like to model with clay, carve, or work with other forms of three dimensional art.

6. Writing ability : A writing talents include writing different type of letter, reports besides original creative writing. Writing ability can be identified on the following basis.

1. They can develop a story from its beginning, through the build-up and climax, to an interesting conclusion.
2. They give a refreshing twist, even to old ideas.
3. They use only necessary details in telling stories.
4. They keep the ideas organized within their stories.
5. They choose descriptive words that other youngsters miss, and still get across the central idea.

6. They enjoy writing stories and poems.
6. They make the characters seem lifelike and capture the feelings of their characters in writing.

7.7. Stages in creative thinking :

Research works have shown that creativity thinking passes through different stages to rearrange the concepts to produce a new idea, novel work, a new solution to a problem which had not been previously existed. Walls and Practice have developed four stages in creative thinking. Those are like (i) Preparation, (ii) Incubation, (iii) Illumination and (iv) Verification.

- i) Preparation :** This is a stage where the individual accumulate experiences, undergoes observing many events and collects all possible informations about the problem. This may be done in deliberate way or undeliberate way. Besides, various aspects of the problem is studied and investigated either consciously or unconsciously. For example, to write a poem or to write a book select a suitable area. This is a period of assemble and integrate the materials and to wait for the right moment to create a new thing.
- ii) Incubation :** This is not a period of obvious progress. The individual tries to assimilate and organise the obtained informations and experiences gathered in preparation stage. He remains away to make himself involved in his work or thinking process directly rather unconscious thoughts evoke in mind in connection with the problem. The individual thought seems to be indulged in daydreaming, the symptoms marked with him opens the path to the solution.

- iii) **Illumination** : This is a period of sudden flash of insight. The solution comes to the mind of the person suddenly either, while he is busy at any work or taking rest in a relax hour. The new idea dances in mind and the happiness knows no bounds to start the work. The possible aspirations rise to complete the work after remaining silent for a long time in incubation period. The new ideas are perceived in the mind in relation to the problem which had not been recongised earlier. The sudden insight into the solution gives immense pleasure to the individual and he feels easy to take the advantages of this chance to carry out the work with a good emotion.
- iv) **Verification** : This is a period of rethinking where the new idea is revised and the concepts are reorganised. The individual tires to reflect his ideas by expressing them on paper or by paitning on canvas. Before the new idea takes its final shape trial and error test may be repeated in this stage and all kinds of experiments may be applied to make it more refined and acceptable. Though this is the final stage of creative thinking, things are considered keeping harmony with the events already known. There is no possibility of contradiction between the previous learning and the finding facts to establish the truth.

7.8. Educational Programmes for the Creative Children :

It is marked in the classroom situation that a teacher is more attracted towards a non-creative student than a creative student as the former shows convergent attitude and the latter reflects divergent attitude towards a problem. Though most of the teachers have the tendency to accept the traditional things easily, they do not give gratification to the creative students for their novel approach to anything they go through to interact with a situation from new stand point to raise

new questions and create imbalance atmosphere for a teacher in the class to get the inference. However, the teacher should tackle the situation in the class for the creative talents with patience and even if some valuable time may be spared. The teacher is nation-builder and the country needs poets, social-reformers, scientists, artists and other creative talents in various fields to stand in its own feet among other countries in the world. So the following strategic may be adopted to facilitate the educational excepts of the creative students.

- 1. Providing necessary freedom :** Creative students should enjoy freedom to exhibit their performances in any field. They should express the talents without any fear or suppression. The way of presentation of their responses may be uncommon or unusual but those should not be criticised sarcastically. The challenges they face or accept might be mysterious but they should be encouraged to handle the concepts and percepts without any regression or inferior complexity.
- 2. Developing self-confidence :** Some students possess inferiority complex and they hesitate to express their own creative performances. Very often parents and teachers discourage the novel works of the creative students and instruct them to be engaged in school task within the school hour and at their homes. It breaks the progress of creativity in the mind and the students loose their self-confidence. So both the teachers and parents should inspire the creative students and reward them for their imaginative and creative ideas.
- 3. Providing security :** The creative student may puzzle the teacher by asking some irrelevant questions not related to the classroom context. Due to the self-approach and to see the

matter from own point of view, he may show deviant behaviour. It is the responsibility of the teacher to listen to the student and to understand his inquisitiveness. The creative activities of the student should be encouraged, approved and valued by the teacher to give him full security to achieve his goal.

- 4. Providing enrichment technique :** The teacher should adopt some classroom enrichment programmes to accelerate the creative abilities of the students. The curriculum should be modified and planned properly to recognise the potentialities of different students. Even special project may be taken for the gifted children and objectives may be fixed accordingly. Besides group activities may be encouraged and students should be facilitated to ask questions. The school should organise picnic and excursion to the place of historical importance, seminars, games and sports, formation of self-government, science forum, dramatic activities and literary activities in order to remote the creative expressions in its enrichment programme.
- 5. Helping to develop physical skills :** Physical activities should be organised in the school to develop the personality of the creative students. It helps to gain a good health and to be motivated to work eagerly. The adolescent boys and girls should avail the chances to take part in athletic meets, club activities, boys scouts and girls guides. The development of physical skills helps the creative students to be involved in another valuable pursuits and to acquire the experience of team-spirit.
- 6. Developing scientific ability :** The adolescent boys and girls should get wide scopes to through the various branches of science. They should know the scientific method and should

apply it in reading different subjects. Research activities and scientific experiments should be facilitated for the creative students to extent the horizon of their acquired knowledge. The teachers and parents should keep eye on the stduetns to stimulate the interest of the students in the field of science inside and outside the school campus.

- 7. Provision of expression through different media :** Creative students want to be recognized in the society and their works should be applauded by others. But the way of expression fo students after individual to individual. Some students express their talents through writing poems, short stories, essays and novels and others through dramatics, painting, music, art and craft. However, the teacher should inspire the students to involve more and more in such type of activities. They should avail the chances to work independently and to express their feelings spontaneously.
- 8. Providing proper training and guidance :** The teacher should provide training facilities in various fields to the creative students in order to enhance their skills and abilities. Training ecels the pattern of activity to be done effectively in a nince manner. The students know the tricks and techniques to be expertised in the prevailing area. The creative talent of many students in the school diminishes due to lack of proper training and guidance facilities. Examples are found that many individuals have showed their excellent performances in different creative areas without any formal training. That is obvious in the part of few individuals, but we cannot defy that proper training and guidance enhance the quality of creative products or contributions.

- 9. Providing variety of approach :** The teacher should give scopes to the students to give varied answers to a problem. The traditional way of answering does not evoke newness rather it closes the doors of creative ideas. The original ideas and creative thoughts should be praised highly by the teacher. Some conventional teachers stick to a particular answer of a question from a student though the apprehension of alternatives are three. This is not psychologically sound to develop the creative pursuits of a student. The teacher should encourage variety of responses and solutions to a particular situation. Those students who show newness or change in their approaches should be reinforced by the teacher properly and should get more scopes for the purpose.
- 10. Encouraging originality :** Most of the teachers give priority to rote memory or cramming. This type of learning has no impact in the progress of the child. The teacher should not inspire students for blind imitation or copying certain activities without understanding. Wide scopes should be given in the class for development of original ideas and imaginary powers. Problems and situations should be given to the students to think over these basing on their own experiences and knowledge. As far as possible original ideas and uncommon responses should be highly appreciated and encouraged.
- 11. Developing leadership quality :** The nation wants talented leaders in different social spheres. Leadership quality can be developed in the school by giving the students scope to organise meetings, seminars and discussions. In a democratic country, the leadership quality also includes keen fellow feelings and democratic thoughts in each step of life. Sometimes teachers given sermons, fix time bound routine and frame strict principles

by which the student feels uneasy to express himself as a leader of the group. Hence, the teacher should be flexible in allowing the students to act according to their own thoughts to give recognition to their leadership qualities.

12. Providing proper environment : Without proper environment the talent of so many poets and artists have faded away in different stages of their lives. Both the home and school environment should be congenial to give impetus to the potentialities of the adolescent boys and girls. A child develops the attitude of drawing pictures on the wall and in his notebook, making different kinds of scientific experiments to his own accord and playing cricket in his own techniques. All these activities should not be discouraged by the parents if these may go beyond the daily school assignment. Besides, with the curricular activities the co-curricular activities like games and sports, dramatics, social works, literary competitions may be organised at school to develop the creativity of the students along with proper training and necessary facilities.

13. Opportunities to realise the creative resources of the society : The students should gain experiences from the creative resources found in the community. The teacher should arrange tours to go to any industrial area, historical or geographical importance place, botanical garden, planetarium and zoo, selecting suitable time in the academics year. The vast experiences taken by the children stimulate them to work in the area with innovative attitude. The reputed scientists, poets, artists, social reformers and religious leaders of the society should be invited to talk in their own career, which will initiate the

child to acquire a good deal of knowledge how to enhance his creative talent.

- 14. Encouraging through social recognition :** The creative individuals become more encouraged and work in the field enthusiastically when they get social recognition and social stimulation. Provisions should be there giving scholarships and stipends to the creative students due to their performance in certain type of creative works. Seats should be reserved in educational institutions and in employment provisions to proceed and continue their activities with self-confidence. The adolescent creative students should get required equipment library and laboratory facilities, financial assistance suitable job opportunities, good training provisions, sufficient time and congenial conditions for the promotions and nourishment of their creative talents.
- 15. Providing proper motivation :** The teachers and parents should create sympathetic atmosphere both at school and home, for which the adolescent boys and girls will be more interested in creative works. They should get satisfaction out of their performances in different stages. It is found that the poets and the philosophers when they are dedicated to their activities wholeheartedly they forget the time factor and maintain a saint like life. Even the great scientists or scholars when they are involved in their research areas forget their age factor and remains away from the family and social bondage. The best satisfaction they get when they achieve their goals and society gives due recognition to them for their contributions inventions and discoveries.

- 16. Providing facilities for creative writing :** The adolescent boys and girls should be inspired to write articles in different fields. The areas they choose should be given priority. This kind of habit from the early ages leads them to develop their proficiency to write any types of assignment on literature, history, geography economics, science, environment and the areas they like. The students should be inspired to write in their own style. The library services, reference books and any related materials should be provided to them. Besides they should feel relaxed in their mind to think over the matter and teacher should be very cooperative to bring out the talent found with them.
- 17. Encouraging dramatic talent :** The teacher should encourage the students who are interested to take part in dramatic activities. Some topics may be selected from the literature books and students who are interested may be assigned to prepare a script. The direction may be given by the teacher and the characters distributed among the students should be judicious and impartial. The teacher should involve students in preparing the stage setting the scene, managing the work of prompting and taking leading for volunteership. A teacher who has good knowledge in dramatic activities must guide the students to uplift their dramatic talents.
- 18. Inspiring for artistic talent :** Emphasis should be given to invoke the mechanical skills of the adolescent boys and girls. The students should be inspired in engineering works, scientific inventions and craft works. The parents should be aware of the talent of their children and necessary assistance may be given to them to explore their talents in different fields in the community. The students should come in contact with the various type of co-

curricular activities, clubs and organisations to gain experiences and suitable information.

- 19. Developing musical talents :** The students who are interested in music should be encouraged. The school should afford facilities to play with different musical instruments and the music teacher should give necessary training to enhance the talent of the students time to time. Abundant opportunities should be provided to the students inside the school campus and in the society to participate in musical competitions. Teachers and parents should develop sympathetic attitude among their children for the proper nourishment of musical talent and for its improvement.

7.9. Summary :

*** Meaning of Creativity :**

Creativity has a predominant role in the field of human knowledge. The world has ever seen the explosion of ideas in the field of science, arts, literature, social science from the primitive structure of the human race on it and the present interest of man to accumulate knowledge about the space is nothing but an extraneous stimulation to deal with novelty in creative thinking. The creative people born in any social, cultural, economical or political background in any time work to bring a significant change in man's process of thinking and living to that time.

*** Definitions of creativity :**

Creativity as an important area, requires the study of its definitions in detailed as given below:

- Torrance
- Skinner
- C.V. Good
- Stagner and Karwoski
- Guilford

- Drevdabl
- Mednik

*** Creativity and Intelligence :**

Creativity and intelligence are not synonymous. It is presumed that a creative individual may be highly intelligent but all intelligent persons may or may not be creative thinkers. Though the highly intelligent and the highly creative individuals are treated as gifted, they differ in their abilities to such extent that the discrimination between them obvious easy.

*** Creativity and personality :**

Galton pointed out that the famous and genius people possess their own original ideas. The most important traits of personality like freedom, social adjustment, self confidence, leadership, sensitivity and balanced temperament are found with the people who have achieved great grand success in different areas of their lives. Above all, creative persons are more sensitive, more thoughtful and more ambitious than the average.

*** Characteristics of Creativity :**

- Creativity emphasises on the newness
- Creativity is often associated with giftedness
- Creativity is spontaneous
- Creativity is a special aptitude
- Creativity does not involve single trait
- Creativity is novel to society and individual
- Creativity is expressed in many ways
- Creativity can be measured
- Creativity is both a product and a process
- Creativity involves divergent thinking
- Creativity is a natural endowment
- Handicaps do not affect creativity
- Creativity is independent of any drugs or drinks
- Creativity and achievement are not correlated

- Creativity includes dynamic thinking
- Creativity involves curiosity
- Creativity leads towards useful results
- Creativity leads to go beyond the existing environment
- Creativity keeps harmony with abnormal and relevant thinking
- Creativity develops the ability to see problem from a new point of view

*** Identification of Creative Children :**

Intellectual ability

- Learns rapidly and easily.
- Uses a great deal of common sense and practical knowledge.
- Reasons things out. Thinks clearly. Recognizes relationships. Comprehends meaning.

Scientific ability

- Expressing himself clearly and accurately either through writing or speaking.
- Reads one to two years ahead of his class.
- Is one to two years ahead of his class in mathematical ability.

Leadership ability

- It is liked and respected by most of the members of the class.
- It is able to influence others to work towards undesirable goals.
- It can take charge of the group.

Creative ability

- They always seem to be full of new ideas pertaining to most subjects.
- They invent things of creative original stories plays, poetry, tunes, sketches, and so on.
- They can use materials, words or ideas in new ways.

Artistic ability

- They cover variety of subjects in their drawings or paintings.

- They take art-works seriously and seem to find much satisfaction in these.
- They show originality in choice of subjects, technique and composition.

Writing ability

- They can develop a story from its beginning, through the build-up and climax, to an interesting conclusion.
- They give a refreshing twist, even to old ideas.
- They use only necessary details in telling stories.

*** Stages in creative thinking :**

- Preparation
- Incubation
- Illumination
- Verification

*** Educational Programmes for the Creative Children :**

- Providing necessary freedom
- Developing self-confidence
- Providing security
- Providing enrichment technique
- Helping to develop physical skills
- Developing scientific ability
- Provision of expression through different media
- Providing proper training and guidance
- Providing variety of approach
- Encouraging originality
- Developing leadership quality
- Providing proper environment
- Opportunities to realise the creative resources of the society
- Encouraging through social recognition
- Providing proper motivation
- Providing facilities for creative writing

- Encouraging dramatic talent
- Inspiring for artistic talent
- Developing musical talents

7.10. Key Words :

1. Divergent- Spread out from a central point.
2. Perception- Understanding
3. Incubation period- Preparation stage or Time taken for the development of the process before first symptoms appear.
4. Illumination- Enlighten intellectually

7.11. Questions for self study

1. Discuss the meaning and characteristics of creative children.
2. Discuss the identification process of creative children.
3. What do you mean by creativity ? Discuss the education programmes for the creative children.
4. Define the characteristics of creativity.
5. Write short notes on :
 - a) Creativity and personality.
 - b) Creativity and intelligence.
 - c) Creativity is both product and process.
 - d) Creativity is spontaneous.
 - e) Creativity is a special attitude.
 - f) Incubation period.

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CHAPTER-8
EDUCATION OF THE MENTALLY RETARDED

Objectives of the Unit :

The students will be able to know about the following points when they will go through this unit.

- 8.1. Meaning of Mentally Retarded**
- 8.2. Definitions of mentally retarded**
 - 8.2.1. Modern concept of mentally retarded (MR)**
- 8.3. Types of mental Retardation**
 - 8.3.1. Educable or mild retarded**
 - 8.3.2. Trainable or moderate retarded**
 - 8.3.3. Severe or profound Retarded**
- 8.4. Identification of educable mentally retarded**
 - 8.4.1. Some methods and techniques**
 - 8.4.2. A study of factors related to reading retardation**
 - 8.4.3. Sharma's (1988) Identification checklist for the mentally retarded**
- 8.5. Characteristics of educable mentally retarded**
- 8.6. Integrating the educable mentally retarded**
- 8.7. Teaching Strategies of the educable mentally retarded**
- 8.8. Remedial Programmes of the educable mentally retarded**
 - 8.8.1. Remedial Programmes by the parents at home**
 - 8.8.2. Remedial Programmes by the teachers at a school**
 - 8.8.3. Remedial Measures by Indian Law**
- 8.9. Etiology of Mentally Retarded Children**
- 8.10. Prevention of Mentally Retarded Children**
- 8.11. Mental hygiene as remediation**
 - 8.11.1. Meaning of Mental hygiene**
 - 8.11.2. Role of parents to promoting mental hygiene**
 - 8.11.3. Role of the teacher to promote mental hygiene of mental retarded children**

8.12. Summary

8.13. Key Words

8.14. Questions for self study

8.15. References

8.1. Meaning of Mentally Retarded :

The constitution under Article 15, 17 and 29 makes sufficient provision for special protection of any class of persons who need such protection. Those provisions in the constitution and provisions for equality of opportunity under Article 14 adequately ensure certain measures of equality to enable, socially, economically or physically handicapped citizens to live along with their more fortunate brethren. The true measure of equality or equal opportunities would be to provide more specialised education to such members of the society.

Most people have some ideas of what mental retardation people are alike. This concept needs clarification. Normally with the label mentally retarded a stigma attaches to a particular individual. Much depends upon the social perspectives as well. It is obvious that different children have differing characteristics, for which every child who requires the requisite methods and habits of study in school develops his abilities, compensates his deficiencies and obtains further opportunities for mental development in his own particular way.

However, the concept of mental retardation is under going a rapid change. In most parts of the world the presence of a retarded child in the home is no longer regarded as something to be ashamed of. It is now regarded almost like a common disease and is at present taken as a multi dimensional and multidisciplinary concept. Apart from the physiological and psychological basis, the sociological basis is gaining prominence.

It has been also viewed that mental retardation is a scientific term which refers to sub average intellectual functioning which originate during the developmental period and is associated with impairment in adaptive behaviour. In spite of various attempts to define mental retardation, it is now a relative concept. There is moreover, a recent trend to lay emphasis on the functional aspects of mental retardation than on the structural ones. Also there is a trend to take it as a developmental concept rather than a statistical one.

8.2. Definitions of mentally retarded :

Mental retardation is a term used to identify on observed performance deficiency. It is a condition failure to demonstrate age appropriate intellectual and social behaviour. Over many years definitions of mental retardation has been proposed, debated, revised and counter proposed. This process has not been ended and still the debate is going on. Since mental retardation is a concept that affects and is affected by people in different disciplines, it has been defined from different perspectives.

1. In early time, only the severely retarded children were identified. The term idiotism was used which meant the people who did not hold public office. In the 19th century the term imbecile was also used for retarded people for the first time these terms were used by Ireland in the year 1900.

“According to Ireland said Idiocy is mental deficiency or extremely stupidity depending upon maturation or disease of the nervous centres occurring either before birth or before the evolution of mental faculties in childhood. The word imbecility is generally used to denote a less decided degree of mental capacity.”

Form the above definition, it is clear that, the definition gives emphasis on the biological or medical aspects of mental retardation. It is obvious that the physicians are for the first time worked with the mental retarded children and thus they considered it from their own angle.

2. In the year 1937 and 1941 respectively Tred Gold and Doll had given two definitions of mental retardation.

According to Tred Gold mental retardation is :

“A state of incomplete mental development of such a kind and degree that the individual is incapable of adapting himself to the normal environment of his fellows in such a way to maintain existence independently of supervision control or external support.”

3. Doll considered that there are six criteria essential to the definition and concept of mental retardation. According to Doll those areas are as follows :

- a) Social incompetence.
- b) Due to mental sub normality
- c) Which has been developmentally arrested.
- d) Which obtains at maturity.
- e) Is of constitutional origin.
- f) Is essentially incurable.”

4. Kidd (1941) : It refers to significantly sub-average intellectual functioning which manifests itself during the developmental period and is characterized by inadequacy in adaptive behaviour.

Thus, three conditions must be satisfied in order to designate a person as mentally retarded :

- i) Sub-normal intellectual functioning.
 - ii) Severity to the level of incapability leading to an independent life.
 - iii) Impairment of adaptive behaviour.
5. In 1959 the American Association on Mental deficiency published a manual of terminology on mental retardation. In 1961 the definition was revised according to it.

“Mental retardation refers to sub-average general, intellectual functioning which originates during the developmental period and is associated with impairment in adaptive behaviour.”

6. Grossman in the year 1973 has defined mental retardations in the following words.

“Mental retardation refers to significantly subaverage general intellectual functioning existing concurrently with deficiencies in adaptive behaviour and manifested during the developmental period.”

7. Tredgold (U.K., 1937)

“A state of arrested to incomplete development of mind so severe that the patient is incapable of leading an independent life or of guarding himself against serious exploitation in the case of a child, that he will be so incapable when an adult.”

8. American Publication

“Who are so deficient in general intellectual ability that their inability to care for themselves, capable with their disruptive behaviour in some cases, is so severe, when compared with their age mates in the community that they require assistance, care and protection, in excess of that which average parents can be

expected to provide during their childhood or that which average communities should be able to provide during their adulthood.”

9. Frank M. Hewelt and Stovin R Forness in their book Education of the Exceptional Learners, have said that.

“A person must meet three criteria in order to be considered as mentally retarded.

i. Sub average intellectual functioning

This is generally determined by an individual intelligence test by performance more than two standard deviation below the mean.

ii. Deficits in adaptive behaviour

Adaptive behaviour refers to the rate of development of sensory motor, self-help and communicative skills, such as sitting up, walking dressing talking etc.

iii. Manifested during the developmental period :

Impairment any time during the first eighteen years of life, which is regarded as the period during which intellectual potential is determined serves to distinguish mental retardation from other disorders.”

10. American Association on Mental Retardation (1992) : Mental retardation refers to substantial limitations in present functioning. It is characterized by significantly sub-average intellectual functioning existing concurrently with related limitations in two or more of the following adaptive skill areas :

- i) Communication
- ii) Self-care
- iii) Home living

- iv) Social skills
- v) Community use
- vi) Self-direction
- vii) Health and safety
- viii) Functional academics
- ix) Leisure and work
- x) Mental retardation manifests before the age of 18

8.2.1. Modern concept of mentally retarded (MR) :

An accurate and consistent definition of mental retardation is critical because of its impact on the prevalence, or count, of those with MR. However, despite the importance of consistency, MR is not always defined in the same way across research studies or service agencies, even within the same state (Koller et al., 1984; Borthwick-Duffy, 1994). While some definitions rely on IQ scores alone to classify individuals with MR, some only use adaptive behaviours for classification, and others include both IQ scores and measures of adaptive skills (Whitman et al., 1990; Borthwick-Duffy, 1994). In addition, many studies are based on broad categories of either severity (using labels such as mild, moderate, severe and profound MR) or etiology (utilizing the terms cultural/familial and organic MR).

The American Association on Intellectual and Developmental Disabilities (AAIDD, 2002) has defined MR as significant limitations both in intellectual functioning and in adaptive behavior, which covers many everyday social and practical skills. This disability originates before the age of 18. Intellectual limitations refer to an Intelligence Quotient (IQ) which falls two standard deviations below the population mean of 100 (<70), and adaptive functioning limitations refer to impairments in at least two out of ten skill areas (AAMR, 2000). MR is also defined in the Diagnostic and Statistical Manual of Mental Disorders, 4th edition

(DSM-IV) by the American Psychiatric Association (APA). Similar to the AAMR definition, the DSMIV has three diagnostic criteria for MR, including sub-average intellectual functioning (IQ < 70), impairments in adaptive functioning and onset before age 18 (APA, 1994).

Zigler and colleagues (1986; 1987; 1991) argue that an appropriate classification of MR employs both IQ score and etiology of the retardation. Consequently, they suggest categorizing MR into cultural/familial and organic groups, based on the presence or absence of a known organic etiology. This two-group approach is one of the most well documented distinctions in the mental retardation literature over the last century.

8.3. Types of mental Retardation :

Many systems have been proposed for the classification of mentally retarded children. In 1963 Gel of reported that 23 different classification systems were in use in English speaking countries. But the three phrases used most by the educators to classify mentally retarded children are the following.

1. Educable Mentally Retarded (E M R)
2. Trainable Mentally Retarded (T.M.R)
3. Severely or profoundly mentally Retarded (P.M.R).

8.3.1. Educable or mild retarded :

Mild retarded children are often referred to by educators as educable mentally retarded children comprise those who lie at the upper end of the mentally retarded category. Their mental handicap is regarded as minimal as their measure intelligence falls in the I.Q range of 50/55 to 70/75.

School programmes of madly retarded children stress the basic academic subjects reading writing and arithmetic during the elementary years. The emphasis shifts to vocational training and work-study programmes in the middle and high school stage. Middle retarded adult develop social and communication skill similar to those of their non-retarded persons and many of them are not recognised as retarded outside of school or after they finish the school.

8.3.2. Trainable or moderate retarded :

Moderate retarded are sometimes referred to as trainable mentally retarded. These children fall at the lower end of the mentally retarded range and their I.Q usually lie between 30/35 to 50/55. The trainable group usually demonstrate their intellectual deficit at a fairly age through their slowness in overtaking the normal developmental steps and difficulties generally in the area of adaptive behaviour. Normally placed in special day schools T.M.R children need training in self care activities and language development and many cases are able to acquire only rudimentary academic skills. Most of them are capable of limited economic usefulness, perhaps in a sheltered workshop. As adults some may ultimately have to live in community or institutional residential settings when parents or relatives are no longer able to provide for them.

8.3.3. Severe or profound Retarded :

Severe or profoundly retarded children are almost identified at birth or shortly afterwards. Their I Q usually lie below 30. These children are for the most part totally dependent on others for their existence and are institutionalised quite early in life. Most of them have significant cerebral nervous damage and many have other handicapping conditions. Traditionally they have not been considered for special education. Training for the severely retarded consists of self care skills,

toileting, dressing, eating, drinking and language development. A profoundly retarded person may not be able to care for his or her personal needs and may be confined to a bed.

According to A.A.M.D system mental retarded children are classified in the following way.

Mild Retarded	IQ = 55-70
Moderate retarded	IQ = 40-55
Severe retarded	IQ = 25-40
Profound retarded	IQ less than 25

8.4. Identification of educable mentally retarded :

When it is suspected that a child is an educable mental retarded, it is the collective efforts of the parents, teachers, medical officers, psychologists and social workers to help in identifying the child. It is essential that their degree of retardation should be ascertained, so that necessary action can be taken from the very beginning otherwise more difficult problems may be created in the future. There are several methods for identifying the educable mentally retarded. The following are some of the methods and techniques, discussed.

8.4.1. Some methods and techniques :

1. A medical examination with view to ascertain the extent of his retardedness is absolutely necessary. This will help the exact line of treatment to be given to the child.
2. A psychological or psychometric examination with the help of various intelligence tests should be conducted in order to ascertain the level of intelligence of the child, his abilities, aptitude

etc. although quite a few tests are widely used, the tests which are popular may be divided into four general categories as :

- i. Picture vocabulary test.
- ii. Verbal and Non-verbal intelligence tests.
- iii. Drawing tests.
- iv. Tests of perceptual qualities.

The tests which may be classified under picture vocabulary tests are :

- i. The full range picture Vocabulary test.
- ii. The Peabody picture Vocabulary test.
- iii. The pictorial tests of Intelligence.

3. If the child has some schooling has school achievements, cumulative record cards, teacher's observation, his backwardness in specific areas can be critically analysed on the basis of such enquiry into his educational disabilities, practical methods can be suggested for his further training or for remedial treatment.

4. The development history of the child from his birth onwards is also to be critically examined as to when the child begins to sit, crawl, stand, walk or talk.

These reports may indicate child's retardness.

5. The observations should be taken by the teacher regarding the general performance of the child to view his retardness.

6. The evaluation report should be collected from teachers, parents and friends to assess the different activities of the child.

7. By examining the previous result of the child, the teacher may take a vital step in the formulation of any remedial programme.

8. By giving other psychological tests of clinical manifestations, general behaviour social adjustment and educational attainments the teacher may diagnose the factors contributing to retardation.
9. The teacher should obtain a comprehensive pictures of the child's personality as well as intellectual functioning using the tests of personality.

8.4.2. A study of factors related to reading retardation :

Reading has verses often provided challenging at the initial stage for some reason or other. It is however, interesting to analyse the mental processes involved in reading and to locate the causes of failure of some in coping with reading. It would be quite interesting to find out how a retarded child approaches the problem of reading and what are the stumbling blocks and how they could be helped.

Diagnostic Checklist

(Reading)

- Names of letters not known.
- Sounds of letters not known.
- Cannot visually synthesise words.
- Unable to combine sounds into words.
- Ineffective visual inspection of the various parts of words.
- Want of rapid visual inspection of the various parts of words.
- Tendency to confuse letters in different positions initial, middle or final.
- Habitual addition, omission or repetition of words.
- Wild random guessing.
- Ineffective use of context clues.
- Ignores word endings
- Distorted articulation.
- Failure to articulate certain sounds.

- Poor visual span of reading.
- Short eye voice span.
- Over analysis in word recognition.

8.4.3. Sharma's (1988) Identification checklist for the mentally retarded :

- Displays academic achievements constantly.
 - Relies too much on presentation of concrete objects.
 - Has a short attention span.
 - Displays short terms memory.
 - Has a poor self-image.
 - Lacks self confidence.
 - Has restricted communication.
 - Seeks repetiion and practice.
 - Does not take any intiaition in group activities.
 - Often inattentive and distracted.
 - Needs immediate reward.
 - Displays fear of failure.
 - Has poor muscular coordination.
 - Faces difficulty on doing things for himself.
 - Has a problem in understanding instruction.
 - Some children have problems in speech and are hyperactive.
- Severe cases of mentally retarded have more speech problems. These children may face multiple problems. They are hyperactive and are unable to sit in one place for more than a few minutes and inhibit restless activities like tapping, pulling and so on.

8.5. Characteristics of educable mentally retarded :

The characteristics of the educable mentally retarded children discussed from the various aspects are given below :

1. Physical characteristics :

- i) Though the educable mentally retarded children have no significant deviation in physical growth like height weight and motor co-ordination, still they are slower in some physical activities like walking, habit training and self-feeding as compared to the normal children.
- ii) In some cases due to brain injury, they do not show progress in language development like the average children.
- iii) Some educable mentally retarded children come from poor home conditions with a poor health due to nutritional and sanitary problems for which they are seemed physically inferior to the normal children of their age.

2. Educational characteristics :

- i) They are not able to think abstractly or to handle symbolic material.
- ii) They have inability to read write and reckon at an early age for which delay learning occurs with them.
- iii) The rate of development in case of the educable mentally retarded children are only a half to three quarters than that of ordinary children.
- iv. The school programme too often has been geared to the average pupils. The bright students have been able to slide along but the educable mentally retarded children can not cope with them for which they face failure and thus experience feelings of frustration.
- v. In the above school situation the educable mentally retarded child learns to feel that he is and will be a failure in life, his ambition is ignored, stunted, or destroyed, and he is led early to believe that he can never succeed.
- vi. With the age of 15 and 16 years the educable mentally retarded child completes his education upto II to IV class.

3. Intellectual characteristics :

1. The educable group comprises those children who lie at the upper end of the mentally retarded category.
2. Since their measured intelligence tend to fall in I Q range of 50/55 to 70/75 their degree of mental handicap may be regarded as minimal.
3. Only rarely is their mental disability accompanied by physical strigmata and indeed, it is often only their failure in the ordinary school and subsequent assessment on psychological tests that reveals their mental disability.
4. As such their rate of intelligence and development is less and they are called as slow learners.
5. The capacity of judgement, abstract thinking and reasoning is out with them.

4. Social Characteristics :

- i) They may react to their educational inefficiency by social misbehaviour.
- ii) They indicate a definite immaturity by their non-acceptance of personal and social responsibilities.
- iii) As a child, the educable mentally retarded child is slow to grasp the rules of the game and this causes his play mates to loose patience with him.

5. Emotional characteristics :

- i) The feelings and needs of the educable mentally retarded children mirror those of normal children.
- ii) The emotional demands which they make on adults may tend to be greater and their dependence will certainly last longer.

6. Behavioural Characteristics :

- i) Their slow learning may be manifested by poor co-ordination and lack of flexibility or adaptability.
- ii) Unlike the superior child, the educable mentally retarded child is unable to win the attention of adults and may be forced into a kind of bewildered isolation, since he cannot understand why no one wants to associate with him.

7. Occupational Characteristics :

- i) The educable mentally retarded are rehabilitated in simple vocations and they become partially or wholly self supporting with some socially adjustment also.
- ii) They can do farming, gardening, making or repairing shoes, tailoring, motor brush making, weaving and laundry work.

8.6. Integrating the educable mentally retarded :

The educable mentally retarded children should get their education in ordinary schools as the normal children. The objectives of the integrated education for the retarded is to enable them to make some social contacts and to get along with his other normal peer groups in a co-operative manner. They also get the chance to bring the all round development of their personalities while mixing with the average children and participate with them in curricular and co-curricular activities the educable mentally retarded children earn knowledge from the normal group to look after their own physical needs, personal hygiene and cleanliness. They also know how to control their impulses and emotions and develop a sense of freedom in doing things they want to do instead of ever remaining inhibited, restrained in dependent. I they acquire a sense of responsibility in order to feel their own ground in society.

8.7. Teaching Strategies of the educable mentally retarded :

There are various programmes, training, techniques and treatment have been developed to meet the needs of the educable mentally retarded children. Some of the research findings suggest greater effectiveness of concrete objects and experiences rather than words alone. It has been also proved to be very effective to use the teaching machines for meeting the individual needs of the retarded. The machines are typically suitable because of the advantage of immediate feedback and reinforcement gained through the programmed approach. They tend to rise the level of motivation as they can deliver tangible rewards for giving correct responses and for completing a sequence of study.

But various activity programmes which have been developed, seem to be more appropriate for the educable mentally retarded. Let us have a suitable presentation of those, here, below.

1. Individualisation :

Considering special methods in the education of the educable mentally retarded, the most important thing in the teaching will be the individualisation. Individualisation does not mean that such children will receive individual instruction. Though it can be possible with a small number children.

Yet it implies that each child will be allowed to proceed at his own rate according to his own strength and abilities. One should not think that there is no importance of group activities for such children as individualisation is emphasised rather opportunities to participate in the group should be organised, so that they can develop correct social attitudes and learn some useful social virtues.

2. Learning by doing :

Another principle of special education for these children is that they should learn by doing the thing by themselves. Activity methods will be employed which will put emphasis on learning through experience. Because of their intellectual deficit, they can learn better, where ideas are expressed in concrete situations, which they can relate to the world they know teaching should be made as far as possible, through materials which can make appeal to the senses.

3. Need for learning readiness :

Readiness to learning is an important factor for effective learning. These children have the ability to learn to read, write and count provided that the way is prepared for the introduction of these subjects through appropriate readiness programmes. The educator should have sufficient patience to wait till the child is psychologically and intellectually ready to receive the knowledge. Education should be imported to them in such a way they can receive though slowly but steadily.

4. Repetition :

It is a saying that practice makes a man perfect. This can be possible through repetition. As the mentally retarded children have poor Emory in comparison with the normal students, teaching method should provide a considerable amount of repetition, for making learning permanent. However repetition should not be encouraged without insight and understanding of the subject. There is no justification of repetition for rote memory. Education should motivate the children and make the material interesting so that memory can be enhanced.

5. Short periods :

Mentally retarded children have limited power of consideration. Therefore formal teaching periods should be kept fairly short but at the sometime it is remarkable to know how long they can preserve when they find the subject matter stimulating.

6. Concrete problems :

It will be admitted that mentally retarded children generally show lack of imagination and foresight. At the same time it is difficult for them to transfer the learning experience of one situation to a similar but new and unfamiliar one. Therefore real life problems should be introduced. So that the immediate application of that is to be learning can be easily appreciated.

7. Graded Curriculum :

Since these children learn slowly than the average child the work undertaken in the basic subjects of reading and arithmetic must be graded. This will ensure steady progress and feeling of success. Therefore there is necessary for the production of special books for slow learners and until these are prepared, the class-teachers should prepare materials by themselves.

8. Projects :

Project is one of the most suitable methods of teaching to the mentally retarded. There is controversy with regard to the introduction of project as to how this can be undertaken without disturbing the basic subject programme. The arrangement can be done with the core-programme of language and number with a peripheral programme including subjects like history geography and nature study etc. within this peripheral subjects, projects can be developed which can provide scope for activity methods and at the same time a process of integration

of the basic teaching subjects. The point of origin may be a story, a poem, a song, a film, or a picture in the newspaper. By the favourable teaching climate created by this approach maximum freedom to children can be accorded and within it the educable mentally retarded can thrive and make progress.

8.8. Remedial Programmes of the educable mentally retarded :

The educable mentally retarded children are capable of making progress in the normal school subjects of reading, writing and counting upto a functional level if the curriculum and methodology of teaching these subjects is specially designed to meet the limitations of their nature. The standards aimed at and the methods used should be functionally oriented. All the school activities should subserve practical realistic and reliable aims for these children.

The most important objective of the teacher would be to help the mentally retarded children to develop these attributes which will enable them to become self-sufficient and accepted members of the community in which they live. The primary concern of education should be to promote not so much the three R's but the three A's personal adequacy social adequacy and occupational adequacy personal adequacy refers to the ability to take care of one's ordinary everyday needs. Personal adequacy for the mentally retarded is concerned as much with self-respect as self-care.

Social adequacy refers to helping the child to behave and conduct himself generally in ways that will make him acceptable to his fellow men both in the work and in leisure time activities.

Occupational adequacy is essentially practical oriented. The aim occupational adequacy is to impart to the child those skills which will

help him setting employment and become economically independent. In lower occupations a friendly co-operative disposition, good manners, punctuality and perspeverance are important factors than knowledge of a specific skill in securing a job keeping in view of these things for developing occupational competency that the tool subjects of reading, writintg and counting should be emphasised as they are required to certain occupations.

The ultimate purpose of placement of the educable mentally retarded is to help the child in positive and realistic way to make him secured in the community as a wage earner and a complete citizen.

Remedial measures for the educable mentally retarded may be assigned both to the parents at home and teachers at school. The role of the parents to understand their mentally retarded children is as important the role of the teachers at school. In this context the responsibility of the parents and the responsibilities teacher are mentioned below :-

8.8.1. Remedial Programmes by the parents at home :

After discussing some of the principles of education for the educable mentally retarded children now it is proper to write a few words for the parents. It should be remembered that most of the mentally retarded children will remain at home. There are only a few instructions which can help the retarded children. Therefore parents should shoulder major responsibilities of the educable mentally retarded children. They should understand their children and develop right attitude towards their bringing up and their rehabilitation.

- i. First thing is that they must accept the presence of the retarded children in their homes instead of cursing fate or themselves. They should have to reconcile with the situation boldly.
- ii. Parents should realise that the retarded children can never become like normal children. They should not therefore waste time, energy and money to cure their children rather they should take care of the children and handle the situation jointly and suffer together.
- iii. Educable mentally retarded children need love and affection but this should not amount to something to over protection or indulgence parents should be sympathetic but firm and consistent in their disciplinary demands. This will help in developing useful habits and attitudes in the children.
- iv. Parents should not forget that the mentally retarded child learns at his own pace. There is no need to push him beyond his abilities as he is a slow learner. They must remember that child individual mental growth should be emphasised rather than the standard rate.
- v. The parents should encourage the retarded children to do various household activities, such as washing, cooking, cutting, decoration and other simple domestic work. At the same time they should appreciate and praise their work in order to give a sense of achievement. Similarly the retarded boys can be taken to the fields or factories where the actual work can be shown with use of concrete materials like coloured paper, black, chalks clay, pegs, balls, tools of various sorts and toys sense training can be given to these children.

- vi. For motor control and muscular co-ordination, physical exercises can be done with skipping, ropes, wooden tadders, stair cases, balancing poles etc. parents also can engage these children in outdoor games of different types and let them play in their own lawns or outside.
- vii. These children should be taken as far as possible to various places of interest. They should be encouraged to ask questions about the things they observe and thus helped to increase their vocabulary, experience and power of observation.

8.8.2. Remedial Programmes by the teachers at a school :

Now more efforts are done to create more favourable learning environment for the educable mentally retarded children. Environmental manipulation is obviously related to the learning outcome. Behaviour can be shaped by applying principles of operant conditioning one advantage of operant conditioning as a technique is that it does not require the student to have verbal ability and thus is the technique most appropriate for the severely retarded.

So the teacher should adopt the following techniques and principles for helping the retardades.

The techniques are :

1. Paired associates learning.
2. Social learning.
3. Effective verbal mediation
4. Motor learning.
5. Discriminating learning.

1. Paired associates learning :

It utilises the successive presentation of a list of pairs of items, including words, pictures, symbols and even sounds. The members of each pair may not belong to the same category of stimuli and the subjects task is to associate the members of each pair. Variations of this basic theme they may be used.

2. Social training :

It is the technique which involves successive presentation of a number of stimuli and the subject is required to anticipate the stimulus following the one that he is shown.

3. Effective verbal mediation :

It is the techniques which makes it clear that it is quite likely that the discriminative and associative learning of the retardates would improve if they were taught first to mediate cues with distinctive labels. The retardates are more easily taught the semiconcrete material and their learning is apparently affected by the meaningfulness of the material to be learned.

4. Motor learning :

It is the area in which the retardates find themselves more comfortable and confident. This involves training in some vocational or manual tasks enabling the retardates to acquire certain vocation skill. This technique proves helpful to the retardates particularly at the lower level of functioning.

5. Discrimination learning :

It involves procedures leading to increased distinctiveness of the stimuli to be discriminated. Retardates usually benefit more from such manipulations, particularly if multidimensional stimuli are provided.

Besides the teacher should follow the following principles while framing any educational programme for the rearded.

- i. Suitable incentives and goals should be set.
- ii. The task should be broken down into components and each component should be learned separately, but of course in sequence.
- iii. Practice should be distributed rather than massed.
- iv. The material to be learned should be well organised.
- v. The students should be encouraged to verbalise their behaviour while they are in the making the responses.

8.8.3. Remedial Measures by Indian Law :

Indian constitution has given the status of justice and equality to all the citizens to live in this country comfortably. There is no discrimination in Indian law against people with disabilities (PWDS). A person of disability has the right to get privileges under Indian law. Here

A) The Mental Health Act, 1987 :

The rights of Mental ill persons under the Mental Health Act, 1987 are stated below :

1. A right to be admitted, treated and taken care of in Psychiatric hospital or Psychiatric nursing home or convalescent home established or maintained by the government or any other person for the treatment and care of mentally ill persons (other than general hospitals or nursing homes of the government).
2. Even mentally ill prisoners and minors have a right of treatment in Psychiatric hospitals or Psychiatric nursing homes of the government.

3. Under the mental health Act, 1987 mentally ill persons are entitled to not only be admitted, treated and taken care of in psychiatric hospital or Psychiatric nursing Home or convalescent home established or maintained by the government or any other person for the treatment and care of mentally ill persons (other than general hospitals or nursing homes of the government) but also live with dignity.
4. The policy have an obligation to take into protective custody a wandering or neglected mentally ill person and inform his relative and have to produce such person before the local magistrate for grant of reception orders.
5. Minors who are under the age of 16 years, those persons who are addicted to alcohol or other drugs which lead to behavioural changes and those convicted of any offence are entitled to admission, treatment and care in separate Psychiatric hospitals or nursing homes established or maintained by the government.
6. Mentally ill persons have the right to have regulated, directed and co-ordinated mental health services from the governemtn which through the Central Authority and the state authorities set up under the Act have the responsibility of such regulation and issue of licenses for establishing and maintaining Psychiatric hospitals and nursing homes.
7. Treatment at government hospitals and nursing homes mentioned above can be had either as in patient or as outpatients.

8. Mentally ill persons can seek voluntary admission in such hospitals or nursing homes and minors can seek admission through their guardians. Relatives of mentally ill persons on behalf of the latter can seek for admission. Applications can also be made to the local magistrate for grant of reception orders.
9. The police have an obligation to take into protective custody a wandering or neglected mentally ill person and inform his relative and have to produce such person before the local magistrate for grant of reception orders.
10. Mentally ill persons have the right to be discharged when cured and entitled to leave in accordance with the provisions in the Act.
11. Where mentally ill persons own properties including land which they cannot themselves manage, the District Court upon application has to protect and secure the management of such properties by the entrusting the same to a Court of Wards, by appointing guardians of such mentally ill persons or appointment of managers of such property.
12. That costs of maintenance of mentally ill persons detained as inpatient in any government concerned unless such costs have been agreed to be borne by the relative or other person on behalf of the mentally ill person and no provision for such maintenance has been made by the order of the District Court. Such costs can also be borne out of the estate of the mentally ill persons.
13. Mentally ill persons undergoing treatment shall not be subjected to any indignity (whether physical or mental) or cruelty. Nor can

such mentally ill person be used for purposes of research except for his diagnosis or treatment or with his consent.

14. Mentally ill persons who are, entitled to any pay, pension, gratuity or any allowance from the government (such as government servants who become mentally ill during their tenure) are not to be denied such payments. The person who is incharge of such mentally person or his dependents will receive such payments after the magistrate has certified the same.
15. A mentally ill person shall be entitled to the services of a legal practitioner by order of the Magistrate of District Court if he has no means to engage a legal practitioner or his circumstances so warrant in respect of proceedings under the Act.

B) The National Trust for Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities Act, 1999 :

1. The Central Government has the obligation to set up in accordance with this Act and for the purpose of the benefit of the disabled the National Trust for Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and multiple Disability at New Delhi.
2. The National Trust Created by the Central Government has to ensure that the objects for which it has been set up as enshrined in Section 10th of this act have to be fulfilled.
3. It is the obligation of the Board of Trustees of the National Trust to make arrangement for adequate standards of living of any beneficiaries named in any be request received by it and to

provide financial assistant to registered organisation for carrying out any approved programme for the benefit of the disabled.

4. Disabled persons have the right to be placed under guardian appointed by the local Level Committees in accordance with the provisions of the Act. The guardians so appointed will have the obligation to be responsible for the person and property of their disabled wards and be accountable for the same.
5. A disabled person has the right to have his guardian removed where he is abusing or neglecting the former or is misappropriating or neglecting the property of the disabled person.
6. Where the Board of trustees is unable to perform or has persistently made default in the performance of duties imposed on it, a registered orgnsiation for the disabled can complain to the Central Government to have the Board of Trustees superceded and/or reconstituted.
7. The provisions of this Act as to its accountability, monitoring finance, accounts and audit, shall bind the National Trust.

8.9. Etiology of Mentally Retarded Children :

Approximately 3% of the population has an intelligence quotient (IQ) of less than 70, among whom a cause for the mental retardation can be established in less than half of all cases (Flint et al., 1995). The prevalence of severe mental retardation is about 3 per 1.000 population and 30 per 1.000 for mild mental retardation (Harper,1993).

A number of environmental, genetic or multiple factors can cause mental retardation. It is also believed that behavioural or societal factors such as poverty, malnutrition, maternal drug and alcohol use, as well as severe stimulus deprivation can contribute to MR (McLaren & Bryson, 1987). Unfortunately, in approximately 30 to 50 percent of cases, the etiology is not identified even after thorough diagnostic evaluation (Cury et al., 1997; Schaefer & Bodensteiner, 1992). Some persons have a congenital malformation of the brain; others had damage to the brain at a critical period in pre- or postnatal development. Acquired causes of retardation include neardrowning, traumatic brain injury and central nervous system malignancy. The most common cause of MR in industrialized nations is fetal alcohol syndrome with an incidence rate of 1 in 100 births. The second leading known cause of MR is Down syndrome, or trisomy 21, with an incidence rate of 1 in 800-1.000 births (Campbell, Morgan & Jackson, 2004).

i. Genetics conditions

A number of single-gene disorders result in mental retardation. Many of these are associated with atypical or dysmorphic physical characteristics (Sultana et al., 1995). Such conditions include fragile X syndrome, neurofibromatosis, tuberous sclerosis, Noonan's syndrome and Cornelia de Lange's syndrome (Baraitser & Winter, 1996; Jones & Smith, 1997).

As many as one fourth of persons with mental retardation have a detectable chromosome abnormality. Children with Down syndrome (trisomy 21) usually have highly recognizable physical characteristics, but features associated with other chromosomal abnormalities, such as Klinefelter's syndrome (47,XXY), may not be as obvious to family members or the physician (Batshaw & Perret, 1992) Other children may have a small deletion or duplication of a particular chromosome that is

rarely reported; thus, the phenotype is still undetermined. Some chromosomal abnormalities are inherited from a parent but most occur de novo (McKusick, 1994). Many previously described clinical syndromes have been found to have an associated chromosomal abnormality (e.g., DiGeorge, Prader-Willi, Angelman and Williams syndromes). Other genetic conditions include Phelan-McDermid syndrome (22q13del), Mowat-Wilson syndrome, genetic ciliopathy (Badano et al., 2006). In the rarest of cases, abnormalities with the X or Y chromosome may also cause disability. 48, XXXX and 49, XXXXX syndrome affect a small number of girls worldwide, while boys may be affected by 47, XYY, 49, XXXXY, or 49, XYYYY (Moser, 1995).

ii. Prenatal problems

Mental disability can result when the fetus does not develop inside the mother properly. Moreover, prenatal causes include congenital infections such as cytomegalovirus, toxoplasmosis, herpes, syphilis, rubella and human immunodeficiency virus; prolonged maternal fever in the first trimester; exposure to anticonvulsants or alcohol; and untreated maternal phenylketonuria (PKU) (Strømme & Hagberg, 2007). Complications of prematurity, especially in extremely low-birth-weight infants, or postnatal exposure to lead can also cause mental retardation (Piecuch et al., 1997).

iii. Perinatal problems

Perinatal causes involve late pregnancy (complications of pregnancy, diseases in mother such as heart and kidney disease and diabetes and placental dysfunction), during delivery (labour) (severe prematurity, very low birth weight, birth asphyxia, difficult and/or complicated delivery and birth trauma), neonatal (first 4 weeks of life) (septicaemia, severe jaundice, hypoglycemia) (Kolevzon, Gross & Reichenberg, 2007).

iv. Postnatal problems (in infancy and childhood)

Postnatal problems include infancy and childhood. It is involved brain infections such as tuberculosis, Japanese encephalitis, and bacterial meningitis. As well as head injury, chronic lead exposure, severe and prolonged malnutrition and gross understimulation (Leonard & Wen, 2002; Zoghbi, 2003).

v. Metabolic disorders

Metabolic disorders are another possible cause of mental retardation. In some cases (e.g., PKU, hypothyroidism), retardation is preventable with early treatment (Scriver, 1995). Other disorders (e.g., mucopolysaccharidosis, sphingolipidoses) are less responsive to early intervention. Molecular medicine has made it possible to diagnose a number of conditions referred to as mitochondrial cell diseases (Dimauro & Moraes, 1993).

vi. Exposure to certain types of disease or toxins

Diseases like whooping cough, measles, or meningitis can cause mental disability if medical care is delayed or inadequate. Exposure to poisons like lead or mercury may also affect mental ability (Aicardi, 1998; Daily, Ardinger & Holmes, 2000).

vii. Iodine deficiency (cretinism)

Iodine deficiency affecting approximately 2 billion people worldwide is the leading preventable cause of mental disability in areas of the developing world where iodine deficiency is endemic. Iodine deficiency also causes goiter, an enlargement of the thyroid gland (Delange, 1994). Lack of adequate availability of iodine from the mother restricts the growth of the brain of the foetus, and leads to a condition called hypothyroidism. More common than fullfledged cretinism, as retardation caused by severe iodine deficiency is called, is mild

impairment of intelligence (Gaitan & Dunn, 1992). Certain areas of the world due to natural deficiency and governmental inaction are severely affected. India is the most outstanding, with 500 million suffering from deficiency, 54 million from goiter, and 2 million from cretinism. Among other nations affected by iodine deficiency, China and Kazakhstan have begun taking action, whereas Russia has not (McNeil, 2006).

viii. Malnutrition

Malnutrition is a common cause of reduced intelligence in parts of the world affected by famine, such as Ethiopia (Durkin et al., 2000; Wines, 2006).

According to American Association of mental deficiency the following are some of the causes of mental retardation.

1. Infections and intoxication.
2. Trauma and physical agent.
3. Metabolism and nutrition.
4. Gross brain disease.
5. Prenatal influence.
6. Chromosomal abnormality.
7. Gestational disorders.
8. Psychiatric disorders.

There are also some other causes of mental retardation which are stated below.

1. The incompatible R.L, factors in the parents.
2. Unusually prolonged labour and abnormal condition of delivery.
3. Hydrocephalic conditions.
4. Glandular disturbances in the child.
5. Premature separation of placenta.

6. After effect of such disease as a severe typhoid smallpox, meningitis, epilepsy etc.
7. Other hereditary factors.

8.10. Prevention of Mentally Retarded Children :

The prevention of mental retarded children is stated below :

1. Birth Control- The parents of the mentally retarded children should be advised to be operated open for birth control by which there should be check of birth of further mentally regarded children.
2. Segregation- The mentally retarded children should remain away from the average children and their admission should be done in separate schools.
3. Education of parents- The parents of the training programme should be organized for the parents of mental retarded children. This will help them to be aware of the level of I.Q of the their children. Besides, they will be able to know how to behave with their mentally retarded children.
4. Individual attention- In the school for the mentally retarded children small size of classes should be arranged. The teacher should pay attention for the special problem of the individual child.
5. Special schools & Hospitals- In the general schools and hospitals the care of the mentally retarded children may not be taken properly. So for the children the arrangements should be done for special schools and hospitals.

6. Special teaching methods- The general teaching methods adopted for the normal children are not suitable for the mental handicapped children. So special teaching methods should be followed for these children.
7. Special curriculum- The mentally retarded children can not adjust with the normal curriculum of the schools. They should not be treated as normal children to follow the educational programmes of the school. Freedom should be given to the mentally retarded children to perform their curricular and co-curricular activities which are suitable to them. So the experts should developed special curriculum for these children.
8. Trained teachers- The teachers who are trained on mentally retarded children should take care of these children. They should be alert to see and solve the problems of the children inside the campus.
9. Special Guidance services- The teacher who have gone through orientation programme on guidance services should help the mentally retarded children for their adjustment inside the campus. They should advise the subject teacher to provide appropriate learning opportunities according to the level of educability. They should consult not to show cruelty to these children and they should tend to the affectionate.

8.11. Mental hygiene as remediation :

For the remediation some psychologists treat the word 'mental hygiene' and 'mental health' as synonymous in this connection N.E. Cutts and N.Mosely view "Mental health has various strains of the

environment we meet in life and mental hygiene as the means we take to assure the adjustment.”

8.11.1. Meaning of Mental hygiene :

Mental hygiene depicts that the teacher should tend the children for the development of social attitude, training social skills and to enable them to develop better personal and social adjustment. Some definition of mental hygiene are stated below which will help to understand its meaning in a better way.

1. In the words of Klein, D.B., Mental hygiene as its name suggests, is concerned with the realization and maintenance of the mind's health and efficiency.
2. Wallace- Wallin has defined mental hygiene as the application for a body of hygienic information and techniques culled from science of psychology, child study, education, sociology, psychiatry, Medicine and biology for the purpose of observation and improvement of mental health of the individuals and of the community for the prevention and care of minor and major mental diseases and defects and of mental, educational and social maladjustments.
3. Drever, James considers mental hygiene as investigation of the laws of mental health and the taking or advocacy of measures for its preservation.
4. Hadfield considers mental hygiene as concerned with the maintenance of mental health and the prevention of mental disorder.

5. American Psychiatric Association observes, Mental hygiene consists of measures to reduce the incidence of mental illness through prevention and early treatment and to promote mental health.
6. Crow and Crow conceive mental hygiene as a science that deals with human welfare and pervades all fields of human relationship.
7. The Dictionary of Education by Carter W. Good defines mental hygiene as Establishment of environmental conditions, emotional attitudes and habits of thinking that will resist an onset of personality maladjustments. It is the study of principles and practices in the promotion of mental health and prevention of mental disorders.
8. According to Boring, E.G., the aim of mental hygiene is to aid people to achieve more satisfying and more productive lives through the prevention of anxieties and maladjustments.

8.11.2. Role of parents to promoting mental hygiene :

- i. parent should providing adequate affection and love to the mental retarded children.
- ii. They should provide conducive environment in the home.
- iii. They developed proper attitude to life.
- iv. They should criticise the children if they should do any fault.
- v. They should not compare the mental retarded child with other children.
- vi. They should accepted the mistakes of the child in a happy manner and should solve it in a proper way.
- vii. They should keep watch full eye on their child.
- viii. They should behave democratically.

- ix. They should cooperate the child in any kind of necessity.
- x. They should understand the legitimate need of the mental retarded child.
- xi. They should build self confidence in their child.
- xii. They should provide guidance when necessary.
- xiii. They should give chance to their child to mix with other siblings.
- xiv. They should always keep watchful eye on the activities of the child.
- xv. Paying equal attention to sibling.

8.11.3. Role of the teacher to promote mental hygiene of mental retarded children :

- 1. The teacher must have deep love and affection for the mental retarded children.
- 2. The teachers should provide all kinds of services to these children.
- 3. The teachers should be a devoted one and should work for the mental retarded children with a holzeal.
- 4. The teacher should arrange meditation class for these students for few minutes. Either in the morning assemble or in a regular period to provide peace of mind calmness.
- 5. The teacher should be a friend philosopher and guide to these children.
- 6. The teacher should observe the mental retarded children carefully in and outside in this class.
- 7. The teacher should try to understand each child in a better way.
- 8. The teacher should suggest for regular medical check-up of the mental retarded children.
- 9. The teacher should keep patience when dealing with mental retarded children.

10. The teacher should developed some good habits among these children.
11. The teacher should not be moody and whimsical.
12. The teacher should not be an auto craft.
13. The teacher should inculcate democratic ideas in the children.
14. The curriculum should be suitable for the ability and attitude of the students.
15. Suitable methods of teaching learning activities of the mental retarded children should be followed.
16. Suitable co-curricular activities should be arranged for the mental retarded children to sublimate their instincts.
17. Healthy competition may be done among the children.
18. Goals set before the children by the teacher should be achieved by them.
19. Proper environment should be provided to the children to satisfied their vocational attitude.
20. On regulated punishment should not be given to mental retarded children.

8.12. Summary :

*** Meaning of Mentally Retarded :**

It has been also viewed that mental retardation is a scientific term which refers to sub average intellectual functioning which originate during the developmental period and is associated with impairment in adaptive behaviour. In spite of various attempts to define mental retardation, it is now a relative concept. There is moreover, a recent trend to lay emphasis on the functional aspects of mental retardation than on the structural ones. Also there is a trend to take it as a developmental concept rather than a statistical one.

*** Definitions of mentally retarded :**

- Tred gold (U.K., 1937)
- “A state of arrested to incomplete development of mind so severe that the patient is incapable of leading an independent life or of guarding himself against serious exploitation in the case of a child, that he will be so incapable when an adult.”
- American Publication
- “Who are so deficient in general intellectual ability that their inability to care for themselves, capable with their disruptive behaviour in some cases, is so severe, when compared with their age mates in the community that they require assistance, care and protection, in excess of that which average parents can be expected to provide during their childhood or that which average communities should be able to provide during their adulthood.”

*** Types of mental Retardation :**

- Educable Mentally Retarded (E M R)
- Trainable Mentally Retarded (T.M.R)
- Severely or profoundly Retarded.

*** Identification of educable mentally retarded :**

*** A study of factors related to reading retardation :**

Diagnostic Checklist

(Reading)

- Names of letters not known.
- Sounds of letters not known.
- Cannot visually synthesise words.
- Unable to combine sounds into words.
- Ineffective visual inspection of the various parts of words.

*** Characteristics of educable mentally retarded :**

- Physical characteristics
- Educational characteristics
- Intellectual characteristics
- Social Characteristics
- Emotional characteristics
- Behavioural Characteristics
- Occupational Characteristics

*** Integrating the educable mentally retarded :**

The educable mentally retarded children should get their education in ordinary schools as the normal children. The objectives of the integrated education for the retarded is to enable them to make some social econtacts and to get along with his other normal peer groups in a co-operative manner.

*** Teaching Strategies of the educable mentally retarded**

- Individualisation
- Learning by doing
- Need for learning readiness
- Repetition
- Short periods
- Concrete problems
- Graded Curriculum
- Projects

*** Remedial Programmes of the educable mentally retarded**

*** Remedial Programmes by the parents at home :**

- First thing is that they must accept the presence of the retarded children in their homes instead of cursing fate or themselves. They should have to reconcile with the situation boldly.

- Parents should realise that the retarded children can never become like normal children. They should not therefore waste time, energy and money to cure their children rather they should take care of the children and handle the situation jointly and suffer together.

*** Remedial Programmes by the teachers at a school :**

- The teacher should adopt the following techniques and principles for helping the retardades.
- The techniques are :
- Paired associates learning.
- Social learning.
- Effective verbal mediation
- Motor learning.
- Discriminating learning.

*** Remedial Measures by Indian Law**

- The Mental Health Act, 1987
- The National Trust for Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities Act, 1999

*** Etiology of Mentally Retarded Children :**

- Genetics conditions
- Prenatal problems
- Perinatal problems
- Postnatal problems (in infancy and childhood)
- Metabolic disorders
- Exposure to certain types of disease or toxins
- Iodine deficiency (cretinism)
- Malnutrition

*** Prevention of Mentally Retarded Children**

- Birth Control- The parents of the mentally retarded children should be advised to be operated open for birth control by which there should be check of birth of further mentally regarded children.
- Segregation- The mentally retarded children should remain away from the average children and their admission should be done in separate schools.

*** Mental hygiene as remediation**

*** Meaning of Mental hygiene :**

- Mental hygiene depicts that the teacher should tend the children for the development of social attitude, training social skills and to enable them to develop better personal and social adjustment. Some definition of mental hygiene are stated below which will help to understand its meaning in a better way.

*** Role of parents to promoting mental hygiene :**

- parent should providing adequate affection and love to the mental retarded children.
- They should provide conducive environment in the home.
- They developed proper attitude to life.

*** Role of the teacher to promote mental hygiene of mental retarded children :**

- The teacher most have deep love and affection for the mental retarded children.
- The teachers should provide all kinds of services to these children.
- The teachers should be a devoted one and should work for the mental retarded children with a holzeal.

8.13. Key Words :

1. Mental Retarded- Back word in mental development.
2. Subnormal- Below or less than normal intelligence.

3. E.M.R- Educable Mentally Retarded
4. T.M.R- Trainable Mentally Retarded
5. P.M.R- Profoundly Mental Retarded.
6. 3 (Three) R- Reading Writing Arithmetic
7. 3 (Three) A- Personal Adequacy, Social Adequacy, Occupational Adequacy.

8.14. Questions for self study

1. What do you mean by mental retardation? Explain with definition.
2. Who are the educable mentally retarded ? Give the identification of educable mentally retarded children.
3. Discuss the characteristics of educable mentally retarded children.
4. How do you integrate the educable mentally retarded ?
5. Discuss the teaching strategies of mentally retarded children.
6. Discuss the remedial programmes can be taken for the educable mentally retarded children.
7. Discuss the etiology of educable mentally retarded children.
8. Explain the measure preventions can be taken for the educable mentally retarded children.
8. Discuss mental hygiene as remediation of educable mentally retarded children.
9. Write short note on :
 - a) Educable Mentally Retarded Children (E.M.R)
 - b) Trainable Mentally Retarded (T.M.R)
 - c) Profoundly Mentally retarded
 - d) Mental Hygiene as remediation.
 - e) Prevention of mentally retarded.
 - f) Mental Health Act- 1987.

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CHAPTER-9

EDUCATION OF THE LEARNING DISABLED CHILDREN

Objectives of the Unit :

The students will be able to know about the following points when they will go through this unit.

- 9.1. Meaning of learning disabled**
 - 9.2. Definitions**
 - 9.3. Characteristics of learning disabled**
 - 9.4. Identification of the learning disabled**
 - 9.4.1. The process of identification**
 - 9.5. Integrating the learning disabled**
 - 9.6. Placement of learning disabled**
 - 9.7. Educational Programme of learning disabled children**
 - 9.8. Role of the teachers in educational programmes of the learning disabled**
 - 9.9. Summary**
 - 9.10. Key Words**
 - 9.11. Questions for self study**
 - 9.12. References**
-

9.1. Meaning of learning disabled :

The learning disabled children are those who possess an intelligent quotient below than the average children. They fall far behind other children of their age group in the class. Due to the weakness in study the learning disabled children require special assistance and instructions. They seek the sympathy and guidance of their friends and relatives when they face some difficulties. The teachers feel discontent in the achievement of the slow learners. As they take more time to learn than the amount of time, taken by the average learner. But views these

children as back ward or slow learner because they fall behind to face with the normal class room learning affairs.

The learning disabled children are not mentally retarded children. Like the average learners, they have the class room achievements in a slower rate. But as out class teachings are meant for the average level of students, naturally the learning disabled children meet the failure. This makes them frustrated and hopeless. It is also essential in the case of the mentally retarded children to place them in special classes but the learning disabled children may be taught in the regular classroom. Learning disabled children obviously show low achievement in reading comprehension, writing and arithmetic reasoning sometimes truancy or delinquency or other problematic behaviours are found with them.

If these children can be detected and helped to acquire the knowledge for effective living, they will be more useful to society and mankind.

The term backward or dull or slow learner or learning disabled may be used for these children as their scholastic performance is lower than the average learners of their age-norm let us go through some definitions given below.

9.2. Definitions :

1. Civil Burt :

“A Backward child is one who in the middle of his school is unable to do the work of class below that which is normal for his age.”

2. Burton Hall :

“The term dull is applied educationally to those in whom the rate of intellectual development is slow compared with other children

of their own age but not so tardy as to amount to feeble mindedness.”

3. Schonell :

“Backwardness pupil is one who compared with other pupils of the same chronological age shows marked educational deficiency.”

4. Samuel Kirk (1963) :

Learning disabled children (LDC) “as a group who have disorders in development of language, speech reading and associated communication skills.”

5. The Association for children with learning Disabilities (1967):

“A child with learning disabilities is one with adequate mental ability, sensory processes and emotional stability who has a limited number of specific deficits in perceptual, integrative or expressive processes which severely impair learning efficiency. This includes children who have central nervous system dysfunction which is expressed primarily in impaired learning efficiency.”

6. The National Advisory Committee on Handicapped Children (NACHC) in USA (1969) :

“Children with specific learning disabilities exhibit a disorder in one or more of the basic psychological processes involved in understanding or in using spoken or written language. These may be manifested in disorders or listening, thinking, talking, reading, writing, spelling or arithmetic. They include conditions which have brain referred to as perceptual handicaps, brain injury, minimal brain dysfunction dyslexia, developmental aphasia etc. they do not include learning problems which are due primarily to visual, hearing or motor handicaps, to mental retardation, emotional disturbances, or to environmental disadvantage.”

7. Kass :

“A child with learning disabilities is one with significant intradevelopmental discrepancies in central motor, central perception, or central cognitive processes which lead to failure in behavioural reactions in language, reading, writing, spelling, arithmetic, and/or content subjects.

8. Burt :

“One who in mid-school career is unable to do the work of the class next below that which is normal for his age.”

9. Reddy (2007) :

“Some terms associated with learning disabilities are perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and others. Their characteristics usually consist of limited cognitive capacity, poor memory, distraction and lack of concentration, and an inability to express ideas.”

10. Pankajam (2009) :

“A learning disorder is when a child has difficulty in learning or assimilating information to understand the world around them. The causes of learning disabilities vary including neurological deficit leading to abnormal functioning of the brain, maturational delay, foetal development, genetics, biochemical factors and medical factors- prolonged hospitalisation or recurrent ear infections, etc.”

11. The first annual report of National Advisory Committee on handicapped Children (1968) :

“Children with special learning disabilities exhibit a disorder in one or more of the basic psychological processes involved in understanding or in using spoken or written languages. These may be manifested in disorders of listening, thinking, talking, reading, writing, speaking, or arithmetic. They include conditions, which have been referred to as perceptual handicaps, brain

injury, minimal brain dysfunction, dyslexia, developmental aphasia etc. they do not include learning problems that are due primarily to visual, hearing, or motor handicaps, to mental retardation, emotional disturbance, or to environmental disadvantage.”

12. The Education for All Handicapped Children Act of 1975 in USA published in Federal Register (1977) :

“Specific learning disability means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculation. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia and developmental aphasia. The term does not include children who have learning problem which are primarily the result of visual, hearing, or motor handicaps, or mental retardation, of emotional disturbance, or of environmental, culturally or economic disadvantage.”

9.3. Characteristics of learning disabled :

The learning disabled show low intelligence scores and poor educational attainments. According to Kirk’s Educational Classification they possess I.Q. between 75 and 90. They take more time to learn than the amount of time taken by an average learner. It has been found that they pass on margin the school subjects. Sometimes they develop a tendency of self devaluation, frustration and lack of confidence.

According to Advaletal Hall aghan and Keufman, Sylvia, Vansickle and Davis the learning disabled children have the following characteristics.

- i) Poor language- (reading writing and spelling) ability.
- ii) Poor ability in making relative generalisations.
- iii) Poor in self directional ability and tendency to accept suggestions of others without considering pros and cons of such acceptances.
- iv) Poor in memory, creativity and critical thinking ability.
- v) Poor in ability to plan and work on one's own.
- vi) Poor ability in perception of abstract experience.
- vii) Poor in motor skill.
- viii) Tendency to get satisfied with superficial answers.
- ix) Ability to learn in steps.
- x) Poor in ability formation of concepts of general idea.
- xi) Negative self concept
- xii) Negative attitude towards learning.
- xiii) A few classified values
- xiv) In-adequate study and inquiry skills.

Characteristics of learning disabled according to Sandra :

1. Characteristics of cognitive learning problem :

- a) They learn at slow rate.
- b) They really in concrete learning, rather than abstract learning.
- c) They find it hard to retain information.
- d) They lack judgement and common sense.
- e) They are highly distractible.
- f) Their learning sets are difficult.
- g) They face troubles in establishing concepts.
- h) Their learning is rigid.
- i) Transfer of learning does not occur in their case.
- j) They learn from direct teaching and can not acquire skill in cidental.
- k) They are under-achievers.
- l) They cannot attend to the relevant stimulus dimensions.

m) They possess short attention span.

2. Characteristics of language and language related problems :

- a) They face difficulties in verbal expression.
- b) Their verbal reception appears inadequate for learning.
- c) Their articulation problems are evident. Commissions and substitutions.
- d) Their oral reading is more difficult than silent reading.
- e) They possess inappropriate speech quality (e.g. pitch, tone) stuttering.
- f) They find it difficult to carry on a conversation.
- g) They do not respond in complete thoughts.

3. Characteristics of Auditory perceived problems :

- a) They cannot attend to verbal directions.
- b) They give inappropriate responses to verbal question.
- c) They prefer visual tasks that require very little listening.
- d) They cannot determine the main idea from orally presented material.
- e) They find it difficult to discriminate between similar sounding words (e.g. Taptop, pen-pin)
- f) They cannot recall a story that was read out loud.
- g) They feel difficulty identifying sounds (e.g. train whistle, dinner bell, ambulance siren).
- h) They feel trouble identifying rhyming words.
- i) They leave off common prefixes and suffixes.
- j) They cannot repeat a series of words or digits that were orally presented.
- k) They have difficulties learning to count by memory.
- l) They have troubles writing from dictation.
- m) They feel strains to hear where is said.

4. Characteristics of visual motor problems :

- a) They feel difficulty to comprehend visual objects.
- b) They have awkward movements.
- c) They are easily distracted by visual stimulus.
- d) They are unable to discriminate shapes, colours and relationship.
- e) They possess poor hand writing.
- f) They have reversals in hand writing.
- g) They can not remember something seen.
- h) They have difficulties in fine motor tasks.
- i) They prefer oral learning task.
- j) They react to part, rather than whole.
- k) They have complaints of physical problem.
- l) They point at each word while reading.
- m) They have evident body tension.
- n) They cannot recognise common objects.
- o) They confuse similar letters
- p) They also confuse similar number.

5. Characteristics of Social-Emotional Problems :

- a) They can not sit still for an appropriate amount of time.
- b) They achieve below expectancy.
- c) They are unable to make friends.
- d) They are aggressive towards peers.
- e) They show the tendency of withdrawn and hypoactive.
- f) They feel anxious to try new things.
- g) They pose in constituent behaviour.
- h) They change their moods frequently.
- i) They are extremely fearful.
- j) They possess constant fantasising of lying.
- k) They show tendency at excessive body movement
- l) They show excessive body movement or twitching.

- m) They are extremely self-conscious.
- n) They have anti-school attitude.
- o) They do not work school attitude.
- p) They show the tendency of briting.
- q) They show the symptoms of inappropriate or excessive verbalisation.

6. Roster's identifying characteristics of learning disabled :

- i) The learning disabled children are unable to work independently.
- ii) They are easily confused.
- iii) They are slow in all areas i.e. academic, social, emotional and physical.
- iv) They are unable to understand complete game rules.
- v) They lack commonsense and reasoning level of group.
- vi) They are unable to understand and carry through the directions for assignments.
- vii) They are unable to think abstractly or to handle symbolic material.
- viii) They find it extremely difficult if they do not cope with the class on academic work.
- ix) They are unable voluntarily to concentrate.
- x) They break rules of conduct or of games and are often unaware of it.

7. Characteristics of learning disable children stated by Traver and Hallahan (1976) :

- i) Hyperactivity.
- ii) Perceptual motor impairments.
- iii) Emotional state (ups and downs, moodiness, anxiety etc.)
- iv) General coordination deficits.
- v) Disorders of attention (distractibility, perseveration)
- vi) Impulsivity.

- vii) Disorders of memory and thinking.
- viii) Specific academic problems in reading, writing, spelling and numbers.
- ix) Disorders of speech and learning.
- x) Equivocal neurological signs.

9.4. Identification of the learning disabled :

It has been derived by the different educational psychologists that different factors are presented in the identification of the learning disabled children. Besides each child has his own set of courses. However the general causes stated below may help to identify the learning disabled.

1. Low intelligence :

The learning disabled child possesses a very low intelligence quotient as compared with that of the average child. It is also significant that due to low intelligence the learning disabled child does not show the same proficiency as a normal child shows in the specific areas of mental traits and abilities. Burt in his study has reported that more than 95% backward children have their intelligence below average. These children need special assistance to cope with the school programmes.

2. Physical defects :

Due to physical defects the learning disabled child faces difficulties in social adjustments. About 15 percent of the backward cases suffer from physical or physiological defects. It makes the child to fall behind the average children. Such physical defects and abnormalities may be hard of hearing defective vision, left handedness stuttering, degenerative disorders, enlarged tonsils or adenoids, chronic coughs, bronchitis or any other glandular problems and being weak or crippled etc.

Sometimes the child suffers from general debility mal-nutrition and tuberculosis which hampers the regular attendance and study habit of the child.

3. Subnormal physical development :

The learning disabled children have the poor health conditions. It may be due to deficiency of protein at prenatal or childhood stage. Earning disability may also occur due to defects in memory, perceptual motor skills, closure generalisation, attending abilities, spatial orientation, verbal expression, visual auditory discrimination and association. Burt has viewed that the development or physical ratio of these children calculated from the physical and chronological age for height and weight has taken to be 95% as compared with 98.2 in the case of normal children. Moreover Vday Shankar states some children are born with an inherited lack of vitality or a weak developmental impulse which causes them grow slowly.

4. Psychological factors :

The psychological factors affect the scholastic achievements of the slow learners. It lead to provoke failure frustration, depression, anxiety, tension and other emotional factors. It is presumed that the child handicapped earlier needs to exceed the normal growth rate to recover. The physical or nutritional deprivation also interferes in the original condition of the child for which he develops certain irritative attitudes, sometimes when the child is taken away from oen school to another for a better education, he fiends relations with neighbourhood peers restricted and severed. This kind of limited social behaviour may tend to slow development rate. Even also the negative attitude towards schools, teachers and classmates, feeling of insecurity, feeling inadequate lack of self-confidence extremetimidty and negative parental attitudes have the adverse effects in the child development.

The absence or presence of parents and other children in the family and the nourishment of the child by the relatives affect the behavioural symptoms of the child in various ways.

5. Environmental Factors :

The child interacts with his own environment that might be home or school, which is responsible for his behavioural outcomes. Bad environment is the potent cause of making the child a learning disabled. The different dimensions may be involved in this respect like a psychological trauma. Such as absence of a mother a physical trauma, a car accident or social deprivation such as limitations arising from social contacts or contexts. The economical conditions of the parents affect the child as they can not supply to their sibling the requisite materials for living. Both social and economical conditions are responsible for psychological and educational complications. A child born in a rustic village is risk to the parents than the child living in townships. In rural areas the child avails a poor medical and educational service. The child goes to his school that is thatched house or old building and teacher are often less adequate and less qualified than at schools in town areas.

At the pre-natal period the physical and mental disturbance of a mother cause to the child a serious damage for which at irth he may be found to suffer from blindness, deafness and mental retardation. Another dimension may be potrayed here that a child deprived of his mother at three weeks of life suffers differents from a child deprived of his mother at nine years of life. It has been also viewed that an individual living in a particular society may not adjust to an another society having complex environment.

6. Genetic condition :

Due to the genetic conditions the children are likely to be affected. Some visual auditory, motor and cognitive defects are found with a child only for major abnormalities. They may arise from dominant or recessive defects or spontaneous mutations. If one or other parent has the condition half the offspring are likely to be affected Recessive conditions are determined by a gene which will only exert an influence in the offspring if both parents are carriers.

A third condition involves an aberrant replication or rearrangement of some of the chromosome material. The most common of these conditions is mongolism. It occurs approximately once in every 666 births and results from the presence of the additional chromosomes or the presence of a phenomenon known as translocation involving in appropriate fusion of chromosome material. The individuals tend to function around an I.a. level of 40, though a number of function at a much higher level, until recent years, many Mongols died of an early age. However with modern drugs most of the secondary disease problems have been overcome. Thus with greater longevity, the educational and social services are faced with greater problems of training community living and residential accommodation.

7. Atmosphere at home :

The children from unhealthy home back-grounds show some psychological problems which cause for learning disability. The effects of poor diet and hard physical labour are associated with the poor health, fatigue and diversion of attention a learning disabled. The nutritional deficiency under nourishment, poverty and lack of education of parents in the family play a major role in producing many deprived children with learning difficulties.

Generally the first born child is liked by the parents and he gets a lion share in all cases in comparison to other children. Sometimes this kind of tendency develops inferiority complex among the younger and they feel depressed in outsider when they are in their peer groups. The supply of toys to the child, the language used by parents and the dealings of father and mother towards the child in different situations in the family are also very important. The punishment and reward by the parents have also influence on the mind of the children. The problems of mild subnormality, hearing loss and other sensory defects, emotional and social maladjustment are more common in children coming from poor socio economic home background than such children who live in stable home environment. The constant quarrelling and fighting between parents and children, strict discipline, absence of peace and calm, lack of security, shortage of sleep and rest, unavailability of recreational social and health services are some of the authentic factors that create defective atmosphere at home.

8. Factors related to school :

If the school environment is not congenial to the child it inhibits the child's physical, mental, social and emotional development. The learning disabled children in the school don't show good performance in reading, writing and arithmetic. In other cases weakness in perception of visual pattern of words, weakness in auditory discrimination of speech sounds, wrongly attitudes defective vision, irregular attendance, speech defects and frequent change of schools are responsible for reading retardation. According to Vernon. The one universal characteristics of non-readers suffering from specific reading disability is their complete failure to analyse word shapes and sounds systematically and associate them together correctly psychoanalysts like Klein, Pearson, English and others state that reading disability is a sign of neurosis and it may cause due to fears, anxieties or conflicts of

various types. Truancy is also a major symptom found with the learning disabled children. It has been studied that 10 percent of children remain absent in the school on account of sickness which hampers their study progress. And among the factors that contribute to the faulty atmosphere in the school are disgusting relations between students and teachers, defective time table, inadequate method of teaching, unqualified teachers, undesirable atmosphere and inadequate curriculum.

9.4.1. The process of identification :

The identification of the learning disabled in the class should be done as early as possible. The teacher should take the responsibility of diagnosing their nature of problems and suggesting the necessary treatment. If the defects are caught and corrected rightly, then the learning disabled child becomes a more normal learner. The process of identifying the learning disabled children is mentioned below.

1. Through the help of case-study method, some information about the child's life may be taken. The data for the purpose may involve home life, emotional control, temperament, scholastic record, interests, leisure, pursuits out of school activities and attitude towards school and different subjects.
2. The intelligence of the slow learners should be determined by standardised intelligence tests. Both verbal and non-verbal intelligence tests may be used a number of times to study the potentialities of the child.
3. Besides, intelligence, the sensory acuity, steadiness speed and accuracy of movements, attention and memory should be explored.
4. Then the medical examination should be conducted including examination of eyes, ears, central nervous system, speech organ and throat.

5. All the medical examinations should be followed by psychological tests vividly.
6. The environment factors e.g. physical, mental and social problems should be experimented carefully.
7. The observation method and situational tests may be conducted to know the behavioural tendency of the child in different situations.
8. The teacher may assess the attainment of the child in the subjects like reading spelling and arithmetic administering standardised tests.
9. The teacher may go through the study of cumulative school records in order to make easy comparison between I.Q achievement physical and mental health and social adjustment.
10. Some informal tests and games like picture games lightening flash game, memory test general information quiz and orientation game assist the teacher to dignose the mental and emotional problems of the child.

9.5. Integrating the learning disabled :

Schonell and other have suggested that the learning disable children should be admitted in ordinary schools for a better type of learning than the special schools. But the provision for special classes and other precautions should be there to integrate these children. The use of special aporach by giving them more individual help and attention in a small group will profit them to make their experience lucid and lofty. Hence the special classes in ordinary schools are preferable to special schools for the reason that the learning disabled can join in many out of school activities and other non-academic pursuits with normal children and in this way acquire a sense of normality. However, it is suggested that these special classes should be small and should include between 10-15 children.

While the remedial teaching courses are taken by the teacher in an ordinary school, it should be followed by the general methods suggested below.

1. Traditional grade system, and traditional curriculum does not work in the case of disabled children. Hence method, material and organisation should be evolved keeping in view the real situation.
2. There should be friendly approach in remedial teaching and the work should be so graded as to give to each child some experience of success.
3. Use of art, music and drama is found useful in the development of interests, social skills and confidence learning disabled children.
4. The teaching material must be very carefully graded, keeping in mind the requirement and level of children.
5. There should be short frequent lessons rather than a few long lessons every week.
6. The learning disabled children are able to comprehend concrete ideas than abstract ideas, they are thing minded, eye minded rather than word minded and thought minded.

9.6. Placement of learning disabled :

The work of placement of the learning disabled is an important part of educational service. Its aim is to prepare the child for an efficient citizen of the country and to adjust in a suitable work with supply of proper educational facilities to maintain his livelihood. Such a service, integrated with home support. Also enables us to know when problems arise in other aspects of living such as home and leisure-time behaviours.

The educator must take responsibility for providing or producing an environment where the child can grow and accelerate his

development. The later he comes into the educational environment and more difficult it is going to be to overcome problems and minimize the accumulation of learning difficulties. It would therefore seem wise for education authorities to make provision for preschooling, long before the age of five years to help the learning disabled.

However, education not only involves pre and post school activities in terms of the child's age but is also concerned with home living, leisure time and work training and performance. Our education needs to encompass a much wider range of subject-matter and practical experience and this can be done only by the integration of a multidisciplinary team. Many of skills which are required for teaching the learning disabled children can be carried out by people with little training provided they are under skilled supervision parents, teachers and volunteers should be encouraged to join their hands in his service by which it should be a launching programme for the rehabilitation and remedial services of the learning disabled through an integrated system of education.

9.7. Educational Programme of learning disabled children :

The learning disabled children are the potential children. The children who possess the intelligent quotient below 75 (Kirk-1972), they do not show improvement among the average in ordinary school. It is better to give them admission in specialised schools. But those children with intelligent quotient between 75 to 90 can improve their standard if requisite provisions can be arranged for them. Different learning disabled children have the different problems. The teacher with keen interest should observe and investigate the difficulties and disabilities they have. It will help to utilise the human power more use-ful for the industrial and economical revival of a developing country like India. The

following Educational Programme may be afforded while teaching to the learning disabled.

1. Character training :

For the education of the learning disabled children disciplining is very important. It should be as free as possible character training is more important than to discern the intellectual aspects. The learning disabled children when guided in a modified manner and get the scopes to take their own decision a remarkable improvement is found in their sub-attitude and self-confidence.

2. Special Curriculum :

Most often, the curriculum is the root cause of the failure of the learning disabled children it should be taken into view by the members of the secondary Board, Universiteis and the experts assigned for different classes should also think over the problems. Normally the learning disabled cannot cope with the curriculum meant for the average or fitted children for which sometimes they show the tendency of truancy and even become drop outs in the end. Basic education, specific profession and vocation should be emphasised in the curriculum construction considering the needs and desires of the learning disabled.

3. Method of teaching :

The learning disabled children do not take the profit from the methods of teaching meant for the average learners in the class. So the method of teaching should be so such that the learners take active interests and develop positive attitude towards learning. The teacher should also provide varied of experiences and use shotter targets meaningful audiovisual aids for more flexible planning.

4. Participation in co-curricular activities :

The regular class teachings do not give much inspiration and stimulation to the learning disabled children. So there must be diversion of curricular activities. The children should be interested to take part in different co-curricular activities according to their interest and ability. The diversified courses challenging atmospheres, creative involvements and new values add rich-experiences to the knowledge of learning disabled children. The various co-curricular activities also provide opportunities to the children to pace with the school programme according to their own rate and choice.

5. Community participation :

In developed countries there is the provision of the participation of the community members in primary schools. Wolf views for parental participation in the education of exceptional children. In the school the parents day should be observed which helps the parents to know the school and to know their off springs in detailed. The voluntary service of suitable persons may be profitable for teaching of learning disabled during the extra school hours. This helps the teacher to work out the plans for the learning disabled children and the remedial instructions.

6. Role of the teachers :

The teachers is the main arch of teaching learning mechanism. He should be enthusiastic and co-operative by his nature. He should not develop the negative attitude towards the learning disabled. The words like stupid the back benchers the slow learners idiot should be avoided by the teacher in the class as it destroys the self-esteem and self-concept of the children. So teacher should encourage the activities, skills and proficiencies of the learning disabled children that will launch their self confidence which are very potent. He should avoid the

abstractness and make the class living by interesting stories and examples.

7. Role of the psychologists :

The learning disabled children have different kinds of educational and emotional problems. All these problems can be solved by the consultation of the psychologists. Some psychological conflicts and mental tensions of the learning disabled children need a sheer study, those children need special attention and valuable guidance to take the advantages from the different school programmes. If the abnormality tendencies go out of the control of the teacher the child may be sent to psychological clinics for necessary assistance.

8. Home visits by teachers :

In U.K. home visits by teachers are considered as the part of their duty. It strengthens the teacher-parent relationship. In our country though that provision has not been given due weightage, still some teachers take interest to consult with the parents in market place, in the shop when buying the materials, in the temple or fair or in the meeting else where and go through the problems of the children. But by the frequent visits to the home of the children help the home of the children help the teacher to accelerate the programmes meant for the learning disabled.

9. Medical check-up :

Special medical checkup should be done for the learning disabled children. The physical disabilities create problems in their learning and adjustment. Both the teachers and parents should help the child in this affair. The school should render regular medical check-up service and it should be inspired by the Government side also. Some students have their disease due to so many reasons. These cases should be detected

by the parental consultation and keeping age in the sentiment of the children.

10. Provision of extra schooling :

The special education system for the learning disabled has been supported by so many psychologists. According to Uday Shankar. If they are kept with normals, they will be pushed back and back ward will become more back ward with children of their own level. But they will be less conscious of their draw backs and they will feel more secure is a group of their own type where there will be more encouragement and appreciation and less competition. In developed countries there are the provisions of remedial teachers in primary schools. For remedial instruction to learning disabled children the school may also fix some extra time which will be a great use to them.

9.8. Role of the teachers in educational programmes of the learning disabled :

1. The teacher should be friendly and sympathetic while teaching to the learning disabled children.
2. He should understand the child whiel talking with him.
3. The teacher should not punish the child.
4. The teacher should be aware of the home environment of the child.
5. The parents should be informed by the teacher regarding the problems of their children and guidelines should be given to them.
6. The attitude of the teacher should not be critical while interviewing the parents.
7. While some major defects are found with the child by the teacher, he may be referred to a guidance clinic.

8. The teacher should make the child dependent on him to a certain extent while showing interest in his problems.
9. The teacher should be a good psychiatrist and psychologist.
10. The child should not be made to feel nervous excited or emotionally upset while treated by the teacher.
11. Individual attention should be paid to the child with all care.
12. The child should be provided with vocational guidance for a better future prospective.
13. The teacher should evolve self-confidence and self-assurance with the child.
14. The teacher should avoid favouritism.
15. The teacher should be highly qualified and well trained to teach the learning disabled children.

9.9. Summary :

*** Meaning of learning disabled :**

- The learning disabled children are those who possess an intelligent quotient below than the average children. They fall far behind other children of their age group in the class. Due to the weakness in study the learning disabled children require special assistance and instructions. They seek the sympathy and guidance of their friends and relatives when they face some difficulties. The teachers feel discontent in the achievement of the slow learners. As they take more time to learn than the amount of time, taken by the average learner. But views these children as backward or slow learner because they fall behind to face with the normal class room learning affairs.

*** Definitions :**

- Samuel Kirk (1963) :
- Learning disabled children (LDC) “as a group who have disorders in development of language, speech reading and associated communication skills.”
- The Association for children with learning Disabilities (1967) :
- “A child with learning disabilities is one with adequate mental ability, sensory processes and emotional stability who has a limited number of specific deficits in perceptual, integrative or expressive processes which severely impair learning efficiency. This includes children who have central nervous system dysfunction which is expressed primarily in impaired learning efficiency.”

*** Characteristics of learning disabled :**

*** Characteristics of learning disabled according to Sandra :**

- Characteristics of cognitive learning problem
- Characteristics of language and language related problems
- Characteristics of Auditory perceived problems
- Characteristics of visual motor problems
- Characteristics of Social-Emotional Problems
- Roster’s identifying characteristics of learning disabled
- Characteristics of learning disable children stated by Traver and Hallahan (1976)

*** Identification of the learning disabled :**

- Low intelligence
- Physical defects
- Subnormal physical development
- Psychological factors
- Environmental Factors

- Genetic condition
- Atmosphere at home
- Factors related to school

*** The process of identification**

- Then the medical examination should be conducted including examination of eyes, ears, central nervous system, speech organ and throat.
- All the medical examinations should be followed by psychological tests vividly.
- The environment factors e.g. physical, mental and social problems should be experimented carefully.

*** Integrating the learning disabled :**

- The teaching material must be very carefully graded, keeping in mind the requirement and level of children.
- There should be short frequent lessons rather than a few long lessons every week.
- The learning disabled children are able to comprehend concrete ideas than abstract ideas, they are thing minded, eye minded rather than word minded and thought minded.

*** Placement of learning disabled :**

- The work of placement of the learning disabled is an important part of educational service. Its aim is to prepare the child for an efficient citizen of the country and to adjust in a suitable work with supply of proper educational facilities to maintain his livelihood. Such a service, integrated with home support. Also enables us to know when problems arise in other aspects of living such as home and leisure-time behaviours.

*** Educational Programme of learning disabled children :**

- Character training
- Special Curriculum
- Method of teaching
- Participation in co-curricular activities
- Community participation
- Role of the teachers
- Role of the psychologists
- Home visits by teachers
- Medical check-up
- Provision of extra schooling

*** Role of the teachers in educational programmes of the learning disabled :**

- The teacher should be friendly and sympathetic while teaching to the learning disabled children.
- He should understand the child while talking with him.
- The teacher should not punish the child.
- The teacher should be aware of the home environment of the child.

9.10. Key Words :

1. Diversified course- Different subjects taken for the preparation of course or curriculum.
2. Extremetimidty- Easily Frightened to way great extent.
3. Auditory- Concerned with hearing.
4. Psychological Trauma- Emotional shock
5. Physical Trauma- Affected condition of the body caused by a wound or external violence.

9.11. Questions for self study

1. Define learning disabled. State their various characteristics.
2. Discuss the identification of learning disabled.
3. Discuss the placement of learning disabled and explain their characteristics in brief.
4. Discuss the educational programme for the learning disabled children.
5. Discuss the role of teacher in educational programme of the learning disabled.
6. Write short note on :
 - a) Write three definition of learning disabled.
 - b) Identification of learning disabled.
 - c) Write two characteristics of learning disabled.
 - d) Roster's identifying characteristics of learning disabled.
 - e) Write three educational programme of learning disabled.

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CHAPTER-10

EDUCATION OF JUVENILE DELINQUENTS

Objectives of the Unit :

The students will be able to know about the following points when they will go through this unit.

10.1. Introduction

10.2. Meaning of Juvenile Delinquency

10.3. Definitions of Juvenile delinquency

10.4. Characteristics of Juvenile delinquents

10.4.1. Characteristics by Sheldon and Gulecks

10.5. Types of Juvenile Delinquents

10.6. Etiology of Delinquents

10.7. Prevention of delinquency

10.8. Education programmes for the Juvenile Delinquents

10.9. Role of the teacher in educational programmes of Juvenile Delinquents

10.10. Summary

10.11. Key Words

10.12. Questions for self study

10.13. References

10.1. Introduction :

Child's personality is shaped in the family as well as in the society when he comes in contact with the social atmosphere. As per his growth and development, he involves himself in so many activities and learns many things from others. But due to some faulty activities he is blamed and punished by his parents and teachers. If we seek for the reason it must be either due to the persuasion of the peer group or as to his won will. Being preyed by the instincts sometimes children are motivated to do wrong things which are not socially approved. This kind

of behaviour is unsocial in nature. The individual is confined in the society by the social laws. He enjoys the privileges of the society being abided by certain norms. When one crosses the boundary of the social laws by his arrogant attitude and causes harm towards any individual in the society such kind of conduct is considered as delinquency or crime.

10.2. Meaning of Juvenile Delinquency :

When a child performs any anti-social activity which is punishable in the law, he is named as a delinquent child. So, the delinquents are those who break the social laws. These teenagers do not think the right and wrong side of an event. They steal and damage the property and commit some odious activities like dacoity and murder. The delinquents are immoral in their nature. So, the term 'Juvenile delinquent' however, usually relates to adolescents who are old enough to come under the purview of the Juvenile courts; psychologically it is impossible to fix a definite age at which responsibility begins, if only because so much depends on mental rather than chronological age. Above all, delinquency is basically termed as violating behaviour that comprises only of those offences by minors belong to 16-20 age group followed by those who are 12-16 years old. Which might be punishable in the case of adults.

10.3. Definitions of Juvenile delinquency :

1. Robinson-

“Wayward, incorrigible or habitually disobedient child is called a juvenile delinquent.”

2. Cyril Burt-

“The offences included under delinquency comprise for the most part such breaches of law as would be punishable in an adult by penal servitude or imprisonment.”

3. **Healy-**
“A child who deviates from the social norms of behaviour is called delinquent.”
4. **Herbert Quay-**
“The delinquent, then, would be a person whose misbehaviour is relatively serious legal offence, which is in-appropriate to his level of development, is not committed as a result of extremely low intellect.... And is alien to the culture in which he has been reared”.
5. **Travis Hirchi -**
Delinquency is defined by acts, the detection of which is thought to result in punishment of the person committing them by agents of the larger society....”
6. **Hadfield -**
“Delinquency may be defined as anti-social behaviour”.
7. **Richard a Cloweed -**
“The delinquent act.... Is behaviour that violets norms of the society, and when officially known, it evokes a judgement by the agents of criminal justice that such norms have been violated”.
8. **Valentine -**
“Broadly speaking, the term delinquency refers to the breaking of some law”.
9. **Ohio code of the USA :**
“A juvenile delinquent is one who breaks the law, is a vagrant, persists in disobeying orders, whose behaviour endangers his own moral life as well as the moral life of others.”
10. **Plant :**
“Juvenile delinquents are persons who habitually respond to serious and prolonged frustration in aggressive ways.”

11. Sen :

“Delinquency is any form of behaviour detrimental to the well being of society.”

12. Klausmeier and Goodwin :

“A delinquent is a child or youth who repeatedly commits acts which are punishable as crimes.”

13. Good :

“Juvenile delinquent is any child whose conduct deviates sufficiently from normal social usage that it may be labeled anti-social.”

14. Coll :

“The delinquent is that an individual in whom instinctive drives are strong, conscience is weak, and the ego is based upon immediate pleasure without respect to the generally accepted norms of behaviour.”

15. Skinner :

“Juvenile delinquency is defined as the violation of a law that, if committed by an adult, would be a crime.”

16. Newmeyer :

“Delinquency implies form of anti-social behaviour involving personal and social dis-organisation.”

10.4. Characteristics of Juvenile delinquents :

The characteristics of delinquents are mentioned below :

- a) They are muscular and bold.
- b) They are restlessly energetic. Impulsive extroverted, aggressive and destructive.
- c) They are hostile, defiant, resentful, suspicious unconventional and non-submissive to authority.

- d) They tend to direct and concrete rather than symbolic intellectual expression and are less methodical in their approach to the problems.
- e) They are lack of affection, stability and moral standard. Parents are usually unfit to be effective guide for them.
- f) They so anti-social behaviour.
- g) They violets the norms of the society.
- h) They show relatively serious legal offences.
- i) They have low intelligence.
- j) They show the tendency of mental abnormalities.
- k) They can not judge different between right and wrong side of a situation or an event.

10.4.1. Characteristics by Sheldon and Gulecks :

Some Characteristics of juvenile delinquents are mentioned by Sheldon and Gulecks are stated below :

- i Physical : Mesosomorphic in constitution, muscular, energetic, and bold.
- ii Temperamental : Restless, impulsive, extroverted, muscular, energetic, and bold.
- iii Attitudinal : Hostile, defiant, resentful, suspicious, unconventional, and non-submissive to authority.
- iv. Psychological : Direct and concrete intellectual expression, less methodical in their approach to the problem, and disregard to elders.
- v Socio-cultural : Lack of affection and stability and low moral standard of parents and elders.

10.5. Types of Juvenile Delinquents :

Delinquency can be divided into the following categories as stated below :-

- i) **Social delinquency** : Social delinquency is marked from group behaviour where a number of young people form group and indulge in anti social activities such as stealing of bicycle, scooter and car, illegal sexual activities, fighting, challenging to the high authorities, destroying the public properties and such other activities.
- ii) **Individual delinquency** : Individual delinquency can be marked by an adolescent either in a good family or bad family. Sometimes to solve one's individual problem a young person can take a wrong attempt in the family, in the neighbour or in the society.
- iii) **Aggressive Delinquency** : In this type of delinquency the attack may be physical aggression torturing, damaging, properties at home and in school, forgery attempt to commit suicide.
- iv) **Temperamental Delinquency** : In this type of delinquency the girls may steal the materials during their menses period. It occurs due to some philological activities.
- v) **Simple delinquency** : This is one kind of anti-social behaviour. Due to the poverty when the need of the child is not fulfilled at home or in school or in social environment the child revolts and tends to steal or to do such kind of mischievous activities.
- vi) **Psycho-neurotic delinquency** : This kind of delinquency occurs when the child feels resentment due to frustration in sex urge or instinct. It may tend to him for truancy, telling a lie for stealing. This anti-social manner occurs for the child's repression tendency.
- vii) **Benign Delinquency** : In this kind of delinquency the child shows the tendency of truancy in a rainy day by running away from the school or to see opera, circus or films goes away outside, without taking others permission from home. This delinquency includes the breach of discipline or law or crime from legal point of view. From the general kind of view these children may be physically

sound but due to their ill mental health they do such kind of illegal activities.

viii) Reaction Delinquency : This delinquency is found with the child when he shows his reaction against the family or society. When he feels that he is the victim of the society. He breaches the rules and regulations of the society, customs and conventions.

However a list of various other forms of Juvenile delinquency are mentioned below :-

1. truancy
2. stealing
3. spoiling the articles of the school
4. bullying
5. telling a lie.
6. Sex delinquency
7. wandering aimlessly or vagrancy.
8. challenging attitude.
9. teasing.
10. smoking

10.6. Etiology of Delinquents :

Delinquent children have dish organised personalities. This may occur due to different kinds of factors which are stated below.

1. Problems of Alcoholism, Drug Addiction :

a) Problem of Alcoholism :

The young persons sometimes develop bad habits in their adolescent period which cause Juvenile delinquency alcoholism and drug addiction are some of the factors which motivate the adolescent to attempt some wrong works in the society by the extra money taking

from the parents adolescent come in contact with some bad friends and their indulged to alcoholism. Normally this kind of symptoms is found in a gang where by taking alcohol they move to create nuisance activities in the society. The adolescents involve themselves in this kind of mischievous activities without the knowledge of their parents and teachers they also involves themselves in some erotic activities sexual harassment stealing and challenging matters.

b) Drug Addiction :

Sometimes the adolescent are addicted to drug which is harmful for themselves and for the society. Coming in contact with bad companies they are indulged in such kind of affairs. Once their addicted to drugs they can not remain away from this. So they go for stealing the money or pick-pocketing. This tends them to do any kind of harmful in the family or in the society. By drug addiction there tempted to such extended that they can kill others or make suicidal attempt they create different kinds of indiscipline's inside and outside the home.

2. Individualistic factors :

- i) Some children become delinquent due to some physiological disorders in them.
- ii) Some girls show delinquent behaviour during their menses.
- iii) Low intelligence is responsible for anti-social behaviour.
- iv) Children become delinquent due to physiological disorder in them.
- v) Some girls show delinquent behaviour during their menses.
- vi) If motor and physical development of a child becomes more rapid or slower than an average then the behaviour problems arise.
- vii) Emotional immaturity.
- viii) Feeling of satisfaction in the company of anti-social elements.
- ix) Any negative stamp and forceful incitements which is controlled.

- x) Arousal of aggressive attitude towards parents, school and society.
- xi) Continuance of frequent trustation and conflict.
- xii) Stamp enmity insider or outsider the family.
- xiii) In security, remensful attitude and poverty.
- xiv) Lack of fulfilment of natural deseres like food, water, air, proper temperature rest and sleep.
- xv) Lack of friendship freedom, testity and keeping love relation.
- xvi) Lack of feeling proper appreciation getting respect and success in any social sphere.

3. Heredity factors :

- i) The family members subtering from backwardness, lurancy and epilepsy are inherited to their children for delinquency.
- ii) Due to the lack of verbal symbols grasping and appreciation of parents, children turns into delinquents.
- iii) As delinquency is an impulsive reaction the above consieousness, restlessness and pagracious attitude of parents affect the children to be delinquents.
- iv) Some traits of prents like physical defects in facial make up and body structure and responsible for delinquency.
- v) Mental defect or low I.Q of parents may cause delinquency in children.
- vi) Innate emotional unsuitability or disturbances inherited from present are responsible for delinquency.

4. Family factors :

- i) Lack of parental affection.
- ii) Loose or very strict discipline in the family.
- iii) Querels among the parents.
- iv) Presence of step-mother or step father.

- v) Divorce between the presents.
- vi) Employment of the presents.
- vii) Mental abarmelity in the mother or father.
- viii) Sexual defects in the mother or new being low character.
- ix) Over-inulgence by either of the parents.
- x) Poverty of parents.
- xi) High ambitions of the parents for their children.
- xii) Disputes regarding the achievement of the children.
- xiii) Comparing the child with other members of the family and broading him as interior.
- xiv) Insecurity or neglect of children by parents.
- xv) Indiscipline, abuse and partiality by the parents.
- xvi) Lack of proper recreational facilities of children in family.
- xvii) Lack of moral code of family.
- xviii) Lack of fulfilling the needs and desires of the children in the family.
- xix) Lack of the vocational opportunities of the children.

5. School factors :

- i) Bad treatment of the teachers with the children.
- ii) Bad discipline in the schools.
- iii) Lack of recreational facilities for the children.
- iv) Unattractive methods of teaching.
- v) Location of the school near industrial area, cinema halls and market places make the children delinquents.
- vi) Lack of facilities in games, sports and library.
- vii) Defective curriculum and communities system.
- viii) Lack of guidance and partiality of the teachers.
- ix) Unattractive school campus and lack of congenial atmosphere.

6. Social factors :

- i) Company of other delinquents and the maladjusted children.
- ii) Location of house near riff-raff area and gambling dens.
- iii) Visiting films depicting sexuality.
- iv) Service of small children in factories and industries.
- v) Watching sex channels in TV.
- vi) Sending irrelevant sex related messages and excited photos through mobile in whatsapp and facebook.

10.7. Prevention of delinquency :

Prevention may be taken for the children first who are becoming delinquents, second who have already become delinquent. In this regard the role of the parents, teachers social workers and government are very significant and essential. The following steps may be taken for the prevention of delinquency.

1. Role of the parents :

- i) The parents should give attention for the proper atmosphere in have.
- ii) Parents should not quarrel in the presence of their children.
- iii) The presents should develop right attitude towards their children.
- iv) They should not abuse the children for their mistakes.
- v) They should not be neither too strict nor too loose when dealing with their children.
- vi) In case of child's fault disobedience, obstinacy and quarrel some behaviour, bad habit the parents should not punish the child rather should solve it by through their love sympathy and affection.
- vii) Parents are the first teachers of the child. So they should possess the knowledge of guidance.
- viii) Parents should get training on child rearing and child psychology.

- ix) In case of joint family; parents should pay attention to the various needs and desires of their children.
- x) Parents should not give a large amount of pocket money to their children.
- xi) They should not allow their children for frequent moving to pictures in cinema hall or watching pictures in T.V at home for a long time.
- xii) Parents should retrain their children from smoking or any such type of bad habits.
- xiii) Parents should not show over-protectiveness attitude towards their children.
- xiv) Parents should keep a watchful eye on the friends of their children.
- xv) Parents should not in any circumstances reject the education for their children.

2. Role of the School :

- i) The teacher should be learned trained and of high moral character.
- ii) The interest and abilities of the children should be emphasised by the teacher in the school.
- iii) The lessons taught in the school by the teacher should be interesting and fascinating.
- iv) There should be provision well-equipped library to provide children text books, magazines, journals, story books and news papers.
- v) The school should provide health recreational facilities to the children.
- vi) Proper co-ordination should be established between homes and schools.

- vii) Provisions should be made in the school to solve the physical and emotional problems of the children by the physicians and psychologists.
- viii) The provision of audio-visual aids should be occupied by the school to make the lessons more attractive and interesting.
- ix) School should have proper facilities for curricular and co-curricular activities.

3. Role of the Society and State :

- i) Children are the wealth of the nation. So, social security school be provided to them for their proper growth and development.
- ii) Proper opportunity for the maintenance of livelihood should be arranged for the children.
- iii) Good schools should be established by the state and social agencies for all the needy children to get proper education.
- iv) Free education should be given to the children of poor parents and state should shoulder the responsibility for fulfilment of their needs.
- v) Good children-films should be produced by the state and social agencies. Besides, strict censor should be implemented on the law sexuality and violence films displayed by the film-hall owners.
- vi) The orphans should be cared properly and orphanages should be opened by the state in different places.
- vii) Beautiful children- gardens, children- parks and children clubs should be provided for the children to utilise their leisure time.
- ix) The illegitimate children should be cared properly and shelters should be arranged for them by the state to give them the status of a rightful citizen.
- x) State should give importance for compulsory enrolment of all children in school.

- xi) There should be free medical facilities for the delinquents for their treatment.
- xii) Guidance clinics for the delinquents should be established for their psychological treatment.
- xiii) Government should take steps to make the provision for those delinquents who commit any blunder or crime should be sent to the reformation centres instead of sending them to jail.
- xiv) Maladjusted parents are sometimes responsible for the delinquent behaviour of their children. So there is necessity for the psycho-analysis of those targeted parents.

4. Legal Provisions for handling the Juvenile Delinquents :

The 1860 Indian Penal code which was the first modified law of the land in this country under British Rule had sections 82 and 83 which related to juvenile offenders which also defined the lower age limit for criminal responsibility and in the modified 1884 and 1898 Codes. Sections 29 (b), 399 and 362 relate to the treatment of juvenile delinquents. These sections had the suggestion for socialized treatment of young offenders. The later Reformatory Schools Act of 1876 and its modified version of 1897 provided on all India basis that young offenders might at the discretion of the sentencing court be detained in reformatory schools for a period of three to seven years instead of undergoing a sentence of imprisonment.

The report of the Indian Jail Committee (1919-20) emphasised the treatment of the youthful offenders for their reformation. In pursuance of the recommendations of this committee, Madras, Bengal and Bombay enacted their Children Acts in 1920, 1922 and 1924 respectively. (The Bombay Children Act was revised in 1948). The main purpose of these Acts, in general, was to provide for the custody, treatment and training of the children who fall foul with laws. The Punjab

Borstal Act of 1926 was also enacted to provide for Borstal Institutes for the young. Bombay Children Act 1948 was applied in Delhi and in 1960 Government of India enacted the Children's Act 1960, for Union Territories and so also Haryana, a new state, enacted the Haryana Children Act 1974, which deals with the juvenile delinquents and neglected children and aims at their rehabilitations. (Bhatnagar and others- 2013)

5. Modern techniques by the psychologists :

- i) Burhard (1967) launched a programme for mildly retarded delinquents. These delinquents were kept in residential schools and their behaviour was punished or reinforced systematically.
- ii) Cohen (1965) used the method of programmed instruction on 16 delinquents to reach specific targets of academic achievement. If a learner completed a unit of the programme by scoring 90%, he was eligible to take examination on which he could earn reinforcement in the form of points. In this way, he was able to generate desirable educational activities in delinquents. (Rakheja-2012)

10.8. Education programmes for the Juvenile Delinquents :

- i) The school should be located away from the society locality.
- ii) The school building should be designed in an attractive and beautiful manner and it should be always kept neat and clean.
- iii) Proper arrangement of seats for each child should be done properly.
- iv) All the class-rooms should be decorated by the pictures of great persons of the soil and religious as well as historical paintings should be done in the walls.
- v) Big fields should be there very adjacent to the school building for playing delinquent kinds of sports and games.

- vi) To make the campus more beautiful for the children provision of flower-gardens should be there and a gardener should remain in charge of it.
- vii) Suitable curriculum and methods of teaching should be adopted by the teachers.
- viii) Religious historical and moral education provision should remain in curriculum.
- ix) Provision of organisation of debates dramas, music programmes and recitations should be there in the school routine to perform different kinds of cultural activities.
- x) The headmaster should give importance to physical education and children should be encouraged to participate in various kinds of and game according to their interest and abilities.
- xi) Special attention should be given in the school programme by the school authorities to keep eye on the proper utilisation of leisure time of the children.
- xii) The teacher should maintain cumulative records of the students properly.
- xiii) In the evaluation practicals an assignments should be given weightage then the theory papers.
- xiv) Meditation yoga class should be placed in daily routine work.
- xv) Moral lesson should be emphasised in the curriculum.
- xvi) Specially train teachers should be their who can counsel to the students to solve their personal problems.
- xvii) The delinquent children should be encouraged to chose and mix with good friends in the school.
- xviii) They should be involved in muscular activities.
- xix) If any delinquent behaviour is found with a child it should be reported to the counsellor and by interview or by standardized test the problem should be removed.

- xx) Parent – teachers relation should be strong and regular suggestions should be communicated to the parents properly.

10.9. Role of the teacher in educational programmes of Juvenile Delinquents:

1. The teacher should make the school a society in miniature for the socialisation of children.
2. Great persons from different social streams should be invited by the teacher to deliver lecturer and speeches to develop the social and moral character children.
3. The teacher should give importance to the mental hygiene of the children.
4. The teacher should be co-operative helpful and sympathetic to solve their problems.
5. The teacher should take interest for the physical, mental and emotional aspect of the children and in case of any defect arises he should consult with concern doctors and psychologists.
6. The teacher should inspire the children for the development of a fire character.
7. After intelligent test the classifications of students may be done.
8. The teacher should provide all kind of facility for the mentally backward children.
9. The teacher should keep a keen relation with the parents and should provide the detailed information time to time about their children.
10. The teacher should earn knowledge about the juvenile delinquents by attending various training programmes organised from time to time.

10.10. Summary :

*** Introduction :**

- Being preyed by the instincts sometimes children are motivated to do wrong things which are not socially approved. This kind of behaviour is unsocial in nature. The individual is confined in the society by the social laws. He enjoys the privileges of the society being abided by certain norms. When one crosses the boundary of the social laws by his arrogant attitude and causes harm towards any individual of in the society such kind of conduct is considered as delinquency or crime.

*** Meaning of Juvenile Delinquency**

- When a child performs any anti-social activity which is punishable in the law, he is named as a delinquent child.

*** Definitions of Juvenile delinquency :**

- **Robinson-**
- “Wayward, incorrigible or habitually disobedient child is called a juvenile delinquent.”
- **Cyril Burt-**
- “The offences included under delinquency comprise for the most part such breaches of law as would be punishable in an adult by penal servitude or imprisonment.”

*** Characteristics of Juvenile delinquents :**

- They are muscular and bold.
- They are restlessly energetic. Impulsive extroverted, aggressive and destructive.
- They are hostile, defiant, resentful, suspicious unconventional and non-submissive to authority.

*** Types of Juvenile Delinquents :**

- Social delinquency
- Individual delinquency
- Aggressive Delinquency
- Temperamental Delinquency
- Simple delinquency
- Psycho-neurotic delinquency
- Benign Delinquency
- Reaction Delinquency

*** Etiology of Delinquents :**

- Problems of Alcoholism, Drug Addiction
- Individualistic factors
- Heredity factors
- Family factors
- School factors
- Social factors

*** Prevention of delinquency**

*** Role of the parents :**

- The parents should give attention for the proper atmosphere in have.
- Parents should not quarrel in the presence of their children.

*** Role of the School :**

- The teacher should be learned trained and of high moral character.
- The interest and abilities of the children should be emphasised by the teacher in the school.

*** Role of the Society and State :**

- Children are the wealth of the nation. So, social security school be provided to them for their proper growth and development.
- Proper opportunity for the maintenance of livelihood should be arranged for the children.

*** Legal Provisions for handling the Juvenile Delinquents :**

- The 1860 Indian Penal code which was the first modified law of the land in this country under British Rule had sections 82 and 83 which related to juvenile offenders which also defined the lower age limit for criminal responsibility and in the modified 1884 and 1898 Codes. Sections 29 (b), 399 and 362 relate to the treatment of juvenile delinquents. These sections had the suggestion for socialized treatment of young offenders.

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*** Education programmes for the Juvenile Delinquents**

- The school should be located away from the society locality.
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- Proper arrangement of seats for each child should be done properly.

*** Role of the teacher in educational programmes of Juvenile Delinquents:**

The teacher should make the school a society in miniature for the socialisation of children.

Great persons from different social streams should be invited by the teacher to deliver lectures and speeches to develop the social and moral character children.

The teacher should give importance to the mental hygiene of the children.

10.11. Key Words :

1. Offender, Committing an offence
2. Criminal- Person guilty of a crime.
3. Crime- Offence punishable by law.
4. Temperamental- Liable to erratic behaviour.
5. Truancy- Stay away from a school without reason.

10.12. Questions for self study

1. What do mean by Juvenile delinquency? Discuss the factors responsible for Juvenile delinquency ?
2. Discuss the Characteristics of Juvenile delinquency ?
3. Discuss the meaning definitions and characteristics of Juvenile delinquency ?
4. In how many ways is delinquency defined by the people. Differentiate between criminals and delinquent.
5. Discuss how heredity, environment and society are causes of Juvenile delinquency ?
6. Discuss the measures for preventing the delinquent behaviour of children.
7. Discuss the education programmes for the delinquent children.
8. Explain the role of school for the prevention of delinquency.
9. Explain the role of the teacher in educational programme for the delinquents.
10. Discuss the types of delinquency.
11. Discuss the etiology of delinquency.
12. Why does a child becomes a delinquent ?
13. Give adaptive educational measures to deal with delinquents.
14. Write short notes on :
 - a) Delinquent child.
 - b) Identification of delinquent child.
 - c) Write three definitions of Juvenile delinquents.
 - d) Write five causes of delinquents.
 - e) Write five roles of teachers for juvenile delinquents.

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