

Interventions for Children with Disabilities

India's Constitutional and successive policy commitments to achieving the goal of 'Education for All' remains elusive due to certain disadvantaged groups remaining out of the fold of the formal education system. One such group is the 'disabled' who have received inadequate attention so far. It is a well-recognized fact that Universal Elementary Education (UEE) cannot be achieved unless all children are brought into schools and provided education that is equitable.

This stance has been emphasized in the National Policy on Education (NPE) 1986 and was strongly reiterated by the Report of the Committee for Review of National Policy on Education (NPERC) 1991 and revised Programme of Action (POA 1992. These policy resolutions have introduced enormous challenges at the implementation level for both educationists and practitioners. Mobilising the general education system and making it responsive to the educational requirements of children with special needs, has been highlighted repeatedly. By implication, what is being advocated either directly or indirectly is 'inclusive schooling' both as a means and an end of integrating the disabled child population into normal classroom settings.

Ending segregation and moving towards integration was considered to be a viable approach for the realization of UEE, and the Government implemented a centrally sponsored scheme - Integrated Education for Disabled Children (IEDC) - in 1974. This was followed up by the Project Integrated Education for the Disabled (PIED) in the GOI-UNICEF Plan of Operation for 1985-89, to strengthen the implementation of the former scheme. The aims were to increase enrolment, improve retention and achievement of disabled children in general schools through context specific delivery modalities.

India's commitment and subsequent movement towards 'inclusive schooling' gained further momentum with the World Declaration on Education For All (1990) wherein it was emphasized that 'the learning

needs of the disabled demand special attention' within the framework of 'Education For All'.

However, inspite of all the above efforts even today a large majority of the school population with special educational needs are either not enrolled on schools or do not receive an appropriate need-based education, finally dropping out of the school system, adding to the already sizeable out-of-school population.

If any measure of success is to be attained by the year 2000 A.D., it is imperative that the movement towards inclusive schooling is given the much needed boost that it requires. An apt vehicle for giving impetus to this movement is through the on-going District Primary Education Programme (DPEP), a major multi-faceted scheme seeking to overhaul the primary education system in the country. Intertwining of integration of the disabled in an evolving programme such as the DPEP, seems to be a befitting solution for a number of reasons. The 'essence of the DPEP is decentralized planning that is highly flexible and contextual in nature. These features are crucial to the implementation of successful integration of the disabled population who have a wide variety of specific needs, requiring continuous support from all sources. The existing infrastructure available in DPEP districts if utilized to its optimal capacity will definitely serve to give a boost to inclusive schooling in the country, which is still in its embryonic stage.

Magnitude of the Problem

Planning and implementation of educational services for the 'disabled' school going population is no simple task. A tremendous challenge faces planners, administrators, educationists and practitioners at all levels due to a number of major constraints discussed briefly below.

The first step towards effective planning and management is estimation of the size of the target group, Ironically, this is one of the hindering blocks due to non-availability of accurate information, incompatibility of various organisations, geo-scatter of the disabled and difficulties in their identification and categorization. Other problems that further aggravate the situation are:

- lack of awareness and acceptability within the community;
- lack of resources-financial, trained manpower and equipment in schools;
- inadequate school infrastructure and support systems;
- lack of special support or absence of flexibility in the conduct of examinations according to the needs of different disability groups;

- lack of appropriate staff development programmes amongst others.

The major premise on which all the drawbacks can be dealt with is availability of an accurate, comprehensive data base. Exact numbers of disabled in and out-of-school children are not available, although surveys have been undertaken periodically by various governmental and non-governmental organisations. The National Council of

Table 1

Projected Population of Children with Disability

(Figures in Million)

Projected Population of Children with disability in the age-group 5-14 YEARS(*)		3.19
Locomotor Handicap	1.48	
Hearing Handicap	0.65	
Speech Handicap	0.91	
Visual Handicap	0.15	
Mentally retarded children in the age-group 5.14*		3.60
Children with learning disability in the age group 5.14		3.60
Children with disability in the age group 16-18 years		2.20

* The 1981 figures of the survey by NSSO have been extrapolated on the assumption that population with disabilities would have grown at the same rate as the general population.

* Estimated at 1% of the population in the age group 5-14 years.

Education Research and Training (NCERT) has proposed to undertake such as survey in 1996-98 but the data may not be immediately available, especially if the DPEP is to be used as a vehicle of change. Therefore, in this particular case, planning will have to be based upon the National Sample Survey Organisation (NSSO) surveys 1981 and 1991 and estimates provided in the Revised Programme of Action (1992).

Table 2
Comparative Prevalence & Incidence
(Disability Wise)

Sector	1981			1991		
	Male	Female	Persons	Male	Female	Persons
Visual disability						
Prevalence rate						
Rural	444	670	563	471	548	525
Urban	294	425	356	263	346	302
Incidence rate						
Rural	32	45	38	22	28	25
Urban	23	38	30	15	25	20
Hearing disability						
Prevalence rate						
Rural	595	510	573	498	435	467
Urban	386	395	390	325	355	339
Incidence rate						
Rural	20	18	19	16	14	15
Urban	14	15	5	11	14	12
Speech Disability						
Prevalence rate						
Rural	379	228	304	333	208	273
Urban	342	207	279	285	182	237
Incidence rate						
Rural	6	2	4	6	4	5
Urban	7	3	5	5	4	5
Locomotor disability						
Prevalence rate						
Rural	1047	597	828	1345	784	1047
Urban	500	544	679	1170	728	962
Incidence rate						
Rural	64	42	53	64	42	53
Urban	61	47	54	65	39	52

Figures are for per 100,000 persons in all the tables above.

Source: Pandey & Advani, 1995, pp. 21-22.

Since our main concern is primary school age children, the number of children in the educable 5-14 year age group can be estimated as above. Recently, Pandey and Advani ¹⁵ have presented a comparative chart of prevalence and incidence of different disabilities based on NSSO1981, giving some indication of the stupendous task ahead, (See Table 2 on p. 301.)

It was found that "the prevalence in 1991 has marginally gone up as compared to 1981. In 1991, the prevalence in rural areas is 1.99 percent as against 1.84 percent in 1981. The prevalence in urban areas in 1991 is 1.58 percent as against 1.42 percent in 1981".

From the above, it is obvious, that the task ahead is phenomenal and requires immediate attention and priority. To facilitate the process of planning, it is imperative that at the outset the target group be defined in clear terms, as this will reflect on the identification, planning, assessment, development and implementation of strategies for the group in question.

The Target Group

The target group comprises five disabilities - visual, speech and learning, mental retardation, learning disability and orthopedic. These are being operationally defined for the purpose of this proposal.

Visually Handicapped

- (I) Blind - are those who suffer either of the following conditions:
 - (a) Total absence of sight;
 - (b) Visual acuity not exceeding 6/60 or 20/200 (snellen) in the better eye with correcting lenses;
 - (c) Limitation in the field of vision subtending an angle of 20 degrees or worse.

Low Vision

- (II) Low vision children mean children with impairment of visual functioning even after treatment or standard refractive correction but who use or are potentially capable of using vision for the planning or execution of a task with appropriate assistive device.

Hearing Handicapped

Totally deaf children are those in whom the sense of hearing is non-functional for the ordinary purposes of life.

Hard of hearing or partially deaf are those in whom the sense of hearing, though defective, functions with or without a hearing aid.

Speech Handicapped

Speech impairment refers to those problems of speech which hamper communication.

Mental Retardation

It is a condition of arrested or incomplete development of mind of a person which is especially characterised by sub-average functions of intelligence manifested by two or more applicable adaptive skills such as communication, care of self, social health and safety, etc.

Learning Disability

"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 or spell or to do mathematical calculations. 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 problems which are primarily the result of visual, hearing, or motor handicaps, of mental retardation, of emotional disturbance or of environmental, cultural or economic disadvantage". (Federal Register, 1977, p. 65083).

Orthopaedically Handicapped

Orthopaedically handicap is one's inability to execute distinctive activities associated with moving, both himself/herself and objects, from place to place, and such inability resulting from application of either bones, joints, muscles or nerves. (Pandey and Advani, 1995, p.10).

Objectives

Keeping in view the various target groups and the goals of ILD in DPEP the following objectives are sought to be achieved:

1. to improve the enrolment, participation and retention of disabled children in general primary schools;
2. to provide support services to general primary school teachers, to meet the educational needs of all categories of disabled children in integrated settings;
3. to enhance the competencies and skills of general teachers to meet the educational needs of children with special needs;
4. to prepare multi-category trained resource room teachers to deal with all types of disabled children in general schools.

The Plan of Action

Based on the objectives, it is apparent that realization of integrated education implies the delivery of a comprehensive package of services at the primary school/ village level. The stress is on development of capabilities of general schools and teachers to meet the educational needs of those with disabilities/ impairments. The major areas identified are as follows:

- early identification
- assessment (functional and formal)
- orientation of and awareness generation in the village community
- mobilization of local resources and community
- development of linkages and networking between different agencies
- identification of special inputs/aids/assistance required for children with specific impairments in the examination process
- planning and implementation of an effective system of monitoring and evaluation

All the above mentioned areas are inextricably interlinked and crucial to the overall progress and realistic integration of children with special needs into the general school system.

The key to successful implementation lies in the delivery of strong inputs in teacher development to meet the special needs of the target in question. Two models are being presented for consideration.

5. to develop instructional materials and suitable strategies for promoting the education of children with special needs through general school teachers;
6. to supply aids and appliance to the disabled child for promoting learning in integrated setting and in evaluative process.

Teacher Training Models

MODEL I - The PIED - 3 tier Cascade model

Level 1

At the first level all primary school teachers will be imparted an intensive 5 day training on special education inputs. In addition a 2 day training programme will be organised for identification of various disabilities. This will be provided by the State at the district/block level. The major focus will be on identification procedures and functional assessment. Orientation will also be given on the need for curriculum adjustment, adaptation of teaching strategies to special requirement of children with different disabilities, classroom management and use of aids and appliances.

Out of these teachers, some motivated teachers will be selected and provided a six week training at the second level.

Level 2

At the second level, daily living skills, plus curriculum areas, orientation and mobility, speech and language training will be focused upon. The DIET along with the State will be responsible for imparting this training. Observation of disabled children in IED and special school settings will also form part of the training programme.

Level 3

Finally, at the third level is the multi-category training visualised to create an effective support mechanism in the overall structure and functioning of the integrated education scheme within the DPEP districts. This training input will make the cluster area/BRC self-sufficient in terms of trained manpower to meet the special needs of visual, hearing, orthopaedic, learning disabled and mentally retarded children within general schools. It is felt that with advances in training technology, materials and aids it is possible to train a single person to deal with special needs arising out of more than one disability. It is more viable to have multi category training (MCT) teacher providing resource support than a team of single disability teachers.

The 9 months MCT programme in the PIED has been underway in the four Regional Institutes of Education (RIEs) with NIE support. The programme can be adapted to suit the specific requirements of districts in consultation with States. Considering the DPEP objectives and infrastructure, the States may decide to conduct training at the State/District/Block and Cluster levels with NGO and academic/technical support from the RIEs and NCERT/

In addition, a number of issues need to be examined and considered if the nine month long training is to be imparted to selected teachers in DPEP districts. They are:

- The resource room will become functional only when the teachers are trained and appointed either at the block or cluster levels. Thus the support will be delayed for nearly a year.
- Teachers who are to be sent for nine months MCT training will be drawn from the existing teacher strength in DPPE districts. This will obviously affect the teaching-learning in schools and quality of education which is a major concern of the DPEP.
- Feasibility of training: The required number of teachers per district at one time for a period of nine months needs to be viewed in relation to availability of infrastructural facilities, trained staff, finances.
- Once the training has been imparted the entire structure may become redundant or partially redundant.
- MCT training organised at the Regional Institutes as part of the PIED raises issues related to language, comprehension and medium of examination for teachers at the primary level.

Besides these issues the State/district authorities will have to consider the more general ones of:

- i) creating MCT posts in DPEP districts
- ii) recruitment of fresh candidates for MCT posts, or appointment of new teachers to replace those withdrawn from the existing system for MCT training/appointment.

Keeping in view all the above issues and spirit of decentralisation and flexibility in the DPEP an alternative model is given below:

MODEL II - Spiral Capacity Building Model

This model advocates recurrent short term training, so that capacities are built up over a period of time, with ample opportunity for practice, feedback and mid-course correction at the district level itself. The programme can be supplemented by the interactive distance mode, materials/techniques, which are already being planned for at the national level by NCERT and Indira Gandhi National Open University (IGNOU). A component can be included accordingly, specifically suited to the requirements of training all primary school teachers.

The capacity building exercise is based on an initial one-month course. Subsequently training is to be imparted through 4-5 refresher courses of 10 to 15 days duration each, focussing specifically on each

disability i.e. visual, speech and hearing, mental retardation and learning disability.

The obvious advantage of this kind of a model is that it can be organised at the district level with academic support from the State. It is recurrent, on the job training and can be held in manageable batches of 30-35. Besides this, teachers will not be away from their schools/resource rooms for a very long period of time, encouraging continuous participation and upgradation of both knowledge and skills, with opportunity of continuous feedback and problem-solving.

Instructional material for the basic and refresher courses will be prepared in a manual form. This exercise will be undertaken jointly by involving suitable persons/experts from all levels/disability areas. Care should be taken to include people directly involved in teaching at the primary level.

The major strength of this model lies in preparing all teachers and thus every individual school in handling children with special needs in integrated settings. This is achieved without disturbing the regular functioning schools in DPEP districts. The operationalisation of this model is subject to the establishment and functioning of the resource room/rooms.

The desirability of in-service or pre-induction training is left to the State/districts concerned.

The establishment of a 'Training Resource Group' (TRG) at the State level would be a very useful structure for strengthening teacher development at all levels. The TRG should have persons from DIETs/ District Resource Groups (DRGs)/Block Resource Groups (BRGs) working together as equal partners in the exercise of teacher development. The focus of attention of the utilization of the TRG should be on making DIETs/BRGs viable support structures. Therefore, the TRG should concentrate on developing DIETs, DRGs and BRGs.

The resource persons attached to the SCERTs and RIEs may form a close network with the TRG, exchanging ideas and developing strategies/materials. This will help in promoting effective training in developing the DPEP districts in teacher education and pedagogical improvement with a focus on IED.

TRGs could thus be established with SCERT as nodal point and made functional with support from the national level institutions. An activity plan for staff development and course delivery for the various levels envisaged in the teacher training programme should be prepared based on teacher training requirements/needs in primary schools.

Training Needs

Broadly, training needs have been classified as specific to three categories:

- I. Primary School (general) teachers
- II. Resource room teachers
- III. Administrators (general and school)

I. Primary School (General) Teachers

- Observation and identification, functional assessment and screening of children with special needs
- Understanding the needs of impaired/disabled children
- Evolving teaching strategies for all groups of disabled children
- Operation and maintenance of specialised aids and appliances
- Development of orientation, mobility and daily living skills.
- Development, monitoring and evaluation of individualized educational plans
- Counseling and guidance of disabled children, students, parents and community members
- Creating awareness amongst the other children regarding needs of disabled children.

II. Resource Room Teachers

- Development of co-ordination skills-teaching of braille: reading and writing
- Development of daily living, auditory, speech and reading skills
- Preparation of teaching materials through the multisensory approach
- Operational skills in planning/time scheduling and transaction of resource room support
- Adapting teaching-learning material according to various needs of disabled
- Development of guidance and counselling skills
- Conducting awareness programmes and providing information for stimulation of the child to parents, community members, students and teachers.
- Providing guidance to general and school administrators, parents, teachers and community.

III. Administrators (General and School)

- Planning and management of integrated education
- Mobilisation of resources
- Generation of community awareness.
- Identification and functional assessment
- Curriculum and examination adoption
- Architectural consideration
- Monitoring and evaluation of integrated education.

It needs to be mentioned at this juncture that the course design and materials to meet the requirements/needs of the various groups will have to be developed keeping in mind the following criteria:

- i) educational level of primary school teachers
- ii) previous exposure to IED, if any
- iii) specific roles and responsibilities of various personnel involved in IED
- iv) level at which they are to function: BRC/CRC/Village) other duties and responsibilities
- vi) language ability

A necessary input is continuous resource room support to be provided either at the BRC/Cluster Resource Centre (CRC) level.

On providing level-1 training the first step of identification can commence in the village. This is to be followed by assessment, delivery of suitable education along with monitoring and evaluation.

Step 1 - Identification

- i) identify out-of-school children with special needs so that they can be brought into the regular schools;
- ii) identify in-school children within ordinary school in order to retain them as they are the potential drop outs of the system;
- iii) identify children within existing special schools that can be integrated into general schools.

This will be done by the school teacher along with the VEC/ Panchayat members at the concerned village.

Step 2 - Assessment

The first step in the assessment process will be functional assessment to be done by the teacher in the school. This will aid the teacher in beginning classroom teaching and management. This should

necessarily be followed by formal assessment which can be done by a group of experienced medical/para medical personnel located at the block level or a mobile team of experts.

The level and degree of integration of the disabled child will depend upon the individual child's needs and potentialities. Thus this step is extremely crucial if further success is to be attained. It would be a continuum of needs and corresponding services wherein follow-ups and frequent reviews are crucial. This can be facilitated by the resource room teacher in collaboration with the general school teacher.

Techniques for assessment along with relevant material will need to be developed by the State Resource Group in SCERT/TRG/BRC/CRC in the local language.

Monitoring support from trained faculty at the SCERT, DIET, district and block level should be provided in the identification and assessment of children with special needs. DRCs and NGOs in the area can also be involved in this exercise.

Step 3 - Development of individualised education plans

This automatically flows from the above two steps. Integration of any child with special needs will depend on how effectively the teacher in the primary school can plan his/her work. This is dependent to a large degree on individual needs, curriculum adaptation, teaching strategies, use of aids and appliances in providing the same experience as is available to other children in the class. Training, will, thus, have to be imparted to the general teacher in the above mentioned areas. This is already envisaged in the training models discussed earlier. Besides training, development and upgradation of material should be a continuous activity. Resource room support is central to the success of total integration.

Step 4 - Monitoring and Evaluation

Monitoring and evaluation is to be an inherent part of the entire exercise. Feedback provide by different personnel at different levels in the DPEP structure will provide feedback to strengthen and improve all aspects such as:

- Planning
- Implementation
- Material development
- Training
- Developing linkages
- Assessment procedures
- Provision of resource room support

Enrollment, participation and retention

Steps taken must ensure that the drop out rates of children with special needs is not more than that of the normal children in the school system. Role of parents and community members must be highlighted in order to strengthen monitoring and evaluation.

Internal monitoring and valuation can be done by the teachers, resource room co-ordinators, SRCs, TRGs, DIET personnel, DRCs depending on the level and areas of monitoring and evaluation.

External evaluation may be done by the RIEs/NIE/Ed.CIL/NGOs/ University Deptt./DPEP Bureau amongst other agencies.

It is imperative that training be provided to all those involved in the exercise and suitable tools developed for the same.

Besides these four areas, it is equally important that the district level authorities establish contact and create awareness within the community through community contact programme for VEC/ Panchayat/Anganwadi/Balwadi members amongst others.

- effectively utilize all available local resources/materials for meeting the needs of disabled children.
- collaborate, coordinate and establish linkages with all agencies working in the district, i.e. ICDS, DRCs, NGOs.

Suggested Models for the Development of Resource Room Support

Acknowledging that the distinctiveness of the DPEP lies in achieving IEE in a contextual manner with emphasis on participation and capacity building a number of alternative models options are outlined for implementing resource room support in districts.

Alternatives have been provided as it will further the flexibility, viability and decentralization process keeping in focus local specific needs and variations regarding numbers/type of identified disabled children.

The alternatives are as follows:

Alternative A - Block Resource Based Model

The model envisages that the resource room will be located in the BRCs of a district. Support to primary schools within that particular block will be provided either by: (i) A team of specialists - one for each disability, or (ii) 2-3 MCT teachers keeping in mind the size of the block in question and numbers and type of disabled children to be provided resource room support.

Arrangements will have to be made to bring the disabled children to the BRC from the different schools in that particular block.

Number of members in the BRC team will depend on the size of disabled child population at the primary level; it is recommended that special teacher/MCT be appointed for 8 to 10 children with special needs.

Alternative B - Mobile Peripatetic Service Model

This type of a model visualizes that a mobile team operates from either the BRC, or the CRC travelling from school to school providing educational support to children with special needs.

However, variations may be made in the constitution of the team depending on the training model opted for by the State/district. These variations are:

- 1) A team of specialists - one for each disability
- 2) A team of MCT teachers depending on the size of the block, number and type of identified disabled children
- 3) A team of teachers selected after receiving the refresher courses according to the spiral capacity building model; selection of these teachers should be cautiously made depending upon back up support from other regular primary school teachers.

This necessarily implies the need for detailed planning of visits and a vehicle or vehicles to facilitate movement of the team members from school to school. The vehicle will also have to have space for storing of aids and appliances and teaching-learning material.

Training of teachers (resource room) in single disability will also have to be organised as a pre-requisite to establishing a team at either the BRC/CRC.

Alternative C - NGO Supported Resource Room Model

In this type of a model a major role is played by an NGO in providing resource room support to disabled children in primary schools. This can be implemented in two ways:

- 1) The NGO team is located at the BRC and through the CRC level which has either MCT teacher or provides support to all clusters of schools.
- 2) The NGO team is located at the BRC level and provides direct support to all primary schools within that block. This may be implemented where the CRC structure is still not viable in DPEP districts.

Alternative D - Cluster Resource Room Model

This particular model highlights the role for the CRC as the location for the resource room and staff will be located therein.

A MCT teacher/refresher course trained teachers will manage the implementation of this scheme. Either the children with special needs will come to the CRC or the teacher at times may have to visit the schools to provide guidance and support.

This seems to be viable especially in clusters where the numbers of children with disability are more and commuting is a problem to a great extent.

These various combinations are only outlined to provide a guideline to the DPEP State/districts in choosing a suitable model and resultant strategies for implementation of the IED scheme.

Establishment of a Resource Room

Central to the adoption of any of the above mentioned models is the establishment of a Resource room, which can be located with either at the block or cluster level. The materials required for the resource rooms will depend upon the type and numbers of disabled children identified in the concerned block/cluster.

While constructing new resource rooms it is essential that architectural barriers be avoided. On the other hand it may be necessary to remove these barriers from the existing schools/Resource rooms so as to facilitate the disabled child's access to equipment and free movement within the school/Resource room premises, construction of toilets suitable for them etc.

Based on the operational framework described above, the roles and functions of agencies at the cluster/block, district, state and national level are given below:

1) CLUSTER/Block level: The Resource room may be set up at the cluster/block level depending on the number of identified disabled children and existing DPEP infrastructure in the district/block in question. The BRC/CRC will be responsible for the following activities:

- training of cluster/village level personnel - teachers, VEC members, panchayat members, etc.
- data collection on IED and needs assessment of teachers/students
- provision of continuous resource room support
- planing and implementation of all activities related to resource room support
- identification and assessment of in/out of school disabled children
- establishing linkages with anganwadis/balwadis/PHCs, etc.

- awareness generation amongst parents, administrators and community members

2) District level: A district resource group should be set up with one person specifically assigned the responsibility of planning and implementation of integrated education for the disabled in each district. This person will be a part of the district project team for DPEP.

Their responsibilities will be to:

- impart training at block/cluster levels
- coordinate various activities at the district levels
- establish Management Information System (MIS) at the district level for IED
- monitor and evaluate IED work in blocks/clusters and schools
- develop action work plans for each district
- assess needs of teachers periodically for effective implementation of the scheme
- maintenance of aids and equipment
- act as a catalyst between the state project office and BRC/CRC

3) State level: A State resource group will have to be set up for planning and implementation of IED activities in DPEP districts. The major functions of this group will be to:

- provide academic/technical support to district/block/cluster level
- provide training to district/block level personnel
- provide funds for the implementation of the scheme
- monitor, supervise and evaluate progress of integration of disabled children
- develop material in regional language
- act as a clearing house
- establish linkage and networking with various departments and NGOs
- conducting research in DPEP districts.

4) National level: A national resource group will be responsible for the following:

- training of master trainers at the State/district level
- providing academic/technical support to the DPEP States

- development of exemplar material involving persons from State/district levels
- institutional capacity building
- providing assistance in monitoring and evaluation of IED in DPEP districts with the State
- setting up a national coordination committee
- providing guidance in planing and implementation of IED in districts to the DPEP States.

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