Chapter 6

6.0.0 SUMMARY & SUGGESTIONS

INTRODUCTION

The Education Commission Report (1964-66) has emphasised the placement of the disabled child in ordinary schools. The National Policy on Education (NPE), 1986 has formulated guidelines for the action on "Education of the Handicapped". The NPE, 1986 strongly emphasised the need for the expansion of Integrated Education Programme (IEP).

As a result of NPE, 1986 the centrally sponsored scheme of Integrated Education for Disabled Children (IEDC) was introduced in 1974. As per the Persons with Disabilities Act, 1995 (PWD, 95), the Central and State Governments shall ensure that every child with disability has access to free and adequate education till the age of 18 years.

In 1992, the Rehabilitation Council of India (RCI) Act was passed to regulate the manpower development programmes in the field of education of children with special needs.

The UNICEF, through the National Council of Educational Research and Training (NCERT) sponsored a programme called Project Integrated Education for the Disabled (PIED) during the period 1987 to 1994 in 10 selected blocks in the Madhya Pradesh and nine other States of the country.

The main aims of the PIED were to prepare general education system to achieve the goal of education for all
children including those with disabilities, develop an attitude of acceptance of children with special needs in the classroom and improve the achievement of all children including those ones with special needs. The PIED emerged as the first indigenous inclusive education programme in India. The PIED experiences need to be replicated in the country. (Mani, 2000, p.24)

With the success of integration in the past two decades, the country is ready for a new and broader concept of inclusive education. Now inclusive education is considered as an integral part of the general education system. Inclusion aims at reinforcing better educational practices in the general school system which address the educational needs of all children - disabled and not disabled.

New Chhattisgarh State carved out of M.P. came into existence on 1.11.2000. Like other Indian States, this state has adopted very sincerely all programmes related with the implementation of inclusive education in order to benefit special needs children of Chhattisgarh.

Chhattisgarh has sixteen revenue districts in which fifteen districts are DPEP districts. Inclusive education of special needs children, being an integral part of District Primary Education Programme (DPEP), has been adopted as a regular educational programme in the State. District Primary Education Programme has completed its tenure very successfully among these districts. One remaining district Durg is covered by
Janshala Programme of the Central Government. Requirements of inclusive education are very successfully met by this programme in Durg District. In this way, whole Chhattisgarh has been covered by the implementation programmes of inclusive education. At present, Sarva Shiksha Abhiyan (SSA) has got momentum to universalise elementary education in the State. Achievements of DPEP in the implementation of inclusive education in Chhattisgarh are being utilised in Sarva Shiksha Abhiyan for further enhancement of inclusive education.

An evaluative study like the present one, assessing the effectiveness of inclusive education, is very much needed in the State. Research findings of such studies will highlight the further direction for making the implementation of inclusive education in the State a success.

Inclusive education is an innovative but interesting subject for research. So far, several researches have been conducted on both National and International levels. Research studies pertaining to inclusive education conducted on both foreign and national levels have given very mixed results. In the global agenda on new paradigms in research on special needs, several evaluative studies concerning the effect of inclusion show a wide range of outcomes (Soda, 1980). Where Bless (1995) says that research findings show that the effects of inclusion are not particularly promising, OECD (1995 a) reported that a number of studies show that inclusion is effective in terms of pupil outcomes. Thus, these findings give very controversial pictures.
On national level, Mukhopadhyay and Mani (2000) express their views that unfortunately the data and information regarding whether children with special needs are being adequately covered and have benefitted from EFA are neither collected nor the services made available presently at par with other children. Apart from this dissatisfaction, Mani (200, p.27) agrees that in general, inclusive education programmes have shown positive results. The present need is to facilitate its expansion.

In this way, on national level also, research findings and views about the inclusive education of SEN children are very much controversial. Moreover, most of the researches conducted in India so far are concerned with different types of impairments and researches on effects of inclusive education as a whole are very rare. On State level, present research seems to be a first attempt.

6.1.0 OBJECTIVES OF THE STUDY

As a main indicator of Education for All (EFA) in the case of children with special needs, inclusive education has well defined aims and objectives. In the present study, objectives set for judging its effectiveness were:

* To assess the attitude of general teachers of inclusive primary schools towards inclusive education.
* To assess increase in enrolment of disabled children and decline in their school drop-outs.
* To assess inclusive classroom environment meeting the requirements of special needs of the disabled children.
To know about disability-issues recognized as an inclusive components of all children in general school system.

* To assess the extent of adaptations and flexibility in curriculum planning, teaching methodologies and evaluation.

* To collect information about the functions of special resource teachers working as liaison among general teachers, school authorities, parents and community.

* To assess working of master-trainers and their multiplier-effects.

6.2.0 RESEARCH HYPOTHESES

Hypotheses in the present study were formulated taking the above objectives into consideration. These hypotheses were formulated only in positive manner, but the sub-hypotheses were formulated in null form. They are given below.

H₁ : Implementation of inclusive education would result in the enhancement of very high positive attitudes of general teachers of inclusive primary schools in the state towards the programme.

In order to test the significance of difference between the mean attitude scores of two sub-samples of male and female respondents and general teachers of inclusive schools of the urban and rural localities, two null hypotheses framed are given below:

H₀₁ : Attitudes of male and female general teachers of inclusive primary schools towards inclusive education would not differ significantly.
Ho$_2$: There would be no significant difference between the mean attitude scores of general teachers working in the inclusive primary schools of the urban and rural locations.

H$_2$: Inclusive education would be found to increase the enrolment of disabled children and decline of their school drop-outs.

H$_3$: Classroom environment are modified in order to meet the special needs of disabled children.

H$_4$: Disability-issues are taken care of and are included as an inclusive component of all children in general school activities.

H$_5$: School calendar, teaching methodologies and evaluation techniques are made adaptive to the needs of disabled children.

H$_6$: Special resource teachers of inclusive education would prove to be very effective liaison among general teachers, school authorities, parents and community members.

H$_7$: Sufficient potential would be generated among master-trainers of the state who will in turn be able to train other teachers in their respective regions creating an environment of multiplier-effects for the replications of inclusive education even in unreached communities of rural areas.

6.3.0 RESEARCH DESIGN:

An evaluative research design of ex-post-facto nature has been used in the present study.
6.3.1 POPULATION:

Inclusive primary schools (government) of Chhattisgarh, school authorities, trained general teachers working in the inclusive schools of the state, Special Resource Teachers, master-trainees trained for training the teachers of various levels, parents of the children with special needs, form the population of the study.

6.3.2 SAMPLE:

In order to choose a representative sample of inclusive schools and general teachers teaching among them, principle of Quota Sampling, very similar to proportionate stratified sampling, was attempted. In order to be assured about the representativeness of the sample, units included in the sample were selected in proportion to their occurrence in the population. Keeping this in view, proportion (percentage) of availability of school-going aged disabled children in each of sixteen districts of Chhattisgarh state was taken as basis for selecting inclusive schools in the respective districts. Percentage of disabled children of age group 6-14 years was found from a State level Survey conducted by Rajiv Gandhi Shiksha Mission Raipur (DPEP) in the year 2001-2002. In this way 100 inclusive schools were chosen. Thereafter, two general teachers from each chosen inclusive school were included in the sample. For data collection, questionnaire to collect general information about the inclusive schools and attitude scale to measure attitudes of teachers towards the inclusive education were
administered over 200 teachers. All these teachers were trained either on SCERT level or on DIET and district levels. As Koul (2003, p.118) suggests, this sample was selected with proportional allocation.

For the administration of Check-List of special resource teachers, a sample of all available 19 Special Resource Teachers in the State was chosen. These resource teachers have already worked in this State under UNICEF assisted project PIED.

Similarly, check-list of general teachers teaching in inclusive primary schools was administered over 200 teachers but responses were received by 150 teachers only. Hence, in this sample, respondents were only 150 general teachers of inclusive schools.

6.3.3 VARIABLES INVOLVED IN THE PRESENT STUDY

INDEPENDENT VARIABLES

The main independent variable in the present study is inclusive education integrated in training programmes of primary school teachers.

Two antecedent variables—gender and locality of schools, are also used. Each variable has two levels, namely male and female for gender and the urban and rural areas for the locality of schools.

DEPENDENT VARIABLES

All indicators for successful implementation of inclusive education in Chhattisgarh form the dependent variables. They are:
* Attitudes of general teachers of inclusive primary schools towards inclusive education.
* Enrolment and retention of children with special educational needs.
* Classroom environment.
* Curriculum planning, teaching methodologies and evaluation.
* Functions of Special Resource Teachers, and Multiplier–Effect produced by master–trainers.

6.3.4 RESEARCH INSTRUMENTS

Research instruments prepared by the investigator for the present study are as below:

1. Questionnaire for general teachers of inclusive schools.
   It consists of two parts:
   
   **Part A:** Information gathering questionnaire for inclusive schools.
   
   **Part B:** An Attitude Scale for General Teachers teaching in Inclusive Primary Schools.

2. A check-list for Special Resource Teachers.

3. A check-list for general teachers of inclusive-primary schools.

6.4.0 DELIMITATIONS

* The study is delimited to the selected government primary schools of the rural and the urban areas in which children with special needs are mainstreamed with the normal children.
Research instruments prepared and used in this study, are based on the contents of teacher-guide and other related literature like "Inclusive Education: Orientation Package for Teacher Educators" (Department of Education of groups with special needs NCERT-New Delhi) used for training the teachers of primary schools of both rural and urban areas.

Some main themes of teacher-guides are as under:

- Concept of inclusive education, cause and kinds of disability, identification of disability, diagnosis of disability, awareness of teachers, children, parents and community about inclusive education, educational activities and rehabilitation of disabled children, schools readiness for inclusion, teaching competencies, community support.

- Children with special needs are meant by children with visual impairment, hearing impairment including deaf, locomotor impairment and others including mentally retarded, learning disabilities and multiple disabilities.

- Data collected in this study are based on Hindi Version of the research instruments. Conclusion of the present study are based on the data collected through the following tools:
  - General Information sheet about the 100 inclusive schools.
  - Attitude Scale measuring attitudes of 202 General Teachers towards inclusive education.
* Check-list for Special Resources Teachers prepared to assess their roles and contributions. (19 respondents)

* Check-list for General Teachers of Inclusive Schools assessing their adaptations, modifications in classroom teachings, methodologies, evaluation, etc., (150 respondents)

* Work Schedule Chart Indicating Time-Allocation for Completing different Activities of the Study.

* In the present study sampling technique of Quota Sampling is used because due to non-availability of the list of inclusive schools for each district of Chhattisgarh State, random selections of schools and teachers were not possible.

* Special Resource Teachers are meant here those teachers who received various special trainings of levels 1, 2, 3 in UNICEF assisted PIED project implemented in MASTURI Block of Bilaspur District. They are nineteen in number.

* The dimension of the involved variables assessed by framing respective hypotheses are covered as per details given in the conceptual framework of the present study (Pp. 15-16).

6.5.0 SOME OBSERVATIONS FROM THE STUDY

Due to innovative nature of the present study, a worthy observation made by the researcher was that a majority of teachers took interests to answer the questions and also in responding the various scales.
The institution authorities were kind enough in extending their full cooperation in providing the smooth administration of research tools. They were very curious to know the findings of the present study.

In the analysis of attitude scores and to draw very precised conclusions from them, ANOVA technique after being corrected for disproportionality of Cell Frequencies. (Wert, Neidt, Ahmann, 1954 Pp. 211-215), was used.

6.6.0 FINDINGS OF THE PRESENT STUDY :

The present study was planned to determine the effectiveness of inclusive education by assessing indicators of its successful implementation in Chhattisgarh State. Indicators of the successful implementation of inclusive education were translated in terms of the objectives of the study. By using valid and reliable tools, the data were collected for each and every set of objectives and hypotheses. They were analysed and interpreted in the fifth chapter of main thesis. The findings based on the acquired data were also indicated and discussed there. Now in the summary, all the findings on different indicators of successful implementation of inclusive education based on previous analyses are given below with their heads :

EFFECT OF INCLUSIVE EDUCATION ON ATTITUDINAL CHANGE OF GENERAL TEACHERS

Findings related to this indicator are mentioned below :
• The distribution of attitude scores of teachers towards inclusive education is normal.

• Exposures to inclusive education have resulted in creating either average or more than average level positive attitudes among general teachers of inclusive primary schools. It indicates satisfactory positive impact of inclusive education.

• Both male and female teachers possess alike attitudes towards inclusive education and gender is ineffective to bring attitudinal change difference among the male and female teachers. Thus, gender and attitudes of male and female teachers are independent.

• Attitudes of general teachers of inclusive primary schools working either in the urban areas or in the rural areas are similar. Thus, locality of inclusive schools is ineffective in creating significant difference between the attitudes of both urban and rural inclusive school teachers towards inclusive education.

• Gender by locality interaction being significant, generalisation of any uniform pattern of either gender impact on locality or locality impact on gender can not be established. Rural female teachers have shown more positive attitudes towards inclusive education in comparison to both urban and rural male teachers and the urban female teachers.
EFFECT OF INCLUSIVE EDUCATION ON THE ENROLMENT AND SCHOOL DROP-OUTS OF THE DISABLED CHILDREN

Information about two indicators-increase in the enrolment of the disabled children and decline of their school drop-outs were gathered and analysed in the fifth chapter of main thesis. Findings are given below:

Some initiatives, like intensive training of the teachers on inclusive education, enrolment drives to get admitted the disabled children in the nearby mainstream primary schools, and creation of more favourable atmosphere for the mainstreaming of the disabled children, have resulted in very positive awareness among administrators, teachers, parents and children to bring SEN children in neighbouring common schools of mainstream. This has resulted in the increase of enrolment of the disabled children.

- A positive trend of increase in enrolment of the disabled children in each type of disability is found in the present study. This trend is low in the case of visually impaired children and high in case of hearing impaired, locomotor disabled and other types of the disabled children.

- Most of the visually impaired children are enrolled in the inclusive schools of the urban locality whereas hearing impaired, locomotor disabled and children of multiple disabilities are mostly admitted in the inclusive schools of the rural locality.
During the last five years, numbers of the disabled children of all types enrolled in class 1 of the inclusive schools are getting increased. This gives the clear evidence of trend in the increase of enrolment.

Since the numbers of the disabled children retained and studying in class 2, 3, 4 and 5 of the inclusive schools are in ascending order, it gives clear implications of the decline of school drop-outs of the disabled children.

EFFECT OF INCLUSIVE EDUCATION IN TERMS OF CLASSROOM MODIFICATIONS

* Majority of teachers accepted that there were not satisfactory modifications in the school and classroom arrangements according to the special needs of the disabled children.

* Very few teachers accepted that special seating arrangement in classrooms and library, toilet-facilities for boys and girls, availabilities of games and recreational materials, etc. are available in their inclusive schools.

EFFECTIVENESS OF INCLUSIVE EDUCATION IN TAKING CARE OF THE DISABILITY-ISSUES IN GENERAL SCHOOL ACTIVITIES

* In the most of inclusive schools, the disabled children are inspired to take active part in general school activities. These children show keen interests in taking part in co-curricular activities, cultural activities like drama, paintings,
stage-performances and also in literary activities like debates, essay-writings, etc.

* In the majority of inclusive schools, charts, posters, literature highlighting the performances of great and successful disabled persons are not available.

* In the majority of inclusive schools, parents and guardians of the disabled children are invited to attend school-meetings. Parents and guardians take active part in discussing the problems related with the disability and also in finding the solutions of the disability-issues.

* Special resource teachers, headmasters and other trained teachers share their views on various disability-issues with parents, guardians, VEC members and other community members.

* Headmasters of only few inclusive schools seek cooperation of NGOs and donars of society to help the disabled children.

**EFFECTIVENESS OF INCLUSIVE EDUCATION IN MAKING SCHOOL CALENDER, TEACHING METHODOLOGIES AND EVALUATION TECHNIQUES ADAPTIVE TO THE NEEDS OF THE DISABLED CHILDREN**

* In order to be a good and competent teacher of inclusive schools, most desired skill is to establish rapport with the students to give them fair, firm, warm, responsive and positive attitudinal behaviour. The works of the disabled children should be intensively monitored and sufficient time and directions should be allocated to them according to their needs.
* A teacher who promotes warm interaction between the disabled and non-disabled children of the class, encourages friendships among them and promotes participatory learning in the class where all children learn with each other, prove to be a good classroom manager.

* Teachers are well acquainted with the features of the curriculum in inclusive schools as they make it accessible to all children in the class including children with special educational needs (SEN). They take into account the diversities in the classroom, such as manage reading medium for the visually impaired children, lip-leading or sign language for hearing impaired, several and different presentations for mentally retarded students. They adapt curriculum in such a way that the educational process of other children of the class is not disturbed.

* Most of the teachers adopt child-centred teaching-learning techniques in the class. Some teachers use techniques like cooperative learning, peer tutoring and voluntary participation of the parents in their classroom teachings.

* Most of the teachers of inclusive schools of Chhattisgarh State are of the views that teaching with teaching-aids in the classroom is most desired skill. Emphasis on activity-based teaching and taking helps from the parents of the disabled children in the completion of their home assignments seem very healthy classroom practices.
* Teachers of the inclusive schools have knowledge of behavioural management technique in inclusive classrooms and they encourage positive attitudes by means of positive reinforcement, praise, rewards and by controlling the undesired behaviours of both-with or without disability children.

* Teachers are competent to understand how learning occurs in the classroom. They try to know the weakness and strength of each child in the class. They also feel that each child of the class is of special type and he has his own learning-style.

* Using language according to the familiarity of the child and according to his cultural/social backgrounds, is the most required skill to be competent in identifying the individual pace of learning.

* Teachers of inclusive schools do recognise that teaching the child by linking the matter with his real life situations is the most impressive instructional strategy.

* Teachers are of the view that creation of fearless, full of curiosity and joyful learning classroom environment in the inclusive schools are necessary for positive learning.

* Teachers of inclusive schools have knowledge of using assessment techniques and recognise that change in teaching technique according to the learning needs of the child, preparation of daily diary about the progress of each disabled child & telling the child about his progress, are the most desired skills for the enhancement in the achievement of the child.
* Preparation of the Individualised Educational Plan (IEP) for each disabled child is much more needed skill for a teacher of inclusive school.

**EFFECTIVENESS OF INCLUSIVE EDUCATION IN NETWORKING WITH PARENTS, COLLEAGUES AND COMMUNITY**

* Teachers of inclusive primary schools acquire the competency of the networking with parents, colleagues and community members as they consult with their co-workers, parents, and other members of the society about the allround development of the children. They know about family circumstances of the children and they inform about the progress of their wards.

**EFFECTIVENESS OF INCLUSIVE EDUCATION AS CONTRIBUTED BY RESOURCE TEACHERS AND POTENTIAL MASTER-TRAINERS IN THE STATE**

Special resource teachers organise and attend the parent-teacher conferences, they share views on different disability-issues with the parents, VEC members and with other social workers. They help teachers in the preparation of Individualised Education Plan (IEP) for each type of disabled children.

* Special resource teachers and other potential master-trainers do help in survey work and in making enrolment drives a success.

* They alongwith a team consisting of doctors, psychologist
and other social workers organise parents/guardians melas (Fare) at different block levels in rural areas.

* They help in the distribution of different kinds of resource materials, support materials, aids etc. for the disabled children. Also they help teachers in using these materials in their classroom teachings.

In this way, special resource teachers working in the inclusive education prove to be an effective liaison among general teachers, school authorities, parents and community. They with the help and guidance of NCERT, RIES experts train ample number of master-trainers. These master-trainers are used to train teachers of inclusive schools in both urban and rural areas. In this way, there is a chain of trainings organised at different levels specially in rural areas. This creates a favourable environment for multiplier-effects for the replications of inclusive education in unreached communities of rural areas.

6.7.0 SUGGESTIONS FOR FURTHER RESEARCH:

There are many more aspects of inclusive education which need further researches. These researches may involve a large number of the disabled children, the parents, the community members, N.G.Os, etc. The present study brings to light some areas to be studied in detail. The areas and variables which are not covered by this study, may be put to test to enlighten the other factors associated with the indicators like achievement of the disabled children and normal children.
teaching, parents counselling, etc. Some studies are suggested below for further researches:

1. Studies may be conducted by arranging controlled and experimental groups to identify the various factors that promote favourable attitudes towards inclusive education.

2. Studies may be carried out to evaluate the effect of extra-honourarium to the teachers of inclusive schools.

3. Studies may be conducted to evaluate the impact of commitment and caring of the parents on the successful involvement of the disabled children among the society.

4. Studies like comparative study of the performances of the disabled children and the non-disabled children in the inclusive education programmes, may be attempted.

In Indian context and particularly with special reference to Chhattisgarh, following studies are suggested for future researches.

5. A study of impact of inclusive education programmes in over-crowded classrooms.


7. "Effectiveness of group techniques for improving the academic and social outcomes of students with special needs integrated into mainstreamed schools of Chhattisgarh: An evaluative study"

8. "Effect of peer tutoring on the attitudes of students with learning disabilities and their regular class peers: A study"
9. "Effectiveness of Cooperative learning process for promoting interactions between mentally handicapped and non-handicapped children"

10. "A study of parental satisfaction with integrated class placement of Special Education and general education students with special reference to Chhattisgarh State".

As said earlier, there is ample scope of further and future researches on the different aspect of inclusive education. The present study, it is hoped, and its findings will throw some light in this respect.

6.8.0 EXPECTED OUTCOMES

Inclusive education is much more desired innovation in mainstream schools. It is based on equity and equality of opportunity for all children. All Indian States are emphasising on "Education for All" mission through various programmes like DPEP, Basic Education Plan, Sarva Shiksha Abhiyan and several others. Findings of the present study will be helpful in identifying effective indicators and on the basis of them, strong base for the expansion of inclusive education will be prepared, specially, in a new state like Chhattisgarh.

Effectiveness of inclusive education in terms of indicators of its successful implementation will open doors for further development of this innovation.

Further more, the results of this study could be utilised as base-line data in the planning, implementation and
evaluation of further programmes in inclusive education of the children with special needs.

Results of the present study will fix priorities and promising strategies for overcoming obstacles and accelerating progress and revise National Plans of Action for inclusive education accordingly.

In the research of the future, the teacher will not be only a consumer but also a partner in research. This scenario is emerging in the developed world. To achieve the goal of developing effective schools for all children, including those with special educational needs, requires pragmatic research support (Jangira, 1991 p. 504).

Findings of the present study will be helpful in this direction and will open door for further similar studies in a newly established Chhattisgarh State.