CHAPTER 5

FINDINGS AND DISCUSSIONS
5.0.0 : FINDINGS AND DISCUSSIONS

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 fourth chapter. The findings based on the acquired data were also indicated and discussed. Now in the present chapter, all the findings on different indicators of successful implementation of inclusive education based on previous analyses are given below with their heads. They are also discussed here.

5.1.0 EFFECT OF INCLUSIVE EDUCATION ON ATTITUDINAL CHANGE OF GENERAL TEACHERS

(Hypotheses $H_1$, $H_0$, $H_0$)

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. But research hypothesis $H_1$ i.e. enhancement of very high positive attitude of general
teachers towards inclusive education could not be established in this study. Possible reasons are discussed below.

- 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.

5.1.1 Discussion:

The findings of the present study mentioned above appear to be contradictory to some of those presented by
Barton (1992) stating that generally teachers are not ready to accept children with disabilities in general schools. These are also contradictory to the findings of Clough and Lindsay (1991) which also revealed that although teachers appeared more supportive of education of children with special education needs in general schools. They identified children with learning difficulties and to a great extent, children with emotional and behavioural difficulties as the most difficult categories. Moreover, majority of the teachers believed that they do not have sufficient time, skills, training and resources necessary to teach these children in general schools.

It is conceivable, of course that the above research findings came in 1991-1992 which was the infancy stage of the inclusive education all over the world. In India, specially, inclusive education was emphasised after the implementation of District Primary Education Programme (DPEP) ie. after 1994. In the early stages when Integrated Education for Disabled Children Scheme was running, trainings of teachers, awareness-boosting programmes for the parents, guardians, community-members, administrators, etc., lack of resources and adaptations in school environment were not much attended. Studies have provided evidences that school ethos and the personal beliefs of its staff have a considerable impact on the attitude towards children with disabilities (Shukla, N.- 2000). Untrained, uninterested and unskilled staff will not have a very positive attitude towards mainstreaming of the disabled children in general schools.
It is, therefore, readily evident that in the early stages of the implementation of the inclusive education, very positive attitude of teachers towards inclusive education could not be created.

Inspite of the above views, there are several research findings that corroborate the findings of the present study.

Findings of Beh-Pajosh (1992) and Shlmman (1990) showed that the teachers who had been trained to teach children with learning difficulties had more favourable attitude towards SEN children and their inclusion than did those who had no such trainings. Similarly, Farrel (1997), Jenkinson (1997) have expressed that teachers are much more positive about the inclusion of the children with sensory or physical impairments than about those with emotional and behavioural difficulties or sever learning difficulties.

Findings of the present study appear to be in agreement of Mukhopadhyay and Sharma (1990) who have reported that the teachers had a positive attitude towards equal educational opportunities for disabled children in integrated classrooms. Verma, J. (2001-02) reported that IEDC has helped considerably in changing the attitudes of teachers, teacher-educators, educational administrators, parents and community.

It should be readily evident that with the implementation of DPEP and Sarva Shiksha Abhiyan, mass trainings of teachers teaching in general schools are very frequently organised at the state, district, block and school levels. Media exposures
about the inclusive education are very impressive. Resources, teaching-aids, school-readiness, special resource teacher's guidance, etc. are some such basic measures that help in the establishment of positive attitudes of teachers towards the inclusive education. All these measures have resulted in the creation of positive or more than positive average level attitudes towards inclusive education. Teachers are now more inspired and they are gaining more self-confidence for successful classroom-teachings in the inclusive schools. This trend will produce very favourable environment for the creation of very positive attitudes of general teachers of inclusive schools.

In the inclusive education trainings organised at block, VEC and school levels in rural areas, most of the lady teachers of inclusive schools take keen interest and they seem more involved in learning and solving the issues of inclusive education. This fact is supported by the findings of this study that rural lady teachers of inclusive schools have shown higher attitude mean score in comparison to rural /urban male teachers and the urban female teachers.

The findings of the present study that the male and female teachers do not differ significantly in their attitudes towards inclusive education is supported by the findings of Mukhopadhyay and Sharma (1990).

Attitudes of the urban and rural teachers towards inclusive education also do not differ significantly according to the findings of the present study. The obvious reason for this fact may be that both urban and rural teachers are trained by
the same resource persons with the same literature. Knowledge and experiences of both urban and rural teachers about the inclusive education are found almost similar. Both urban and rural teachers feel equal responsibilities for educating the disabled children. These facts failed in creating a significant difference in the attitudes of the urban and rural teachers towards inclusive education. Although mean attitude score of the rural teachers is higher than that of the urban teachers but their difference is not significant. Most of the disabled children come from the majority of the rural population and teachers working in the schools of rural areas face directly the issues related with the education of disabled children. Activities like teachers-parents conferences, enrolment drives, distribution of resource materials, etc., are mainly performed by the rural teachers. More involvement of inclusive education may be the reason of getting higher mean attitude score in comparison to their urban counterparts. Findings of the present study are also in accordance to the findings of PIED stating that PIED has also had a positive impact on the attitudes of the teachers and on the needs of schools as well as parents and the community in general (Janshala, Vol-VI-1, Jan-March 2003, p.3)

5.2.0 EFFECT OF INCLUSIVE EDUCATION ON THE ENROLMENT AND SCHOOL DROP-OUTS OF THE DISABLED CHILDREN.  
(Hypothesis $H_2$)

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 previous chapter. Findings are given below:
Some initiatives, like intensive trainings 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 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 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.

All above findings support the research hypothesis $H_2$ of the present study.

### 5.2.1 Discussions:

The findings of the present study about the positive trend of increase in the enrolment of the disabled children in inclusive schools seem to be supported by the findings of a study conducted in Delhi (1991-92) on IED launched by Directorate of Education. It was reported that out of 141 schools listed under IED, only 85 schools had children with special needs. In all 504 children with different disabilities were integrated, majority being physically handicapped. As per the recent statement by Ministry of Human Resource Development, 60,000 disabled children are in the process of integration in 15000 schools all over the country. Average number of enrolled disabled children comes out to be four. (Usha Grover, Inclusive Education : An Overview pp.8-9)

Findings stated in the present study are supported by the findings of PIED stating that under PIED, there has been a significant increase in the number of not only mildly disabled, but also severely disabled children, with the number of orthopaedically handicapped children far outstripping other disabled children. All these children perform at par with non-disabled children; in
fact their retention rate is higher than that of non-disabled children and absenteeism is low. (Janshala;Vol.VI-1, Jan-March 2003. p-3)

Main reasons of positive trend in the increase of enrolment of the disabled children and decline of their school drop-outs in Chhattisgarh state seem that government is fully aware of the negative forces that prevent full inclusion of the disabled children in mainstream schools. As Davis & Watson (2001) and Leicester (1992) have suggested that a lack of resources and the attitudes of adults and other children create difficulties for children and prevent full inclusion in mainstream schools. Govt. of Chhattisgarh has launched several enrolment drives during the last five years, have made suitable resources at block levels, provided thorough trainings to the teachers to raise their positive attitudes. This has created very favourable atmosphere for raising the enrolment and declining the school drop-outs of the disabled children.

5.3.0 EFFECT OF INCLUSIVE EDUCATION IN TERMS OF CLASSROOM MODIFICATIONS

(Hypothesis \( H_J \))

* 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, boys and girls toilet-facilities, availabilities of games and recreational materials, etc. are available in their inclusive schools.
Research Hypothesis $H_3$ is not fully supported by the findings of this study.

5.3.1 Discussions:

The findings that classroom and school modifications as per the special needs of the disabled children are not satisfactory seem in accordance with the findings of Cowasji (1985) in which he has reported that the position of teaching-aids was not good and repairs were needed. Similar findings of Pathak (1984) are also reported that the few problems which disabled children faced were fear of the school, difficulty with classroom learning, dissatisfaction with teachers, ridicule by other children and inabilities to participate in co-curricular activities. Singh and Prabha (1987) findings also reported that none of the schools has a separate resource room. Facilities like grants of books and stationery were not availed by some schools.

Above discussions give evidences that modifications in the school arrangements and classroom environments for meeting the special requirements of the disabled children were not satisfactory over a long time and as the finding of present study indicates, the same are still not satisfactory at present. Actually modifications in school arrangements and classroom situations according to the needs of the disabled children require too much money and they are very costly affairs. Government alone can not do all these structural modifications.
Helps from donars, NGOs and social workers and parents should be sought. With the increasing awareness among the teachers, parents, mothers, VEC members and other concerned people towards inclusive education, it is hoped that modifications in the school arrangements and classroom environment to meet the special needs of the disabled children will satisfactorily be adopted.

Findings of the present study about the classroom management, classroom practices, etc. are also supported by Pandey (2003, pp 158-159). According to him, generally teachers are using nine major ways for dealing with diversity in the classroom. They are including all pupils communication managing the classroom, planning the lesson, planning for individual, growing individual help, using assistive aids, managing behaviour and working together.

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

(Hypothesis $H_4$)

* 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.

This result of the present study is in the support of research hypothesis $H_4$ of the present study.
* 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.

5.4.1 Discussions:

The findings of the present study that the disabled children take active part in all general school-activities appear to be in agreement with the findings of Rane (1983) which states that the disabled children under study had no problems of social relationship in the school and they had happy school experiences. Similarly, Grover (2002) suggests that every child with disability should be in an inclusive education programme and Agrawal (2002) suggestions that involve the child in all the activities, do not exempt the SEN child for picnics or sports day, create opportunities for him, SEN students should work with thinking how he can participate in various activities of the school and society, all such suggestions are being
supported by the findings of the present study because these findings are based on the responses of more than seventy seven percent teachers of 100 inclusive schools. This gives clear indications of positive effectiveness of inclusive education programmes in Chhattisgarh State.

Availability of charts, posters, literatures, etc. highlighting the great deeds and successful stories of the great disabled persons of the state, country and the world, is not very common and adequate. Hence, the findings of the present study about the non-availability of these materials seem justified. With the long term implementation of the inclusive education, it is hoped that availability of these reference materials would be possible.

In her article- "Parent-teacher Relationship-A path to Inclusion' Swati Sanyal (2002) has given a review of researches on successful education in the mainstream schools and has concluded that the parents can play a major role in decision-making regarding their child’s educational placement in programme-planning and successful monitoring of the programmes. Their roles are crucial for the education of every child especially the child with special needs. Dearth of resource facilities in general mainstream schools could be overcome by parental cooperation. Recognising the importance of such findings, headmasters, teachers of inclusive schools are fully aware and they invite the parents and guardians, NGOs and other agencies in the school meetings in order to share the views on various disability-
issues. Hence, findings of the present study in this regards are justified.

At present only few NGOs in Chhattisgarh are working in the field to provide education for the disabled children. With the increasing awareness among the community members and initiatives taken by Chhattisgarh government to invite more NGOs for starting welfare works for the benefit of the disabled children, it is hoped that situation will be more favourable for the successful implementation of inclusive education.

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

(Hypothesis $H_0$)

* 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. They 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 views 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 techniques 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 of 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 schools.

All above findings of this study give clear indications of full support of research hypothesis $H_5$ of the present study.

5.5.1 Discussions:

The findings of the study given above are based on the responses of more than eighty percent general teachers
working in the chosen 100 inclusive schools of Chhattisgarh State. Their responses were collected through a Check-list specially prepared on the basis of guidelines given in Inclusive Education-An Orientation Package for Teacher Educators (Julka 2002, p.54-64). Responding teachers were asked to tick those skills under different teaching competencies which they think, are most desired skills for the successful classroom-teachings in inclusive schools and which they adopt in their actual classroom teachings. Findings are very inspiring. Most of the teachers have given implications for getting themselves well equipped with the teaching competencies like classroom management, curriculum modifications, classroom practices, knowledge of behavioural management techniques, individual pace of learning, use of instructional strategies, creation of positive learning environment, use of assessment techniques and preparation of Individualised Educational Plan (IEP) for each disabled child. It seems that trainings of teachers of inclusive schools in this state by using such packages have proved very fruitful and thus very positive impact of successful implementation of inclusive education is supported by the afore-mentioned findings of the present study. Preparation of Individualised Education Plan for each disabled child of the class is well suggested in the National Curriculum Framework for School Education, 2000 stating that bringing learners with special needs into the mainstream in an inclusive school starts with the assessment of their educational needs and preparation of their Individualised Education Plan for each one of them in
consultation with their parents. Individualised Education Plan for each disabled child is much more needed skill for a teacher of inclusive school.

5.6.0 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.

5.6.0 Discussions:

These findings of the present study are well supported by the findings of Verma (NCERT, 2001-02) and others which indicate that if we involve teachers, parents and members of the community in the education of children with special needs, a positive impact can be made on their attitudes towards children with special needs by providing them better attention, better treatments and appropriate education to the maximum of their capabilities.

These findings of the present study also corroborate the suggestions given by Hallahan and Kauffman (1991) that the parents-teacher conference is one of the most common avenues to harness the expertise of parents. They are also
supported by the findings of Hart and Farrell (1991) suggesting that various guidelines in order to facilitate the partnership between parents and teachers with special reference to parents of visually impaired children.

In perspectives and prospects (DPEP Calling, 2001 p-21) it is stated that the entire inclusive education programme, which is multi-strategy, multisite and multilevel in nature, are based entirely on, by and through family participation. Parents participation is seen indispensible to ensure quality and excellence whenever parents are involved in policy, planning and monitoring, whether at ECCE levels or in Education committees.

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

(Hypotheses $H_6$ & $H_7$)

* 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 (Fair) 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 of multiplier-effects for the replications of inclusive education in unreached communities of rural areas.

The results of this study reported above under heads 5.6.0 and 5.7.0 give very effective evidences in support of both the hypotheses $H_6$ & $H_7$. The special resource teachers have proved themselves as a very effective liaison officers among general teachers, school authorities, parents, and community members. In new Chhattisgarh State actually networking activities of the special resource teachers and resource teachers at different levels have generated ample number of potential master-trainers who, in turn, have replicated the inclusive education in unreached communities of remote rural areas. This has also created a very favourable environment for multiplier-effect of this programme.
5.7.1 Discussions:

As already mentioned, nineteen well trained Special Resource Teachers under UNICEF assisted PIED scheme are available in Chhattisgarh State. In the evaluative studies of PIED, roles of these specially trained resource persons in the mass implementation of inclusive education in regular schools are of immense importance. Some of them are multi-category trained teachers suitable to provide economically viable options to address the needs of different types of disabled children. The findings of the present study mentioned above, are very much supported by the findings of various evaluation studies of PIED (1988-95). In fact, these resource teachers along with some NCERT and RIES experts and few NGOs working in the state, prepare a very favourable background for the trainings of state level and district level resource persons. They have played a very crucial role in the implementation of inclusive education in Chhattisgarh State.

It is worth mentioning that Chhattisgarh government is well acquainted with the success story of implementation of IED in DPEP-Tamil Nadu and is fully committed to make the implementation of inclusive education a success in the state. Some positive findings of this study are the results of the state government initiatives in this regards. As stated in an article "Apart or a Part-Perspectives and Prospects" (DPEP Calling, May-June 2001, pp.22-24), findings of the present study are supported such as
• There is a clearly defined policy backed by a specific plan of action.
• The non-disabled student population and their families are sensitised as a pre-requisite to inclusive education.
• Large scale attitudinal changes are being created through orientation of the entire hierarchy of school authorities from state level bureaucrats to district level master-trainers, to block levels personnel to classroom teachers through cascade models of training.
• Research support is available for specific classroom transactions like teaching of Braille to students with visual impairment through specialist teachers.
• Assistive devices like hearing aids and mobility aids like wheelchairs are made available, accessible, affordable and appropriate.
• Teaching-Learning materials like tactiley sensitive maps, using low cost technology like paper, clay and bamboo are modified.
• Students with disabilities are included in recreational activities.
• Physical access is aided through ramps, etc.
• Most of all, peer group support is facilitated.
In this way, inclusive education has brought a new reform, a new wave for education of children with special needs in Chhattisgarh.