

## CHAPTER VIII

# EDUCATION OF THE VISUALLY IMPAIRED

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*“Education must aim at giving the blind child a knowledge of the realities around him, the confidence to cope with these realities, and the feeling that he is recognized and accepted as an individual in his own right.” - Berthold Lowenfeld*

### 1. What is Education

**1.1 Special Education** : UNESCO (1983) has provided the most comprehensive and appropriate definition of special education.

*“Special education is a form of education provided for those who are not achieving, or are not likely to achieve through ordinary educational provisions, the level of educational, social and other attainments appropriate to their age, and which has the aim of furthering their progress towards these levels”.* It includes integrated as well as residential school education.

Gideon, John and others (1992) also consider special education as instruction that is designed to meet the needs of children who cannot profit from the regular curriculum. Carter’s Dictionary of Education as reported by Bernardino (1963) defines special education as:

*“The education of the pupils who deviate so from the relatively homogeneous group of so-called ‘normal’ pupils that the standard curriculum needs, involves modification of the standard curriculum in content, method of instruction, and expected rate of progress to provide optimum educational opportunities for such people”.*

Jangira (1986), however, defines special education as the process of making educational provisions to meet special educational

needs of children which can not be met by the arrangements available in ordinary education. By implication, both education of the talented and education of the disabled come within the purview of special education. Johnson (1994) disputes this contention and advocates that the “traditional term” special education is proposed to describe education of students with disabilities carried out entirely in an outside, parallel school system.

To explain Special Education, Stein (1990) prefers the Greek term “Pedagogy” which means “*Take a child by the hand and lead him into life*”. The greatest challenge is to lead children out of school and prepare them for life.

According to UNESCO (1983) Pedagogy is the systematic set of rules, or science involved in special education. The French term “*Pedagogie Speciale*”; Spanish term “*Pedagogia Especial*”; and Russian term “*Pedagogika Special'naja*” cover all branches of the science of education dealing with the upbringing and education of atypical children (UNESCO, 1983).

Pedagogy, thus covers all branches of education of the children with all categories of disabilities and includes special as well as integrated education.

## **1.2 Residential School**

According to Frampton & Kerney (1953), residential school for the visually impaired may be defined as:

*“A boarding school offering education and care to blind children from ages three to twenty-one, or from pre-school through the high school. Educationally speaking, these schools attempt to provide complete education and care for the blind children. These services include medical, academic, musical, social, vocational courses, placement, and follow-up.”*

Tuttle (1986) also confirms that the oldest, the most comprehensive and the most expensive delivery model is the residential school. It provides basic array of services:

- Instructional services including classroom, educational materials and equipment, offices and storage, teachers, aides and other specialists;
- Food services including fully equipped kitchen, dining room, cooks, and other personnel;
- Residential services including furnished rooms, linen, laundry, house-parents, and other personnel;
- Extracurricular and recreational services, both on the campus and the community;
- Health-care services including clinic and medical staff;
- Maintenance and administrative services.

The entire campus of the residential school is designed, equipped and staffed specifically to meet the needs of the visually impaired children. In addition to the classroom teachers, there may be other specialists in physical education, orientation & mobility, activities of daily living, music, craft teaching, occupational therapy, career counselling, vocational counselling, social work and psychology. The educational materials, educational and mobility devices and specialized equipment are accessible to all the students throughout the campus.

Gideon, John and others (1992) have defined residential school as:

*“A school in which the pupils are provided dormitory accommodation and live apart from normal family environment other than holidays and weekends.”*

Generally, a residential school avails grant-in-aid from the State Department of Social Welfare or such other department. It avails and mobilizes public support as donations, endowments, sponsorship of meals or special events. The residential schools are symbols of public charity, pity and compassion for the visually impaired children. Most schools are managed by public

charitable organizations and supported by the State Departments of Social Welfare.

According to Lowenfeld (1983), however, the residential school for the blind has undergone a decisive change in character. It is no longer an institution which children enter with the expectation that they will remain there until graduation, returning to the “regular world” only for vacation. It no longer harbors groups of youngsters which remain, by and large, unchanged for many years until their members are scattered into a world from which they have for a long time been apart. The school for the blind no longer is an organization that has practically no contact with the stream of life in the general public school system of the state. It is a part of the stream into which it channels the pupils who have become adjusted, and from which it receives those who need special training or temporary adjustment.

Frampton (1953) emphasize that the residential school has outlasted many social, educational, and economic changes and survives today rigorous and alert to its task. It will remain a bulwark for the future, insuring to the visually impaired the most productive and practical method of teaching.

### **1.3 Integrated Education**

It refers to the measures taken to provide educational resources, within the ordinary educational system, for those children who need them, the aim of integration is to avoid or reduce restrictions on any aspects of a child’s development which might result from segregated education. To Kristiansen (1989) to be integrated means to be transferred from a segregated or isolated position to an ordinary environment, with the rights and obligations that are linked to it.

According to Namgayel (1985) integrated education refers to meaningful involvement of such youngsters into ongoing regular educational programme to whatever extent it is feasible and beneficial, in a given instance, with the ultimate goal being

optimal academic and social as well as personal learning of each child.

According to Mani integrated education means providing equal educational opportunities and experiences to children with disabilities with the assistance of a trained specialist teacher in the least restrictive environment such as a regular school.

Integration is also referred to as day school, common school, ordinary school, regular school, normal school, standard school movement.

### **1.4 Inclusive Education**

As adopted in the Salamanca Framework for Action, Article 7, the fundamental principle of the inclusive school is that all children should learn together, wherever possible, regardless of any difficulties or differences that they may have. Inclusive school must recognize and respond to the diverse needs of their students, accommodating both different styles and rates of learning and ensuring quality education to all through appropriate curricula, organizational arrangements, teaching strategies, resource use and partnership with committees. There should be a continuum of support and services to match the continuum of special needs encountered in every school.

Johnson (1994) provides most comprehensive definition of inclusive education:

*“It is a flexible and individualized support system for children and young people with special educational needs (because of a disability or for other reasons). It forms an integral component of the overall education system, and is provided in regular schools committed to an appropriate education for all.”*

Johnson (1994) lists the following distinguishing features of inclusive education:

- a. It preferably takes place in a regular class, in the student’s nearest, regular school.

- b. Separation from the regular class environment, whether partially or in exceptional cases fully, occurs only where there is evidence that education in a regular class, accompanied by supplementary support and services, fails to meet educational, emotional and social needs of such students.
- c. It recognizes, and responds to, the diversity of children's needs and abilities, including differences in their ways and paces of learning.
- d. It encourages use of individualized teaching methods, adapted curricula and teaching devices.
- e. It is a team work of the whole school with class teacher provided with the following support services plays the major role:
  - Supply of special teaching aids and material.
  - Availability of assistance by parents, volunteers or older students.
  - Modification or adaptation of physical environment, curriculum, time table and evaluation procedure as per specific needs of the child.
  - Provision of inservice training to upgrade knowledge and skills of the class teacher.
  - Appropriate services of guidance and counselling.

Johnson (1994) concludes that *“with careful planning, it should be possible to meet the unique needs of all students within one unified system of education - a system that recognizes and accommodates for differences.”*

The following words of Benget Lindqvist, United Nations Special Rapporteur on Disability amply clarify the concept of inclusive education (UNESCO, 1998).

*“It is not our education systems that have a right to certain types of children. It is the school system of a country that must be adjusted to meet the needs of all children”.*

### 1.5 Significant Difference

Education *per se* is generally defined on the basis of aims or objectives, while special education is defined on the basis of the educant and the mechanics or arrangement for his education. Special education has the same objective as general education. There is improvement in the method, mode and system of imparting instructions as per the specific needs of the select target group.

All modes of education - residential, integrated and inclusive have the same goal of formal education of the disadvantaged groups. They, however, differ in the means of achieving the same. The residential education focuses at attainment of education through special schools, whereas integrated education aims at providing education to disadvantaged children within the ordinary educational system.

Mainstreaming in the United States, Integration in the United Kingdom and India, Normalization in Scandinavian countries, though differing in conceptual and operational nuances, have the common denominator of educating children with special needs, as far as possible, in ordinary schools (Jangira, 1986).

## 2. Status of Education of the Visually Impaired in India

### 2.1 Acceptance in the Constitution

The basic structure of the Constitution of India as reflected in the Preamble ensures social, economic and political justice as well as equality of status and of opportunity to all citizens of India. It is thus constitutional obligation of the State to ensure equal justice and equality to all citizens including persons

with disabilities and other marginalized groups of people.

Similarly, the Directive Principles of State Policy embody the aims and objects of the State under the republican Constitution e.g. that it is a Welfare State. In other words, it shall strive to promote welfare of the people by securing and protecting as effectively as it may a social order in which social, economic and political justice shall inform all the institutions of normal life

The State policy regarding right to work in case of disablement is enshrined in the Directive Principle under Section 41 of the Constitution of India. It states that the State shall, within the limits of its economic capacity and development, make effective provision for securing the right to work, to education and to public assistance in cases of unemployment, old age, sickness and disablement, and in other cases of undeserved wants.

As regard education, Article 45 of the Constitution of India on the Directive Principles of State Policy states “*the State to provide free and compulsory education for all children until they complete the age of fourteen years.*” The Persons with Disabilities Act, 1995 goes a step further and desires provision of free education to children with disabilities till the age of 18 years. Thus the Constitution of India has duly recognized provision of education to all children including those with disabilities.

Despite the spirit of social justice and equality as embodied in the Constitution, a negligible percentage of such persons has access to required services. Even after so many years of independence, hardly 5 percent visually impaired children of school age have been enrolled for education. While the country is at the verge of declaring education as a fundamental right, education of the visually impaired is still considered a welfare activity.

## **2.2 National Policy on Education (1986)**

For the first time, the policy considered “*Education for all*” as one of the cherished goals of national development. Universalization of primary education is a step towards realization of this goal. The policy recognizes that non-enrollment and drop-out of special groups of children is one of the major difficulties in the realization of this goal. One of the special groups, which has received inadequate attention so far, is that of children with disabilities.

Outlining the steps for ensuring equal educational opportunities for the children with disabilities, the National Policy on Education states that the objective should be:

*“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.”*

It envisages that “*wherever it is feasible, the education of children with motor handicaps and other mild handicaps will be common with that of others.*”

## **2.3 The Plan of Action (1986)**

The Plan of Action also stresses that as education of children with disabilities in special schools is very costly, it will be ensured that only those children whose needs can not be met in common schools be enrolled in special schools. Once they acquire communication skills and study skills, they will be integrated in common schools.

## **2.4 The Bahrul Islam Committee on Legislation for Persons with Disabilities (1988)**

The committee included education in the Draft Legislation. It mentioned that the State shall endeavour to provide free and universal elementary education to children with physical and mental disabilities. The State shall also provide assistance

to them for education and training at the secondary and higher levels. It also emphasized promotion of integrated education and continuation of residential education.

### **2.5 Central Scheme of Integrated Education for the Disabled Children** (Revised 1987,1989 and 1992)

With the emergence of the National Policy for Children (1974) which envisages coverage of children with disabilities as well, the Ministry of Social Justice & Empowerment introduces this scheme. It was a centrally sponsored scheme with 50 percent financial support to State Governments by the Ministry for this purpose. The scheme was liberalized during April, 1981 providing for 100 percent financial support to State Governments in addition to other facilities such as setting up of an assessment room, resource room, and special pay to special teachers etc.

With the coverage of education of children with disabilities in the National Policy on Education during 1986, the scheme was shifted to the Ministry of Human Resource Development.

The scheme purports to provide educational opportunities for children with disabilities in common schools. A large number of State Governments have already adopted the Scheme. They have established Administrative Cells for monitoring the Scheme. However, coverage of visually impaired children under the scheme at present is negligible.

In light of successful experience of Project on Integrated Education of Disabled (PIED), the scheme was revised further during 1992 to give an opportunity to the NGOs to implement the scheme.

### **2.6 Project Integrated Education for the Disabled (PIED)**

The National Council for Educational Research and Training implemented PIED during 1987 with the financial support from UNICEF in order to strengthen implementation of IEDC within the framework and goals of the National Policy on Education. UNICEF provided support for development of

instructional material, training of personnel, mobilizing community support, training of parents and coordination of the project in remote and rural areas and difficult places. It also extended support for identification and assessment of children with disabilities, establishment of resource rooms, provision of aids and appliances and allowances for children with disabilities. The approach adopted under PIED was Composite Area Approach and different models were adopted to experiment this approach.

### **2.7 Evaluation of IEDC**

The NCERT evaluated the IEDC in 14 States during 1989-90. The study established that IEDC is not being implemented properly due to lack of trained manpower and lack of coordination regarding the scheme (Azad, 1996). The States/UTs are facing problems in its implementation mainly due to lack of orientation, late receipt of grants from State/Central Governments and lack of coordination among different agencies associated with its implementation (Azad, 1996).

Gujarat, however, has taken a quantum jump in the implementation of IEDC. The coverage of children with disabilities was enhanced to 15,800 during 1999. The Gujarat Council for Educational Research & Training (GCERT), State Coordination Committee under the scheme has already identified 33,000 children with disabilities which need to be covered under the scheme.

### **2.8 Department of Special Education**

The National Council for Educational Research & Training (NCERT), a premier institute run under the auspices of the Ministry of Human Resources Development has established the Department of Special Education for promoting education of persons with disabilities. The Department has been playing a key role in the promotion of integrated education, implementation of UNICEF sponsored project on integrated education, teacher training and the implementation of District Primary Education Programme.

## **2.9 Persons with Disabilities Act (1995)**

To give effect to the Proclamation on the Full Participation and Equality of the People with Disabilities in the Asian and Pacific Region, the Parliament enacted the Persons with Disabilities Act (Equal Opportunities, Protection of Right and Full Participation) Act, 1995 which came into force with effect from 7th February, 1996.

The Act desires the appropriate Governments and local authorities to ensure that every child with a disability has access to free education in an appropriate environment till he attains the age of eighteen years. It encourages promotion of integrated, residential education, functional literacy, non-formal education, education through open school or open universities. It desires initiation of research for designing and developing new assistive devices and developing human resources.

It also ensures reservation of at least three percent seats in the educational institutes for persons with disabilities. It also encourages preparation of comprehensive education schemes with a variety of facilities for such persons.

### **2.10 District Primary Education Programme**

Evolving from the national experience with area-specific projects is an ambitious nation-wide plan, popularly known as District Primary Education Programme (DPEP), to put local communities in charge of education in their area and enhance investments in primary education. The DPEP attempts to little less than a complete overhaul of the system of educational planning in the country and to implement interventions in primary education in a holistic and coordinated fashion. It is being implemented in the mission mode through registered autonomous societies in each state. As a first step, a five year plan for the selected districts has been chalked out. The district planning process, however, is distinct in its emphasis on participation by all major actors in the education system, such as parents, guardians, teachers, educational administration and voluntary organizations.

From the year 1995, the education of children with disabilities has also been included as integral component of the programme. All such children in the selected districts would be enrolled for inclusive education at the primary level. The DPEP envisages following measures in this regard:

- Providing all children, including children with disabilities, with access to primary education either in the formal system or through non-formal education programme.
- Facilitating access for disadvantaged groups such as girls, socially backward communities and children with disabilities.
- Improving effectiveness of education through training of teachers, improvement of learning materials and upgrading of infrastructure facilities.
- Short training of selected primary teachers as regard imparting education to children with disabilities.
- Appointment of special teachers at district and cluster level for providing support services to class teachers.
- Provision of assistive devices and educational devices to these children.
- Involvement of experts in disability development in the State Co-ordination Committee.
- Orientation of Master Trainers at the State and District level in respect of educational needs of children with disabilities.
- Improving the quality of education through a process of demand creation for better services.

DPEP is an excellent and bold step towards promotion of inclusive education of children with disabilities.

## 2.9 International Opinion

Azad (1996) presents a summary of various Commissions, Declarations and Policies on Education which lay emphasis on making education accessible to each and every citizen including children with disabilities. Some of these statements are as follows:

- Everyone (including child with disability) has right to education (Universal Declaration for Human Rights, 1948).
- The education of children with disabilities should be inseparable part of the general education system (Indian Education Commission, 1964-66)
- Every effort should be made to develop integrated programmes enabling the children with disabilities to study in regular schools (National Policy on Education, 1967)
- The child with disability will enjoy all the rights enjoyed by everyone else (U.N. General Assembly Declaration on the Rights of Persons with Disabilities, 1975)
- Every effort should be made for wider expansion of education for children with disabilities (National Policy on Education, 1979).
- Special assistive devices and equipment should be provided for children with all categories of disabilities for their placement in regular schools (Working Group Report on Education of Children with Disabilities, May, 1980).
- Every individual regardless of individual differences has a right to education (World Conference on Education for All, 1990)
- A child with disability, who can be educated in regular schools, should be educated there only (National Policy on Education, 1992)
- Education of persons with disabilities is an integral part of the education system (UN Standard Rules with Equalization of Opportunities for Persons with Disabilities, 1993).
- Provision of Education to children with special educational needs within the regular education system (Salamanca Declaration, 1994).
- All the pre-primary and primary schools should be strengthened in terms of trained manpower and facilities to enroll children with disabilities (Rights of Children with Disabilities, NIPCCD, 1999)
- Enable by year 2002 at least 75 percent of all children and adults with disabilities to participate in formal and non-formal education programmes on an equal basis with non-disabled peers (Asia Pacific Decade of Persons with Disabilities).

## 3. Milestones in the Development of Education of the Visually Impaired

### 3.1 Residential Schools

Stein traces the beginning of the education of the visually impaired to a letter written by Diderot during 1748 and published in a newspaper in Paris as "*Letter about the blind for the use of those who can see*". Dr. Diderot, a physician by profession had two visually impaired friends who influenced his thinking.

It was only during 1784, that Mr. Valentin Huay established the first school for the visually impaired in Paris. Mr. Louis Braille, a student of this school later on went and invented the embossed six dot system of reading and writing, now popularly known as Braille.

Frampton (1953), however, maintains that in the United States, groups of visually impaired children were first taught in a residential school on 15 March, 1832 and in a public school (integrated education) on 17 September, 1900

### 3.2 Residential Education in India

1887: Soon the good news travelled abroad. Miss Annie Sharp, a missionary, founded the first school for the visually impaired in India at Amritsar. It was shifted to Dehradun during 1903, now called the Sharp Memorial School for the Blind after its founder.

Mr. Bihari Shah started Calcutta School for the Blind.

**1889:** An institution for the visually impaired run by the Canadian Presbyterian Mission established at Indore.

**1890:** Ms. A. K. Askwith established the Palayamkottai School for the Blind

**1893:** Ms. O'Connor founded a class for the visually impaired at Ranchi

**1896:** The Canadian Presbyterian Mission started a class for the visually impaired at Ujjain.

**1900:** Mukti Mission established a Home for the Blind at Kodgaon, Poona. Ms. Millard founded the American Mission School for the Blind which was subsequently renamed as the Dadar School for the Blind.

**1900:** Mr. M.M. Srinivas established the School for the Deaf and the Blind at Mysore.

**1902:** The Victoria Memorial School for the Blind established in Mumbai.

**1915:** The Baroda State founded the Mehsana School for the Blind.

**1917:** N.S.D. Industrial Home for the Blind established in Mumbai.

**1919:** The Blind Relief Association founded in Mumbai which established centres at Chalisgaon, Valsad and Surat.

**1922:** Mr. B. N. Mitter founded Patna School for the Blind.

**1925:** Happy Home for the Blind founded in Mumbai. Mr. Sahabzada Aftab Ahmed Khan founded Ahmadi School for the Blind at Aligarh.

**1929:** Madras Association for the Blind founded. Dr. Kugelberg founded Tirpattur School for the Blind.

**1932:** K. K. School and Home for the Blind founded at Bhavnagar.

**1934:** Mr. V. H. Telang founded Poona School and Industrial Home for the Blind.

**1939:** Govt. School for the Deaf and the Blind established at Hyderabad.

**1940:** Dr. Mary Scott started Kalimpong School for the Blind.

**1941:** Mr. Subhodh Chandra Ray founded All India Lighthouse for the Blind at Calcutta.

**1943:** St. Dunstan of London established the St. Dunstan's Hostel for Indian War Blinded at Dehradun. (The venue now accommodates the National Institute for the Visually Handicapped).

**1944:** Sir Clutha Mackenzie submitted "*Report on Blindness in India.*" The Blind Relief Association established in New Delhi.

**1945:** The Navrangpura School for the Blind established at Ahmedabad.

**1949:** Model School for the Blind established at Dehradun.

**1950:** Jagdish Patel established Blind People's Association at Ahmedabad.

**1951:** The National Association for the Blind established in Mumbai.

**1957:** Blind Boys Academy established at Narendrapur, West Bengal.

**1958:** Divine Light School for the Blind established at Whitefield, Bangalore.

**1960:** A School for the Blind established at Bhubneshwar.

**1962:** Andhra Blind Mission School established at Nasrapur.

**1963:** Bharat Blind School established at Shahadara, Delhi.

**1969:** Shree Ramna Maharishi Academy for the Blind established at Bangalore.

**1981:** A large number of schools for the visually impaired established across the country as a part of observation of the International Year of Disabled Persons.

**1995:** The Persons with Disabilities Act, 1995 envisages promotion of all modes of education including residential education.

**1998:** The Scheme of Assistance for the Promotion of Voluntary Education also supports establishment of special schools for visually impaired children with multiple disabilities.

**2000:** There are 300 schools for the visually impaired across the country covering 20,000 visually impaired children. This coverage is merely 3 percent of the population of the school-age visually impaired children in the country.

### **3.3 Beginning of Integrated Education**

Three groups of individuals played an important role in initiating integrated education:

- i. *Blind Persons themselves:* Many visually impaired persons themselves were not satisfied with special education. They took the initiative in encouraging integrated education.

This is true in India as well. Most of the initiators of integrated education like Jagdish Patel, Lal Advani, Ramnik Halari, Rehmat Fazelbhoj, Bhaskar Mehta, Narinder Kumar, Harshad Jani, Anil Patel, Ashir

Nallathambi, M. K. Chaudhary, A. S. Athalekar, Harshad Joshi are visually impaired persons.

- ii. *Progressive Teachers of visually impaired:* They discovered that the special education was not the right answer to education and complete development of the visually impaired. Hence they initiated integrated education.

- iii. *Parents of the Visually Impaired Children:* also realized that their visually impaired children must be educated along with the sighted children and they encouraged integrated education.

### **3.4 Milestone in the Development of Integrated Education Abroad**

The Scottish Education Act, 1872 made provision for the education of the visually impaired along with seeing children in the Public Board Schools. In 1879, the London School Board decided to carry out integrated education thoroughly and systematically.

Chauhan (1989) traces the origin of integrated education to Johann Witheim Klein, founder of the Imperial School for the Blind who mooted this concept in the early nineteenth century. He prepared a handbook to guide normal teachers in their educational ventures for the visually impaired. Samuel Gridley Howe (1871) voiced strong objections to “*social sequestration*” and advocated having the visually impaired “*attend the common schools in all cases where it is feasible.*” He considered special education unnatural and supported integrated education.

Madden and Slavin (1983), however, attribute the growth of mainstreaming in the USA to the Education for All Handicapped Children Act of 1975, mandating the “*least restrictive placement*” of children with disabilities. This means that many students who were formerly taught in self-contained special education

programmes were to spend as much time as possible in the regular programmes, with only as much special instructions outside the regular class as absolutely necessary.

According to Lady Campbell (1921), "*Blind children were placed with the seeing in Edinburgh in 1834-36, but lack of interest caused the plan to be given up. The first successful effort to place children in day school classes was made in Greenock, Scotland in 1868 only*". Gallagher (1982) feels that the signs of mainstreaming visually impaired children began to emerge during 1950 accompanied by a proliferation in the number of rehabilitation and adjustment training centres.

### **3.5 Beginning of Integrated Education in India**

Ras Mohun Halder, Principal of the Dadar School for the Blind and pioneer in the field of the education of the visually impaired in India refers to integrated education in the regular school system in his 1943 publication "*The Visually Handicapped in India*." He suggested establishing of a special class, in collaboration and co-ordination with a central sighted school, where these partially sighted children (not totally blind) children can congregate in a separate room provided with special equipment and under supervision of a properly qualified teacher. The children could, with advantage, attend almost all the regular classes with the normally sighted children.

*3.5.1 Bombay Experiment:* Halder (1943) reported that the first experiment of this nature was started in 1940 by the Dadar School for the Blind in cooperation with the Hume High School, Bombay. Two bright pupils after finishing their elementary education in the blind school were sent to regular schools. One boy stood first in all his examinations in a class of 40 sighted children.

Halder (1943) reported that this experiment was started out of a local need and through economic necessity. Till then there

was, however, no reported case of any visually impaired child living in his parental home and attending a sighted school anywhere in India.

*3.5.2 Joint Venture:* 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. This venture could not make much progress. Mrs. Rehmat Fazelbhoj, a pioneer of integrated education in India, launched integrated education during June, 1958 with the admission of two visually impaired students in the New Activity School, Mumbai. Taylor and Taylor (1970) also confirm this and report that during April, 1967 seven visually impaired children were enrolled here.

*3.5.3 The Palanpur Experiment:* on partial integration emerged in 1963. Starting with 4 visually impaired boys, it has grown steadily, and now has more than 100 such boys and girls. One finds reference to the needs of providing special education in the Education Commission Report (1964-66) which recommends placement of children with disabilities, as far as possible in ordinary schools.

*3.5.4 The Visnagar Project:* on the Itinerant Model of integration of the rural visually impaired children was initiated during 1981 with 11 children only. During 1990, there were 232 children enrolled in the regular rural schools. The movement has spread to other areas of Gujarat as well and enrollment more than 2000 children by 1999. Integrated education has been accepted as a component of the comprehensive community based rehabilitation of the rural visually impaired.

*3.5.5 The Central Scheme of Integrated Education for the Disabled:* was evolved by the Ministry of Social Justice & Empowerment during 1974. The Scheme has since been revised during 1987 in view of the National Policy of Education (1986).

3.5.6 *Ramakrishna Mission Vidyalaya, Coimbatore*: established a major personnel preparation programme for promoting integrated education.

## 4. Residential Schools

As explained earlier, under this system of education, the visually impaired children are provided residential accommodation, meals and clothes and they attend special schools. Most of these schools follow the regular academic curriculum. The students are also imparted training in various crafts, orientation & mobility and activities of daily living.

### 4.1 Advantages of Residential Schools

- Availability of specialized trained teachers
- Access to a wide range of special equipment
- As the size of each class is small, generally limited to 10 students it is possible to pay individual attention to each student
- Teacher has adequate time for each student
- Excellent system for the poor children as boarding and lodging is generally free.
- Well organized and clean environment
- A shelter for abandoned or abused visually impaired children
- Excellent facilities for the development of other skills i.e. music, chair caning, weaving etc.
- Adequate emphasis on plus curriculum i.e. Braille, activities of daily living and orientation and mobility

### 4.2 Limitations of the Residential System of Education

4.2.1 *Low Coverage*: Of the 51 countries that supplied information for a recent study by UNESCO (1988), 34 - most are developing countries - have less than 1 per cent of their total population enrolled in special education provisions, with 0.03 per cent

at the lower end of the range.

In line with this, WHO estimates that institution based services which are the predominant form of service delivery, cater to nearly 1-2 per cent of rehabilitation needs in developing countries (UNESCO, 1988). Other estimates have indicated that possibly less than 1 per cent of disabled children in these countries receive any educational assistance (Brohier, 1990)

4.2.2 *High Cost*: The residential services tend to be very costly due to the following factors:

- large expenditure on buildings, equipment, infrastructure, and establishment
- large per student expenditure on the specialist staff as the teacher-student ratio is as low as 1:5
- pupils need to be provided boarding and lodging facilities and other amenities
- there is hardly any financial contribution from the family

The trend in India is that such residential schools should provide completely free boarding and lodging facilities. The residential schools are run not as educational institutes but as charitable institutes.

4.2.3 *Restricted Growth*: As the students at such schools are labelled as “special” it makes it difficult for them to ever re-enter the mainstream.

Ahuja (1980) also supports this contention and maintains that the students coming out of the residential schools are totally unprepared for life. They are unfit for employment in the open market and their emotional growth and development of personality too are limited. Shukla (1990) admits that the students who pass out of these institutions also develop rigid attitudes and do not appreciate ‘give and take’.

*4.2.4 Isolation of the Inmates:* Stein (1990) goes to the extent of comparing residential schools with Ghettos i.e. completely isolating the visually impaired from the society. People recognize the need for special education but do not want to be a part of it. The approach is comparable to creating special rooms for the sick and dying. Under the pretext of doing something for the ailing, the society created special rooms and thus isolated them totally. The same logic could be true for the creation of special schools.

*4.2.5 Creating a Separate Group:* The residential schools, however, for the first time in history raised hopes for the visually impaired, hope for their liberation from mediocrity and hope for a better life. These schools, however, contributed to the phenomenon of “the visually impaired - a group set apart” These schools could cater to the needs of only a fraction of the visually impaired population, and lacked genuine rehabilitation concepts and provision for the reintegration of the visually impaired into the community.

*4.2.6 Resulting to Aggressive Behaviour:* Mathur (1985) after conducting a in-depth study on social aggression of a visually impaired inmate of a residential education and training programme concluded that since the subject was socially deprived of love, affection and economic support (Mayor, 1981), from his family, he gradually developed the tendency of hostility, which later on was manifested in aggressive behaviour. The factors which play a significant role in socialization and fostering kinship being absent in a residential school and coupled with social isolation, turned him to an aggressive individual. This study concludes with the observation that integration of the subject would save him from developing hostility and aggressive behaviour.

*4.2.7 Inadequate Services:* Jangira (1989) refers to the absence of adequate early intervention, parental participation and pre-school education programmes in such schools. There is also a conspicuous absence of programmes for meeting the educational

needs of visually impaired children with other disabilities like mental retardation and hearing impairment. There is also a lack of instructional material for improving access of visually impaired children to appropriate curricula to ensure equal educational opportunities. These areas of concern, as pointed out by Jangira are true for integrated education in the present context.

In the field of education as a whole, Jangira (1989) lists two more areas of concern i.e. isolation of special schools and the tendency of such organizations to consider similar organizations as competitive organizations; moreover most of these voluntary organizations confine their activities to a single disability.

*4.2.8 Poor Quality:* Saxsena (1982) is also very critical of the quality of education in the residential schools. The increase in the number of such schools has not been accompanied by a corresponding increase in qualitative excellence in the standard of education. The residential schools function as islands and are woefully ill-equipped to fulfill the expected role. Similarly Gallagher (1983) is not certain as to the potential role and impact of technology on residential schools.

*4.2.9 Kenmore* (1972) identified three major limitations of the residential education:

- i. It has been assumed in all countries that what was done in special schools was the best possible. Today it is known from many graduates of some of these schools, that there have been many things not good there.
- ii. A second assumption about special schools was that teachers gained special understanding and knowledge about visually impaired. This is not necessarily true. Often older teachers passed on to younger teachers poor ways of teaching various subjects, incorrect information about blindness, and peculiar attitudes

which hampered each succeeding generation of visually impaired children.

iii. A third assumption was that it was a kindness to visually impaired children to shelter them from the world of the sighted while they were young and to prolong their childhood as long as possible. Special schools around the world often kept visually impaired people in school until they were well into their thirties. The students of these schools thus always remained diffident and dependent.

Kenmore (1972) concluded that integrated education can help correct those old problems of special schools, can contribute to their improvement, for integration must be tied to special schools. As one type of programme flourishes, the other will also.

## **5. Integrated Education**

### **5.1 Advantages of Integrated Education**

According to Stein, integrated education for the developing countries is not a matter of option but a compulsion. According to Kenmore (1985) this system is more than an alternative; it is quite literally the only hope, for thousands of visually impaired children in developing countries, for any education.

According to Jangira (1985) most of the developing countries visualize integrated education as an expedient measure to reinforce efforts to improve access to school as a part of the universalization of basic education. International funding agencies UNESCO and UNICEF also support it as an alternative to the education of children with special needs in special schools.

A large number of educators and workers of the visually impaired have pointed out the following advantages of integrated education.

*5.1.1 Low Cost:* Expenditure on integrated education is comparatively lower as:

- there is no investment in building;
- no maintenance of hostels;
- no duplicating of land areas, play ground and equipment.

Advani (1990) maintains that integrated education in the Indian context is not as cost effective as is considered. If expenditure on resource room, material, salary of teachers and other incidental expenses are considered, the cost difference between residential schools and integrated education programmes would not be significantly large.

*5.1.2 Integration:* The integrated education enhances the social acceptance of a child due to the following factors:

- The child has the advantage of being in an environment which he shares with his sighted peers.
- Congenial company instead of isolation - a natural social environment.
- Participation in the general community life.
- Stays with his family thus ensuring family bonding.

Jangira (1991) while investigating sociometric choices relating to the academic, managerial and play related tasks and academic performances of visually impaired children in general schools found that these children are neither isolated nor below average in academic performance.

*5.1.3 Family Involvement:* The visually impaired children under integrated education also have their full share of family life along with their family members. It forces the family to feel and assume its responsibility towards the child. It also enables the child to feel that he is an integral part of the family.

Gardiner (1908), however, felt the other way. Sometimes the loving mother was the child's worst enemy, and unless the child was rescued in time from such a "good home" there would be a lot of hard work for teachers that might be avoided if the child came to school before the home-spoiling process had gone too far.

*5.1.4 Better Understanding of the Sighted:* Under integrated education, a sighted child obtains a better understanding of a visually impaired student, his needs, his aspirations and the true picture of a disability, it helps to reinforce that a disability need not bar a student from attaining academic excellence. It enables sighted students to appreciate the problems and feelings of the visually impaired and to learn proper ways of dealing with them.

*5.1.5 Better Acceptance:* According to Rehmat Fazelbhoj many misconceptions are destroyed when there is a close contact between visually impaired and the sighted children, and foundations are laid for the acceptance of the former into the world after graduation.

*5.1.6 Demonstration:* According to Han Zole, Head of Beijing Municipal Corporation Bureau (Shui, 1981), having disabled children in common schools is a positive factor. The courage and confidence shown by them in overcoming their difficulties is an object lesson to normal students in the cultivation of good character and it has had a unifying influence among the schoolmates. Similarly, Bailun Xu (1990) maintains that in China there has often been reduction in the drop out of sighted students in some schools as a result of encouragement from visually impaired students who had been integrated into the programme.

*5.1.7 Familiar Environment:* According to Horton (1988) transferring of knowledge is less of a problem in an integrated programme because the child is being trained in his home area. He also adds that as the parents watch the child being

trained by the teacher, they would be able to form a more realistic picture of what the child is able to do on his own.

*5.1.8 Community Participation:* Pickering and Haskell (1986) advocate that central to the argument for integrating disabled children in regular schools is the belief that they are members of the community and have the right to grow and develop inside that community. In Australia, the parents are pressing for 'Rights Legislation' encompassing the right of every child to be educated in a regular school; non-categorization of disability; and no child to be denied schooling on the basis of claimed ineducability.

*5.1.9 Right of a Child:* Thus integrated education is not being viewed merely as an option but as a right of every disabled child. Stein (1981) supports this contention and maintains that any society's ethical, moral and spiritual value can be measured according to not only whether or not it tolerated its members with disabilities, but whether it fully accepts them. One of our philosophers said the people with disabilities need society, but society needs its members with disabilities also. The Persons with Disabilities Act, 1995 also recognizes child's right to appropriate education.

*5.1.10 Conclusion:* On the basis of these observations, one may conclude beyond doubt that integrated education is the only viable available alternative for promoting universal education of the visually impaired in the developing countries. It scores better on the following accounts:

- social integration
- quality of vocational training
- cost effectiveness
- personality development
- coverage
- understanding of the sighted, etc.

According to Bourgeault (1970) integrated education is logical, practical, viable, educationally sound and can be accomplished at a minimum cost. According to Bailun (1990) integrated education is more a matter of necessity than a luxury.

## 5.2 Limitations of Integrated Education

*5.2.1 Low Enrollment:* This system has been prevalent in India since 1956. The progress is dismal in the following aspects:

- enrollment
- number of common schools admitting such children
- quality of training, and
- availability of educational material.

During 1990, only 3,000 (Advani, 1990) visually impaired children have been enrolled under integrated education.

*5.2.2 Declining Enrollment:* Findings of Dixit (1985) are very alarming. He established that the percentage of schools providing integrated education has declined from 83.72 percent during 1972 to only 50 percent during 1982. The reason for this drastic decline is attributed to the fact that initially the schools tried the new concept but were considerably discouraged for many reasons.

Dixit also established the phenomenal increase in the average number of pupils per residential school from 50.4 to 69.04 during the same period (increase is significant with  $t=2.26$ ). During the same period, number of pupils per teacher also increased from 5.6 to 6.8 (increase is significant with  $t=1.9$ ). The study also establishes that the residential schools have upgraded the level of education they impart. Average number of trained teachers also increased from 3.03 to 7.51 which is a significant increase ( $t=4.72$ ).

Frampton (1953) after analyzing the enrollment in the residential schools and in common schools in the United States over 75 years concluded, "It is interesting to note that, percentage-

wise, the number of visually impaired children enrolled in the residential schools for the visually impaired has not appreciably changed since the beginning of day school movement over the last 50 years".

*5.2.3 Apathy of Parents:* Mittal (1981) is of the opinion that in India where parental attitudes towards the visually impaired child are found to be mostly negative and where social prejudice is presently too strongly embedded to allow free and equal participation in the activities of the community and common school, the success and efficacy of integrated education needs to be objectively assessed.

*5.2.4 Not Suitable for All Children:* Fazelbhoj (1959), a crusader of integrated education, also admits that every visually impaired child, however, can not be educated in common schools. It can not be denied that learning with sighted children imposes a certain amount of strain on visually impaired child, there are times when the child finds himself on the sidelines, unable to participate in certain activities.

Ramakrishna Mission Vidyalaya (1989) reported that about 10 percent of identified disabled children are either over aged or below the school going age. In order to streamline these unserved children, the residential schools have been endorsed the responsibility of bringing them up by providing necessary pre-school training so that they can be inducted into integrated education.

*5.2.5 Difficult to Implement in Urban Areas:* Fazelbhoj (1990) points out that getting visually impaired child accepted in urban schools proves more difficult than rural schools. As most of residential schools are located in urban areas, the concerned authorities do not see the need for admitting a visually impaired child into a common school. The Third Asian Conference (1968), however, noted that the introduction of integrated education in rural areas may face some difficulties.

5.2.6 *Cropp* (1985) recognized that a fully integrated setting presented potentially major constraints for all pupils with visual impairment. He conceptualized these constraints in terms of time, equipment, staffing and physical environment. He recognized the following curriculum constraints in this respect:

- a. Teaching of specific skills of orientation, mobility and braille results into missing of activities undertaken by his seeing peers.
- b. A mainstream school can not normally offer access to the type of equipment available in a special school.
- c. Quality of equipment and educational material is restricted.
- d. The class teacher can not be expected to have knowledge of specialist inputs. Similarly the specialist teacher may lack familiarity with mainstream curricula and approaches.
- e. Many a times, school environment is unsuitable to meet the special needs e.g. lighting etc.
- f. There is an age-range dilemma in terms of effects of placing older visually impaired pupils with younger pupils.

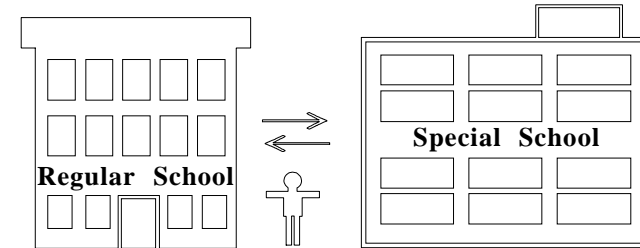
Integrated education even after 100 years of its implementation world over and 50 years of its implementation in India, has not succeeded in reaching even one-tenth of population of school-age visually impaired children in the developing countries. Integrated education by no means has emerged as penance for the promotion of appropriate education of the visually impaired.

## 6. Models of Integrated Education

Over the years, a variety of models of integrated education have been successfully developed in various countries. Most of these models are a combination of hostel facilities and complete integration. In India, almost all the models listed below have been tried at various locations. The most popular models in India are the Itinerant Model and the Resource Centre Model of integrated education. All the models have their own merits as well as demerits. The Itinerant Model of integrated education is, however, the most suitable for India.

### 6.1 Model I Semi - Special Schools

The visually impaired children are enrolled in the special schools. They are provided residential accommodation in the special schools itself. They attend some classes in the regular schools in the vicinity and they return to the residential schools after the same.



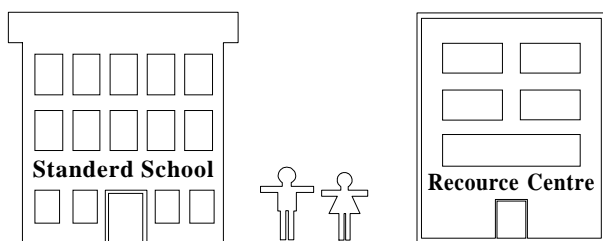
*Demerits:* As students return to the residential school, after attending some lectures at the regular school, they tend to isolate themselves. This model does not result into meaningful integration.

### 6.2 Model 2: Resource Centres Model

In this model, the visually impaired children are provided residential accommodation and resource room facilities near a standard school. They, however, attend the standard school in the locality.

They daily go from their resource centre to the standard school and come back after the classes are over. The Resource Centre has facilities for producing braille material and has educational aids and appliances for the visually impaired students.

**6.2.1 Acceptance in India:** This model is also explained as the residential annexe attached to a standard school. In India, this model is also termed as Semi-integrated Education. Most of the integrated education programmes supported by the Christoffel Blindenmission in Tamil Nadu have adopted this model. Most of the city based integrated education programmes generally follow this model.



**6.2.2 Merits:** As services of the Resource Teacher are available full time at the same location, the quality of support services and plus curriculum is better.

This model is feasible when there are at least four to eight students in a single school. This model is suitable for urban areas where a leading educational institute takes up the responsibility of implementation of integrated education.

**6.2.3 Limitations:** This model, however, is not feasible where the population of visually impaired children is scattered and it is not practically possible or feasible to enroll the required minimum number in one school.

According to Horton (1988), a Resource Room is feasible if there are four or more blind or low vision children attending

the same school. Otherwise, it is neither economically feasible nor good use of a special teacher's time to set up a resource room.

**6.2.4 Demerits:** The Resource Centres tend to become special schools as more and more visually impaired children are identified or enrolled. The advantage of low initial investment, cost effectiveness, active community involvement and complete integration which are the principal objectives of integrated education are not fulfilled in this model. For countries with resource constraints and large numbers of visually impaired children, this model is thus not desirable.

### 6.3 Model 3. Itinerant Model of Integrated Education

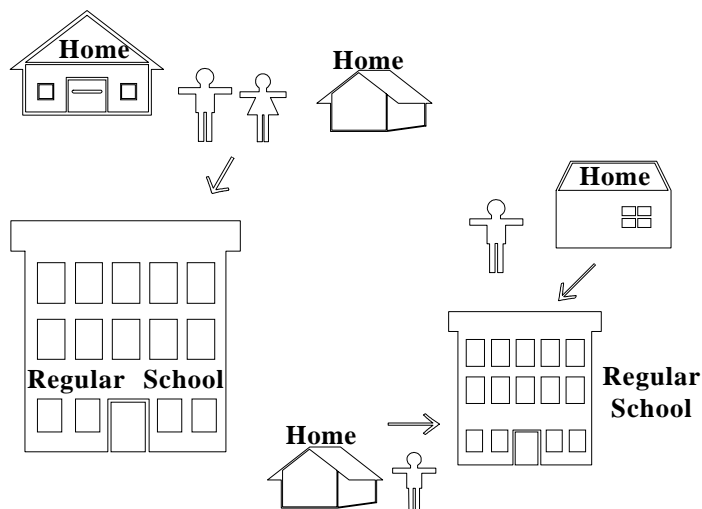
The visually impaired children stay with their families in their own communities only. They are enrolled in a regular school in the vicinity. They are provided services of an Itinerant Teacher and the education instructional material and equipment. The visually impaired students accompany other sighted students to the nearby school and return to their homes, like other children, after school hours.

**6.3.1 Mobile Teacher:** The Itinerant Teacher travels from village to village to provide special instruction and support services in the regular school or at the homes of the children. The number of times the Itinerant Teacher visits the school depends on the needs of the children. It could vary from one visit a week to as many as five visits a week (Horton, 1988). The difference in this model is in the movement of the teacher rather than the movement of the children (Bourgeault, 1970)

**6.3.2 Teacher - Student Ratio:** This ratio in this plan as approved under the Central Scheme of Integrated Education of Disabled Children is 1:8. Stein (1990), however, feels that this ratio should not exceed 1:6 if adequate attention is to be paid to each child. The actual ratio, at present, in the existing itinerant

programmes is 1:12 mainly due to the low number of trained teachers and scarcity of resources.

Horton (1988) mentions about a Teacher Consultant programme in which the Itinerant Teacher travels from school to school but meets and guides the class teacher and not the visually impaired student. This model is similar to the Itinerant Model but is as yet not prevalent in India.



**6.3.3 Merits:** The Itinerant model described above is the most effective model of complete and true integrated education. It is the only alternative for the children staying in the rural areas where regular schools exist. This model involves the family actively in the education of the children. This model has been adopted by all the projects initiated and encouraged by the Sight Savers and the National Association for the Blind. As this is the most appropriate model, it needs to be discussed in greater detail:

**6.3.4 Role of Itinerant Teacher:** The teacher is expected to perform the following roles:

- Mobility and Braille Teacher
- Instructor in Activities of Daily Living
- Teacher Consultant to the Class Teacher
- Arrange admission of the visually impaired students
- As an Investigator for identifying the visually impaired children in the assigned area
- Promoter of the idea of integrated education and complete integration of visually impaired children
- An Artisan as he is expected to train visually impaired children in various local trades and crafts
- Career Counsellor to the students completing school education
- Counsellor to the parents and the fellow students

**6.3.5 Selection of Visually Impaired Children:** Mr. Stein is of the opinion that the Itinerant Teacher should cover at the most 7 visually impaired children at any point of time. (The Central Scheme of Integrated Education of the Disabled Children recommends Teacher - Student ratio of 1:8 )

The Teacher - Student ratio in case of the project areas of the participating teacher is 1:12. In such cases where it is essential to maintain such a ratio due to financial constraints and other such reasons, the following procedure is recommended:

- Visit all the visually impaired children to be covered (12 in the present case).
- Administer a pre-planned questionnaire for evaluating the child in mental as well as social aspects
- Select 3 best children and initiate integration. Three best children may be selected on the basis

of the following criteria:

- i. Level of orientation & mobility
- ii. Language development

- Speaking ability
- Understanding ability

For establishing this, ask simple questions:

- \* names of family members
- \* name of the village
- \* routine activities
- \* name of items of daily use, etc.

- iii. Ability of the child to identify the world around
- iv. Level of sensory development, etc.

- Arrange for the admission of the selected 3 best children and start pre-braille activities
- Take the next 3 visually impaired students when these 3 are reasonably well settled.

During the first year, major emphasis should be socialization of the visually impaired children. Academic development should not be the only target.

- While children in groups 1 and 2 are being covered, the Itinerant Teacher should pay regular visits to other children at home to teach them initial skills.
- The visually impaired children who are well settled in the regular schools should be used as a demonstration to others.

*6.3.6 Stages for Preparing a Child for School:* After the 3 best children have been identified, the following steps should be followed before the child is admitted into the regular school:

*6.3.6.1 The first step should be sensory training* i.e. activating the remaining senses of hearing, touch, taste and smell etc. As far as possible simple techniques and locally available material should be used for this purpose.

*6.3.6.2 Pre - Braille training:* the next stage is imparting pre-braille training. Mr. Stein emphasizes that teaching of alphabets straight away must be avoided. Various Montessori aids should be introduced at this stage. The aim of this exercise should be to sensitize the tactile sense of the child and familiarize it with the concept of an embossed and tactual script like Braille.

*6.3.6.3 The pre-braille training* should culminate into the teaching of braille. Mr. Stein advocates a scientific approach to teaching of braille. He makes the following observations:

- Reading of braille should be the first step.
- Beginning should be made with recognition of dots.
- Writing of braille should be the last stage.

It is advisable to administer work sheets as suggested by Kirk Horton in his UNESCO publication on education of the visually impaired.

*6.3.7 Introduction to School:* It is desirable to follow the following steps:

*6.3.7.1 Orientation about the class room and the school -* the Itinerant Teacher should take the visually impaired child to the school one day in advance and orient him about the class room, toilet, staff room, prayer hall, place for drinking water and other facilities at the school.

*6.3.7.2 The Itinerant Teacher* should approach the Principal and explain to him the whole approach to integrated education. Otherwise the Principal may have doubts about the success of the programme.



6.3.7.3 *The Itinerant Teacher* should contact the class teacher alone. He should explain the programme to him and his role in the programme. The class teacher in turn may introduce the visually impaired child to other students in the class. The Itinerant Teacher should leave his address with the class teacher.

6.3.7.4 *The Itinerant Teacher* should encourage pairing of the visually impaired child with a sighted child who could help the former while going to the toilet, in group activities to facilitate the participation of the former child.

6.3.7.5 *The Itinerant Teacher* should also explain to the class teacher the special equipment which the visually impaired child uses. He should also explain the contents of the Braille Kit and the use thereof.

6.3.8 *Working with the Visually Impaired Child*: The Itinerant Teacher should perform the following roles:

- a. **Mobility Training**: He should provide appropriate

and adequate training in mobility to the child to enable his independent movement in the school.

- b. He should orient the child about the environment around his school. The following four locations must be explained to the child:

- class room
- toilet
- water tap
- play ground

- c. He should introduce the child with the Principal and the class teacher.

- d. Build up a good rapport with the child before initiating any formal education. The first lesson must definitely not be an arithmetic lesson!

- e. He should maintain a daily diary of the inputs given to each child and a log book depicting his travelling.

- f. He must not dominate the class teacher, he should realize that both roles are complementary.

- g. The frequency of visits of the teacher would depend upon the individual needs of the child. The frequency of visit should be more in the beginning and it may be reduced subsequently which would however depend upon progress of the child.

6.3.9 *Integrated Education Process*: A publication of the NAB Rural Activities Committee “*Guidelines for Social and Economic Rehabilitation of the Rural Blind*” has reported an Integrated Education Process which is reproduced below with certain modifications. This process is relevant and advisable for the itinerant mode of integrated education.

Activity	Person Responsible	Purpose
1. Identification of V.I. children (3-12 years age)	<ul style="list-style-type: none"> <li>● Field Workers</li> <li>● Itinerant Teachers</li> </ul>	<ul style="list-style-type: none"> <li>● For admission in the regular school</li> </ul>
2. Counselling the parent and the V.I. child	<ul style="list-style-type: none"> <li>● Field Worker</li> <li>● Itinerant Teacher</li> <li>● Project Supervisor</li> </ul>	<ul style="list-style-type: none"> <li>● Convincing the V.I. child to join the school</li> <li>● Motivating parents to send the child to the school</li> <li>● Popularizing integrated education of VI children</li> </ul>
3. Preparing the Child		
<ul style="list-style-type: none"> <li>● Orientation &amp; mobility</li> </ul>	<ul style="list-style-type: none"> <li>● Itinerant Teacher</li> </ul>	<ul style="list-style-type: none"> <li>● To enable the child to move around freely</li> </ul>
<ul style="list-style-type: none"> <li>● Daily Living skills</li> </ul>	- do -	<ul style="list-style-type: none"> <li>● To enable the child to take care of himself</li> </ul>
<ul style="list-style-type: none"> <li>● Braille Reading</li> </ul>	- do -	<ul style="list-style-type: none"> <li>● Introduction of Braille</li> </ul>
<ul style="list-style-type: none"> <li>● Braille Writing</li> </ul>	- do -	<ul style="list-style-type: none"> <li>● Access to material in braille</li> </ul>
4. Admission to the village school	<ul style="list-style-type: none"> <li>● Itinerant Teacher</li> </ul>	<ul style="list-style-type: none"> <li>● Education of VI child</li> <li>● Social integration</li> </ul>
	<ul style="list-style-type: none"> <li>● Joint Project Director</li> </ul>	<ul style="list-style-type: none"> <li>● To popularize the concept and feasibility of such education</li> </ul>

	<ul style="list-style-type: none"> <li>● School Headmaster</li> </ul>	<ul style="list-style-type: none"> <li>● To demonstrate the skills of V.I. children</li> </ul>
	<ul style="list-style-type: none"> <li>● Education Officer</li> </ul>	<ul style="list-style-type: none"> <li>● To create public awareness</li> </ul>
5. Involvement of class teacher and school staff	<ul style="list-style-type: none"> <li>● Resource/Itinerant Teacher</li> <li>● Class Teacher</li> </ul>	<ul style="list-style-type: none"> <li>● Social integration</li> <li>● Assistance in reading and school work</li> </ul>
	<ul style="list-style-type: none"> <li>● School Headmaster</li> </ul>	<ul style="list-style-type: none"> <li>● Participation in education, sports, and extra-curricular activities</li> <li>● Assistance in commuting and other daily living activities</li> </ul>
6. Incentive to class teachers	<ul style="list-style-type: none"> <li>● School Headmaster</li> </ul>	<ul style="list-style-type: none"> <li>● Active involvement of teacher Better attention and extra coaching</li> <li>● Adopting of special techniques by the class teacher for facilitating understanding of VI child</li> </ul>

7. Service Flow	<ul style="list-style-type: none"> <li>● Project Director</li> <li>● Resource/Itinerant Teacher</li> <li>● Class Teacher</li> </ul>	<ul style="list-style-type: none"> <li>● Cooperation of school management, teacher and fellowstudents.</li> <li>● Extra coaching of VI child</li> <li>● Morale boosting</li> <li>● Active involvement of parents, teachers and fellow students</li> </ul>
8. Evaluation	<ul style="list-style-type: none"> <li>● Headmaster</li> <li>● Project Director</li> <li>● Headmaster</li> <li>● Project Director</li> </ul>	<ul style="list-style-type: none"> <li>● On the spot solving of the inherent problems</li> <li>● Encouraging use of educational aids and material</li> <li>● Performance evaluation of the child and the programme</li> </ul>

#### 6.4 Model 4: Preparatory Schools

This mode of education is also becoming popular in the developing countries. In this model, visually impaired children are provided one or two years of preparatory services at a central place. This place may be a day centre or a residential centre. At the centre, the children are imparted training in skill development, pre-braille braille, orientation & mobility, activities of daily living and socialization. After this training, they are enrolled into regular schools. They may be covered under the Resource Model or Itinerant Model of education.

This model is a combination of the residential as well as regular school education. The beginning is made with special instructions with the objective of promoting integrated education.

This model as reported by Punongong (1990) has been adopted in Thailand. The children come to the education centre from their rural homes and stay for approximately one year in the hostel. First they are taught basic living skills, such as personal hygiene, independence in daily living skills, getting around with and without a cane, and trust in others. After acquiring these skills, the children enter the preparatory programme, held at a centralized place or the child's home attended by the Itinerant Teacher. They learn to read braille, use abacus and stylus. Then they are enrolled into a regular school under the Itinerant Mode of Integrated Education.

#### 6.5 Model 5: SPED Centres

According to Gregorio (1981) the most effective access route in the Philippines today that enables the school-age visually impaired children to benefit from services and education in the "least restrictive manner" is the Special Education Centre, popularly known as the SPED Centre.

The physical dimension of a SPED Centre may be anywhere from an unused classroom in a common school, a shared space in the library, or a school clinic, to a corner in a hallway or even an area underneath the stairways of the school.

The SPED Centre makes available to the school age visually impaired child a variety of educational services ranging from resource room instruction and partial integration for some, full integration in regular classes and special classes for the visually impaired whose multiple disabilities may prevent him from getting the most out of education along with sighted peers.

The distance of the home of each child becomes the determinant of the specific programme plan for him. For the visually impaired

child who resides far away from SPED Centre, itinerant teaching is adopted while resource room services are provided to students who live near the Centre.

The SPED Centre provides the following services:

- Survey, location, screening and assessment and referral services for prospective pupils.
- Selection of an appropriate programme plan viz. integration, partial integration, resource services in specific class etc.
- Provision of suitable requirements according to the specific type of disabling condition.

The operational capacity of the SPED Centre depends upon a number of local factors. In the Philippines, it has been demonstrated that the special education teacher can assume the leadership in setting up school-age pupils in regular schools which would certainly increase their chance for full participation in life.

The SPED Centre Model is combination of all the five models mentioned earlier as it takes care of all models of education of the visually impaired. This model is individual need-based and in consonance with the local conditions and the environment of the child.

## **7. Which System is Better**

The educators, professionals, administrators and workers in the field of education of the visually impaired have discussed, argued and debated this question for over more than one century. The question has still not been answered. Inclusive as well as integrated education have been the only subject of discussion at several world meetings.

The professionals have very strongly advocated that inclusive education is the least cost, whereas integrated education low

cost; both socially desirable and the only viable solutions of educating millions of visually impaired children. Some of them have gone to the extent that inclusive education is not an option but a compulsion, particularly for the developing countries. Hence, there is no question of comparison among different systems of education. The philosophical basis of inclusion and integration emanating from the normalization principle, labelling and equal opportunities principle is supported by reports of successful integration practices (Thomas, 1985)

Yet the residential schools have not only continued to provide education but have grown in number, have more enrollment and have improved the quality of education. It is only in this century that a large number of inclusive and integrated education programmes have developed, and now this system is operating in over 30 countries with Government support (Kenmore, 1985).

In India, all these systems are prevalent and being promoted. The State Governments are providing grants for the maintenance of special schools and hostels, whereas financial assistance for promoting integrated education is available under the Central Scheme of Assistance for Integrated Education of Disabled Children (Revised 1992). The nation-wide District Primary Education Programme aims at promoting inclusive education at the primary level across the country. The Persons with Disabilities Act (1995) envisages promotion of all the models of education. The National Policy on Education (1992) has emphasized the need for encouraging integrated education. At the same time, it has recognized supporting special education for children with specific problems and multiply disabilities.

From the available literature on residential, integrated and inclusive education and various research studies, it is difficult to clearly establish:

- Which system is better than the other?
- Within a particular system which particular model of education should be promoted?

- What is the possibility of adopting a middle path approach and what should be the level of inclusion, integration and residential support?
- Need for transition from one model to another and time span and criteria for the same?
- Need for evolving various criteria of establishing efficacy and evaluating performance of a particular system and testing reliability of that criteria.

Olipphant (1912) evaluated the integrated education, contrasting it with the residential school. He concluded, “*As to the educational environment, - for purposes of acquiring knowledge and modes of making livelihood, I think special education has the advantage, -for purposes of learning the art of living, I think integrated education has the advantage*”.

Tobin (1972), however, indicated that the integration/segregation debate centres upon beliefs, hopes, and long-term aims, and depends not so much upon empirically determined facts as upon “*a value judgment concerning the role the child is to assume later in relation to seeing persons*”

## 8. Middle Path Approach

Both systems of integrated and residential education and combinations thereof have stood the test of time and they are bound to stay. Inclusive education goes a step further in promoting education in a completely non-restrictive environment. The experience in Gujarat has established that with the promotion of integrated education, the enrollment in the residential schools has increased. The children who cannot be accommodated in the regular schools due to age, multiple disabilities, lack of availability of secondary level education in the vicinity and other such factors seek admission in the residential schools. The enrollment under inclusive education is also steadily rising.

Similarly, a number of residential schools are also performing the role of a resource centre, material production centres and

preparatory centres. The residential schools have also initiated teacher training courses for the itinerant teachers and class teachers under inclusive education. Many leading educationists of the visually impaired who have been promoting residential education are now promoting inclusive as well as integrated education also.

In India and other developing countries, all these systems of education are relevant and desirable. All these systems with their combinations should be promoted. It is, however, essential that the criterion for selection of the system of education should be based on the convenience of the child and his felt needs. The middle path approach has been advocated by a large number of experts across the world. The following statements of the most leading educationists across the world support this contention:

### 8.1 Target Oriented Approach

*8.1.1 Segmentation According to Level of Disability:* Van Cleve (1916) remarked in this respect, “*I am coming to the conclusion that the provision for the visually impaired in integrated education may better be confined to partially sighted who may be placed in conservation of vision classes (integrated education) and leave to the specially organized and equipped institutional schools the work with the totally or partially blind*”.

*8.1.2 Segmentation According to the Level of Education:* Namgayel (1985) stresses that integrated education should be adopted from the ninth standard onward. It is important that visually impaired students should develop some self confidence. They should get basic feelings of education or schooling before they are integrated into the regular schools. Whereas the Asian Conference (1968) recommended introduction of integrated education at all levels.

*8.1.3 Segmentation According to Availability of Services:* The Ohio report (1950) concludes that “*special classes in the public schools*” would be best for the majority of visually impaired children but that the residential school should be maintained

for them where such classes do not exist or where these children could not be educated. Cheah (1963) also supports this contention.

## 8.2 Need for Co-ordination

Lowenfeld (1946) desired co-ordination between residential schools and common schools. According to him the school for the visually impaired no longer is an organization that has practically no contact with the stream of life in the general public school system of the State. It is a part of that stream into which it channels the pupils who have become adjusted, and from which it receives those who need special training or temporary adjustment. These views were incorporated into "Oragon Plan".

W. R. Dry (1948) reviewed the Oragon Plan after it had been in operation almost for five years. His five conclusions were:

- i. It is not only possible, but entirely feasible to correlate the work of the residential school and the public schools.
- ii. Such a programme is not inimical to the interest of children without sight or those with low vision.
- iii. There must be cooperation between all agencies interested in the health, welfare and education of the visually impaired children.
- iv. Such programmes will, in all probability, achieve the following ends:
  - a. Increase enrollment in the residential schools.
  - b. Help by locating visually impaired children sooner and so ensuring maximum in physical restoration, and educational and emotional adjustment at an early date.
  - c. Decrease the time the children are required to spend at the residential school.
  - d. Enable the facilities of the residential school

to serve a much greater number of visually impaired children, so eventually decrease the number of such children.

- v. If such a programme is to be possible, administrators and staff of the residential schools for the visually impaired must broaden their horizons to include not only the visually impaired child with extremely low vision, but every child who has any visual impairment.

## 8.3 Complementary Roles

Bourgeault (1968) also supports this contention and maintains that integration is not a substitute for a quality residential programme but, rather, a complementary service. The residential school role is a significant one, but without a doubt, a changing one, and much must be done to strengthen their staff and to modify their curricula so that the over-aged beginner and the multi-impaired can be better served than in the past. He concludes, "*No programme in any state, region or nation is complete without both residential and integrated educational opportunities.*"

## 8.4 Education According to the Felt-needs of the Children

The Perkins School for the Blind proposed "The English Plan" in 1952. The Plan proposed:

- formation of council;
- placement of a number of pupils in public schools;
- establishing of braille classes;
- providing of educational material and equipment;
- co-operating with the State departments in determining the most suitable programmes for an individual child, either in residential school or elsewhere;
- and transferring him from one type of schooling to another as circumstances may direct.

The Plan advocated the philosophy that the educational programme should be fitted to the child, and not the child to the programme. The points to be considered in this context are: physical, mental and emotional maturity, eye condition, family status and the school facilities in his home town. In each case each child is treated as an individual case, and the answer is found on the basis of, what seems best for the child, not personal bias of one group or another.

Thomas (1985) concludes that our guiding principle must be to find the educational environment of those available to us, that best meets the needs of the child rather than to choose the most convenient integrated setting.

Azad (1996) also advocates that the education now is to be tailored according to the needs of the child. The child is not to be compelled to fit in the system without appropriate adaptations. The main concern of the educationists should be to provide conducive environment to children with disabilities in a manner that inspite of their limitations, they experience success and improve their quality of life.

### **8.5 Integrated Approach**

Jangira (1986) also proposes a service delivery mode which takes into consideration the strengths of both the modes to generate an “eclectic mode” which elevates it from a mere ‘mix level’ to the organismic integration of the two modes. Namgayel (1985) also supports this contention and advocates that the special school should work as a base school. It should provide reading material and required equipment.

Bourgeault (1970) also advocates that the emphasis should be placed on the needs of visually impaired children for special instructions and for independence rather than on administrative convenience.

The Third Asian Conference on Work for the Blind while recognizing the importance of integrated education, accepted

the value and role of special schools and recommended their development. The conference accepted the fact that integrated education was not the only means of providing education and observed that, where other alternatives existed, each child should be placed in a suitable programme after proper screening.

### **8.6 International Initiatives in Support of Inclusive Education**

Inclusive education has evolved as a movement to challenge exclusionary policies and practices and has gained ground over the past decade to become a favoured adopted approach in addressing the learning needs of all students in regular schools and classrooms. International initiatives from the United Nations, UNESCO, the World Bank and elsewhere jointly add up to a growing consensus that all children have the right to be educated together, regardless of their disability or learning difficulty, and that inclusion makes good educational and social sense (UNESCO, 1998).

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**The Persons with Disabilities Act, 1995** makes the following provisions as regard education,

**Section 26 :** The appropriate Governments and the local authorities shall-

- (a) ensure that every child with a disability has access to free education in an appropriate environment till he attains the age of eighteen years;
- (b) endeavour to promote the integration of students with disabilities in the normal schools;
- (c) promote setting up of special schools in the Government and private sector for those in need of special education, in such a manner that children with disabilities living in any part of the country have access to such schools;
- (d) endeavour to equip the special schools for children with disabilities vocational training facilities.

**Section 27 :** The appropriate Governments and the local authorities shall by notification make schemes for-

- (a) conducting part-time classes in respect of children with disabilities who having completed education up to class fifth and could not continue their studies on a whole-time basis;
- (b) conducting special part-time classes for providing functional literacy for children in the age group of sixteen and above;
- (c) imparting non-formal education by utilizing the available manpower in rural areas after giving them appropriate orientation;
- (d) imparting education through open schools or open universities;
- (e) conducting class and discussions through interactive electronic or other media;
- (f) providing every child with disability free of cost special books and equipments needed for his education.