# CHAPTER - I
## INTRODUCTION

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 Introduction</td>
<td>1</td>
</tr>
<tr>
<td>1.1 Emergence and Concept of Inclusive Education in India</td>
<td>2</td>
</tr>
<tr>
<td>1.2 Meaning and Concept of Collaborative Learning</td>
<td>4</td>
</tr>
<tr>
<td>1.3 Origin and concept of Collaborative Learning</td>
<td>5</td>
</tr>
<tr>
<td>1.4 Elements of Collaborative Learning</td>
<td>7</td>
</tr>
<tr>
<td>1.5 Collaboration for learning together</td>
<td>9</td>
</tr>
<tr>
<td>1.6 Method of Selecting Collaborative Learning groups</td>
<td>10</td>
</tr>
<tr>
<td>1.7 Collaborative learning promotes Social Skill development</td>
<td>11</td>
</tr>
<tr>
<td>1.8 Alternatives for Collaborative Learning</td>
<td>13</td>
</tr>
<tr>
<td>1.9 Collaborative Learning for different subjects</td>
<td>15</td>
</tr>
<tr>
<td>1.10 Collaborative Learning in Science classroom</td>
<td>16</td>
</tr>
<tr>
<td>1.11 Potential Benefits of Collaborative Learning</td>
<td>17</td>
</tr>
<tr>
<td>1.12 Challenges and Opportunities in Collaborative Learning</td>
<td>19</td>
</tr>
<tr>
<td>1.13 Collaborative learning for Inclusive classrooms in this context</td>
<td>20</td>
</tr>
<tr>
<td>1.14 Rationale of the Study</td>
<td>22</td>
</tr>
<tr>
<td>1.15 Operational Definition</td>
<td>24</td>
</tr>
<tr>
<td>1.16 Objectives</td>
<td>25</td>
</tr>
<tr>
<td>1.17 Hypotheses</td>
<td>25</td>
</tr>
<tr>
<td>1.18 Scope of this study</td>
<td>26</td>
</tr>
<tr>
<td>1.19 Delimitations of the study</td>
<td>26</td>
</tr>
<tr>
<td>1.20 Organization of the thesis</td>
<td>27</td>
</tr>
</tbody>
</table>
CHAPTER - I
INTRODUCTION

1.0 Introduction

The present study entitled "Effect of Collaborative Learning on Learning Outcomes of Students with Special Needs in Inclusive School" investigates the effect of collaboration in the learning of special needs students enrolled in inclusive education system. The education system in India has undergone a different change over the years to get better system of educational practices.

The Ministry of Human Resource development in 2013-2014 stated that 25,03,907 children with special needs were enrolled in schools and 2,06,713 children with "profound and severe" special needs were covered under home-based education. It has also been made free for children of age 6 to 14 years or up to standard VIII (The Right of Children to Free and Compulsory Education Act, 2009).

The traditional classroom is structured as an instructional paradigm centered on efficiently covering subject content, where typically students ‘learn about’ by passively listening to lecture given by experts in the field (Bass, 2012).

Collaborative learning has been widely recognized as a significant educational paradigm for its promotion of student achievement and collaborative skills (Slavin, 1995; Thousand, 1994). The present study attempted to find the effectiveness of collaborative learning on learning outcomes of students with special needs in inclusive school. In addition, the study has brought out how collaborative learning helped all children learning in the classroom.

In this chapter, the Emergence and Concept of inclusive education, the meaning and importance of Collaborative learning, Rational of the study,
Statement of the Problem, Objectives, Hypothesis, Scope and Delimitation of the study have been discussed.

1.1 Emergence and Concept of Inclusive Education in India

The Kothari commission (1964-66) pointed that “the education of the handicapped children should be an inseparable part of the education system.” and thus recommended integrated programme. The objective was to integrate children with disabilities in the general community at all levels as equal partners to prepare them for normal development and to enable them to face life with courage and confidence. National Council of Educational Research and Training (NCERT) and UNICEF together launched a Project Integrated Education for Disabled Children (PIED) in the year 1987 to strengthen the integration of learners with disabilities into regular schools.

The NCERT brought inclusive education into the framework: “Segregation or isolation is good neither for learners with disabilities nor for general learners without disabilities. Societal requirement is that learners with special needs should be educated along with other learners in inclusive schools, which are cost effective and have sound pedagogical practices (NCERT, 2000).

Moreover, The term used by MHRD and drafted the definition of Inclusive Education by the MHRD (2003) uses the following definition: Inclusive education means all learners, young people-with or without disabilities being able to learn together in ordinary preschool provisions, schools, and community educational settings with appropriate network of support services (Draft of Inclusive Education Scheme, MHRD, 2003).

Inclusion welcomes all children without discrimination. The central concern is the equalization of opportunities and the creation of quality education for all as shown in Figure 1.1.
Inclusion in the context of education is a term that refers to the practice of educating students with special needs in regular classes for all. Advocates of regular inclusion and full inclusion believe that students with special needs “belong” to the regular classroom. Consequently, Special Education Services are delivered within the normal classroom. Inclusion advocates are opposed to students spending significant time in special education classes or being totally segregated from nondisabled students in specialized facilities.

In an ideal system of Inclusive Education, the classroom teacher should assume a major responsibility to impart education to children with diverse needs. The appropriate pedagogy and adaptations are vital to cope with the mainstream education for children with disabilities. Collaborative Learning is one of the successful approaches to cater the needs of children from diverse background. Hence a study attempted to find out the effect of Collaborative learning on learning outcomes of students with special needs in Inclusive Schooling.
Research evidences state that high-impact practices that produce meaningful learning gains. High-impact practices include students taking responsibility for their own learning, investing time and energy in practice, collaborating with classmates around challenging learning activities, receiving and responding to frequent and timely feedback from instructors, and seeking to connect their learning to real-life applications (Kuh, Kinzie, Shuh & Whitt, 2010). This approach represents a learning paradigm. Collaborative learning has been proved one of the high impact practices and hence a study has been attempted in this direction.

1.2 Meaning and Concept of Collaborative Learning

According to Lehtinen, Hakkarainen, Lipponen, Rahikainen, and Muukkonen (1999), one of the prime goals of education in the near future will be to enable learners to actively participate in an interconnected society, whose main resource for development (either personal, social, or economical) will be knowledge.

Collaborative learning in general is defined as any kind of group learning in which meaningful learning interaction between learners is taken place (Goren-Bar & Koubek, 2001). Collaborative activities can increase student’s achievement boost motivation, offer variety and interest, and allow the teacher to differentiate instruction to target students’ needs, interests, and aptitudes (Slavin, 1995). Collaborative group learning, however, reflects a much different paradigm of teaching and learning. It is grounded in “constructivism”, a psychological and philosophical perspective suggesting that individuals or groups, through their experiences, shape or construct what they learn and understand (Bruning, Schraw, & Ronning, 1995).

Collaborative Learning is a relationship among learners that requires positive interdependence (a sense of sink or swim together), individual accountability (each of us has to contribute and learn), interpersonal skills (communication, trust, leadership, decision making, and conflict resolution),
face-to-face promotive interaction, and processing (reflecting on how well the team is functioning and how to function even better).

Students cooperate among themselves and with the teacher as they actively engage in the learning process and take ownership for their learning (Goodsell, Maher, & Tinto, 1992).

Research shows that collaborative learning compared to individual and competitive learning scenarios brings students to a higher achievement level, raises their problem solving-abilities, offers cognitive advantages to learners and also has positive influences in enhancing the development of personality traits that are beneficial for future learning or future autonomous or co-operative learning and working (Tozer S. E. et.al. 1995; Webb, N. 1984).

This study is intended to examine the effect of collaborative learning on learning outcomes of students and students with special needs.

1.3 Origin and concept of Collaborative Learning

Collaborative learning approaches were employed in the 1970s by Britton (1973) and colleagues in the field of language and learning such as Barnes (1976) and Barnes & Todd 1977).

Kelly (1955) and Polanyi (1958) have had more influence in collaborative learning circles. Other authors contributing to social constructivism in education include Palincsar (1998) and Flynn, Mesibov, Vermette, and Smith (2013). Theorists including Vygotsky (1978), Dewey
(1938) and Piaget (1951) have influenced both collaborative and cooperative learning.

At the school level in Great Britain, Australia, Canada, and the United States, Collaborative learning has often developed in conjunction with areas such as Language Across the Curriculum, Whole Language Learning, Oracy, Psycholinguistics, Learning through Talking, Negotiating the Curriculum, etc. These perspectives tend to focus on creating an environment that best helps an individual to develop mentally, emotionally, and socially through being an active participant, personally committed to learning within the context of a supportive learning community.

Brubacher, Payne, and Rickett (1990) identify the individuals who have taken significant leadership in collaborative learning at the conceptual and research level, and in the practical classroom implementation level, with some contributing to both.

Some experts on collaborative learning focus on younger learners (Hill & Hill, 1990). In higher education, collaborative learning is arguably the most recent of the three approaches to group learning, being recognized as a unique approach to group learning in higher education in part through the efforts of Bruffee (1973, 1984, 1993). Bruffee often identifies collaborative learning as interpretivist in nature, meaning that individuals strive to understand and act in the world around them. His definitions share much with social constructivism, but with a critical stance, as he recommends that professors should see themselves as change agents who help students better themselves by developing independence through interdependence.

Use of Collaborative learning, Zurita and Nussbaum (2004) claims that collaborative learning is considered to enable cognitive development, since it stimulates social interaction and learning among the members of a group. In this regard, two major theoretical approaches explain the role of social interaction in collaborative learning. On one hand, the Vygotskian perspective considers that individual change arises as the result of an
internalization of regulatory, achieved by the mediation of communication between them. On the activities, such as member coordination and interaction of constructive processes other hand, the Piagetian approach posits that collaborative learning is effective because it promotes the emergence of socio-cognitive conflicts due to different opinions and strategies employed by the partners.

Collaboration in virtual learning communities characterizes itself by heavily relying on interaction among the collaborators (Edwards, 2002; Bistron, 2005). The collaborators can be instructors and learners, the interaction can be resources discovery, access, and sharing, as well as group communication and discussion, or simply any collaboration which has occurred among the instructors and learners. In addition, the collaboration should be enacted inside and outside of classrooms without limitation of space and time; it can be over the Internet and beyond the geographical boundary. Nevertheless, such collaboration environment is generally not supported by conventional learning environments. Typical learning services for collaboration in virtual learning communities are content, access of certain learning subjects; making studying notes and annotation on learning subjects; group discussion, brainstorming for knowledge creation and sharing.

All of these efforts have advocated group work and collaborative discussions.

1.4 Elements of Collaborative Learning

Collaborative learning is the umbrella term encompassing many forms of collaborative learning—from small group projects to the more specific form of group work called cooperative learning (Nagata & Ronkowski 1998).

Johnson and colleagues (1990) pointed out 5 basic elements in CL. CL is not simply a synonym for members working in groups. A learning exercise only qualifies as CL to the extent that the following elements are present in the figure 2.
i) Clearly Perceived Positive Interdependence

Team members are obliged to rely on one another to achieve the goal. If any team members fail to do their part, everyone suffers consequences. Members need to believe that they are linked with others in a way that ensures that they all succeed together. Positive interdependence is the belief by each individual that there is value in working with other members and that both individual learning and work products will be better as a result of collaboration.

ii) Considerable Interaction

Members help and encourage each other to learn. They do this by explaining what they understand and by gathering and sharing knowledge. Group members must be done interactively providing one another with feedback, challenging one another's conclusions and reasoning, and perhaps most importantly, teaching and encouraging one another.

iii) Individual Accountability

All members in a group having a personal responsibility are held accountable for doing their share of the work and for mastery of all of the material to be learned.
iv) Social Skills

Members are encouraged and helped to develop and practice trust-building, leadership, decision making, communication, and conflict management skills.

v) Group Self-Evaluating

Team members set group goals, periodically assess what they are doing well as a team, and identify changes they will make to function more effectively in the future.

Successful collaborative projects have the following characteristics:

1. The problem to be solved is an example of the types of problems found in the community, in industry or in commerce
2. The solution to the problem requires the use of knowledge, skills and attributes that are part of the curriculum
3. The problem can be solved by a small team of students, none of whom possesses the knowledge or skills to solve the problem alone, yet each of whom is able to contribute to the final product. (Miller, Imrie & Cox, 1998).

1.5 Collaboration for Learning together

Group work in schools is generally regarded as falling into one of three types, peer tutoring, cooperative learning and collaborative learning these being distinguished by increasing levels of equality and transitive engagement between students (Damon & Phelps, 1989; Foot, Morgan, & Shute, 1990).

For collaborative learning to be effective, there should be both "group goals" and "individual accountability" (Slavin, 1989). This means that the collaborative learning task must ensure that every group member has learnt something. Ideally, a collaborative learning task would allow for each member to be responsible for some concept necessary to complete the task. This implies that every group member will learn their assigned concept and
will be responsible for teaching to other members of the group. As most teachers have discovered, Learning has been consistently found that students who learn most are those who give and receive elaborated explanations about what they are learning and how they are learning it (Webb, 1985).

Collaborative learning ensures to every group member contributes to the work of their group:

- Making group member responsible for a unique portion of the project as in jigsaw activities (Slavin, 1995).
- Assigning interdependent group roles (Johnson, Johnson, & Holubec, 1993).
- Labeling on random group members to report a group’s conclusions,
- Administering individual tests or composition, increasing motivation through Peer tutoring and
- Providing Feedback to each group member individually (Putnam, 1997).

Hernandez (2002) reported that team learning improved students’ motivation and additionally reported that promotes active and higher level of thinking.

Haberyan (2007) and other have reported that team based learning is motivating, interesting and enjoyable, and has been utilize in science, education, business and medical disciplines with positive results.

1.6 Method of Selecting Collaborative Learning Groups

Collaborative groups can be either homogenous or heterogeneous. Homogenous groups consist of students at similar levels of readiness with regard to a particular task or skill. Beware the negative effects of homogenous groups on students deemed less proficient; studies show that long-term homogenous groupings can compromise motivation and negatively impact learning in lower-level groups (Allington, 1980, Schell &
Rouch, 1988, Hiebert, 1983). The homogenous groups can be: short-term, skill-based and flexible in order to benefit students rotating out of the group as they master the skill being emphasized.

Heterogeneous groups consist of students with varying interests, aptitudes, and degrees of readiness. Advantages to heterogeneous groups include:

- peer modeling of thinking and problem-solving strategies
- subversion of academic stereotyping by encouraging students to recognize diverse

Capros et al (2002) found that low ability students were engaged for longer periods of time when placed with high ability students. Also, it is recommended to place highly motivated peers with less motivated peers (Sage & Kindermann, 1999; Bru, 2006). Overall, these researchers suggest grouping students heterogeneously. Under the direction of a group leader, the group works together in coherent manner and helps one another with projects (Muelter and Fleming, 2001).

This study attempted to implement heterogeneous groups to ensure learning that actually occurs.

1.7 Collaborative Learning Promotes Social Skill development

Collaborative learning promotes social skills among the group and their classmates. Many of the researches noted most social psychology text books contain considerable discussions about conflict, sometimes instigated by individual or inter-group competition, and its resolution and/or reduction through the use of cooperative techniques (Sherman, 1991).

Johnson, Johnson, and Holubec (1993) state that collaborative learning provides students with the opportunity to develop social skills. They found that many of the outcomes expected as part of a collaborative learning activity corresponded with goals for student content understanding and skill attainment. The strategies associated with collaborative learning—such as
role assignments, collaborative problem solving, and task and group processing—all build the social skills that students need to be successful when working with others. Additionally, these skills are important in preparing students for the world of work, where collaborative writing and problem-solving are key elements of many careers.

Another study by Kewely (1998) concluded that peer collaboration encourages maximum student participation, resulting in more flexible thinking, multiple solutions, and a clearer understanding of the steps leading up to those solutions.

Collaborative learning activities allow students to provide explanations of their understanding, which can help students, elaborate and reorganize their knowledge. Social interaction stimulates elaboration of conceptual knowledge as group mates attempt to make themselves understood (Van Boxtel, et al., 2000).

Related to this study of collaborative learning, Schoor, C., Narciss, S. & Korndle, H. (2015) reviewed the terms and concepts that have been used for describing regulation of learning during cooperative and collaborative learning. This regulation might occur on both an individual level and a social level. Several modes of regulation have been identified, but the terms used may vary tremendously-including social regulation, socially shared regulation, coregulation, and other-regulation.

Eichinger J. (1990) compared social interaction behavior between nondisabled and disabled students, as a function of the way tasks were structured during a peer integration program. Of the eight pairs of students, four pairs were assigned to an individualistic goal-structured condition; the other four pairs, to a cooperative condition. For nondisabled students, the cooperative condition was associated with more social interaction during activity and free play sessions. For disabled students, the cooperative
condition was associated with more social interaction during activity sessions, but not during free play sessions.

Gresham, Sugai, and Horner (2001) noted that deficits in social skills are key criteria in defining many high-incidence disabilities that hinder students academic progress, such as specific learning disabilities, attention deficit/hyperactivity disorder (ADHD), mental retardation, and emotional disturbance. Therefore, helping students learn social skills is a proactive approach to minimizing the impact of these types of disabilities on school success. When social skills are absent, educators cannot fully engage students in a variety of learning experiences, especially those that are cooperative.

As inclusion classroom teachers increasingly use such cooperative learning strategies across their curriculum, the need for students to have strong social skills is evident. To participate fully in cooperative learning, some students with disabilities need training in skills such as giving and receiving feedback, listening, and appropriate self-disclosure.

1.8 Alternatives for Collaborative Learning

The Alternatives for collaborative learning is cooperative learning because of the learning type involve learners working together. The concepts of Collaborative learning and cooperative learning share a major characteristic of learner-centered, interaction and important distinction.

On one hand, Collaborative learning uses self-contained tasks and focuses solely on joint activity (Foot et al., 1990), typically with the overt objective of creating shared understanding, particularly where older learners are involved (Roschelle & Teasley, 1995; Schwartz, 1998; Summers, 2006). This variation in emphasis stems from differences in theoretical background. On other hand, Cooperative learning research originated in social psychological work on teams (Bales, 1950; Deutsch, 1949; May & Doob, 1937), and retains a focus on conditions that promote coordination of
effort and understanding (Cohen, 1994; Slavin, 1989; Summers & Svinicki, 2007; Webb & Farivar, 1999).

Active learning is a broad concept of engaging students in higher order thinking and synthesis activities (Bonwell & Eison, 1991). Active learning encompasses a wide range of active designed to involve students such as small group discussion, group projects and personal reflection, (chickering and Gamson, 1987; Mckeachie 1999, Parscarella & Terezini, 2005).

According to Slavin (1987), having two or three members per group produces higher achievement than groups with four or more members. Antil et al (1997) conclude that most teachers prefer pairs and small groups of three and four. Elbaum et al (1997) suggest that we have dialogues with students about their preferences for group composition and expected outcomes.

Thus cooperative and collaborative learning diverge from peer tutoring in their shared emphasis on horizontal rather than vertical variation in the knowledge and expertise held by the students comprising a group; and on discussion and exchange of information and ideas between students as a key mechanism promoting growth (Dillenbourg, 1999; Johnson & Johnson, 1979). They differ in turn from each other in the degree of transactive exchange they foster.

Earlier research by Kamps and Barbetta (1994) involving students who have autism also found peer tutoring to be an effective strategy for increasing reading fluency and comprehension for both students with autism and their peers. And Marr, Algozzine, Kavel, and Dugan (2010) introduced an intervention with second grade students who were failing to make academic progress in their general education classroom. A recent investigation found peer mediated learning groups, in which children work
together to support each other, to be a powerful academic intervention (Marr et al., 2010).

Similar to these approaches, student benefit from active learning and cooperative learning remains a shared responsibility rather than individual activity.

Collaborative learning, especially as applied to younger students, is found in work on socio-cognitive conflict (Doise & Mugny, 1984; Piaget, 1932, 1985), and research here has concentrated on how differences in viewpoint serve as a catalyst and a resource for conceptual change (Azmitia, 2000; Clark et al., 2003;).

1.9 Collaborative Learning for Different Subjects

Many researchers on different learning types of Collaborative Learning found on board perspective in all subjects of primary, secondary and upto university level. These include improvements in participants’ conceptual grasp and application of skills (Gillies & Ashman, 2003; Johnson & Johnson, 1979), but also more positive social relations (Azmitia, 2000; Blatchford, Baines, Rubie-Davies, Bassett, & Chowne, 2006; Marks, 2000). This dual impact on achievement and social integration is of considerable practical significance, since it makes it easier to justify implementation of group work in crowded curricula.

The subject of Mathematics has often been considered beyond the capacity of the blind to master. Traditionally it has been inaccessible to visually impaired and blind students because its content is rich with visually presented concepts and information (Schleppenbach, 1997). Students, who learn by active learning method, not only learn better, but also take more pleasure from learning experience. One of the main methods of activate students in learning use of studying groups in the class, and provide discussion list, is exchange of views, questioning and answering
Science is a subject involving experiments to understand concepts of day to day life. The primary benefits of science activities for students with disabilities is the increase in academic achievement and appropriate social behavior that occurs when the students are actively engaged in learning science concepts with materials adapted to meet their individual learning needs. Students are motivated and engaged in learning through collaboration, they naturally experience increased academic achievement and success in inclusion classrooms (Marie, 2004).

1.10 Collaborative Learning in Science classroom

Science teaching and learning today is to a great extent focused on activities by which the learner acquires facts, rules and action sequences (Kpangban & Ajaja, 2007). In a student-centered instructional approach like this, using student ideas means incorporating student experiences, points of view, feelings, and problems into the lesson by making the student the primary point of reference. A completely student oriented lesson is always initiated by asking students questions and assigning specific roles to them on the content to be taught and their answers and dispositions would become the focus of the lesson. The access to inclusive curriculum is the first stage of overcoming the exclusion of disabilities in the mainstream education (Booth, 2000).

Social and Collaborative learning methods in their science classes to achieve better learning outcomes (National Research Council, 2012). There are different research methods that results in deeper engagement of students across a wide range of contexts. Collaborative learning where students develop their thinking, and immediate feedback through the interactions with their peers (National Research Council, 2012).
Gilley and Clarkston (2014) reported knowledge gains (increases in student learning, i.e., the original acquisition of knowledge by students) due to the collaborative part of the exam in a science course on natural disasters.

Other studies have focused on retention of content in biology (Leight et al., 2012, Cortright et al., 2003).

1.11 Potential Benefits of Collaborative Learning

According to proponents of collaborative learning, the fact that students are actively exchanging, debating and negotiating ideas within their groups increases students’ interest in learning. Importantly, by engaging in discussion and taking responsibility for their learning, students are encouraged to become critical thinkers (Totten, Sills, Digby & Russ, 1989).

Many researchers have reported that students working in small groups tend to learn more of what is being taught. Moreover, they retain the information longer and also appear more satisfied with their classes (Beckman, 1990; Chickering & Gamson, 1991; Goodsell, et al, 1992).

Research shows that educational experiences that are active, social, contextual, engaging, and student-owned lead to deeper learning. Roberts (2005) highlights:

**Academic benefits**: promotes critical thinking skills by through discussion and debate; involves students actively in the learning process by creating an environment of active, involved, exploratory learning; improves classroom results by promoting higher achievement and class attendance, as well as innovation in teaching and classroom techniques; and fosters the development of problem solving techniques, potentially helping weaker students improve their performance when grouped with higher achieving students.
**Social benefits:** develops a social support system for students; builds diversity understanding among students and staff; and establishes a positive atmosphere for modeling and practicing cooperation, as well as teamwork.

**Psychological benefits:** can help to reduce anxiety and encourage students to seek help and accept tutoring from their peers; and develops positive attitudes towards teachers. Based on the study, the benefits of Collaborative Learning are presented in the figure below:

![Figure 1.3: Benefits of Collaborative Learning](image-url)
Nelson and Johnson (1996) found that the academic performance of students is enhanced when teachers use an instructional sequence of 1) demonstration, 2) guided practice, and 3) independent practice. They also state that students displayed much higher rates of on-task behavior.

Webb and Farivar (1994) suggest that children who need help can potentially benefit from these interactions, because their peers are often more aware than their teachers of what other students do not understand, they can focus on the relevant features of the problem, and give explanations in terms that can be easily understood by the peers.

Fuchs et al (1994) and Gillies and Ashman (1997) have also demonstrated that low-achieving children can interact effectively in group and that these interactions can lead to a greater understanding of the content material.

1.12 Challenges and Opportunities in Collaborative Learning

Collaborative learning can be an opportunity rewarding to learn in groups but it has also full of challenges. Stepping out of the center and engaging students in group activity is difficult at the beginning of the classroom.

Designing group work requires a demanding yet important rethinking, in terms of course content and time allocation. The classroom time is considered an important social space for developing understandings about course material, and out-of-class time is devoted to study groups or group projects, the rest of the class time (lectures, assignments, examinations) is to design? How do we ensure students are learning and mastering key skills and ideas in the course, while at the same time addressing all the material of the course? Teaching in collaborative settings puts front and center the tension between the process of student learning and content coverage.

Challenges to collaborative learning at the classroom level are compounded by the traditional structures and culture of the academy, which
continue to perpetuate the teacher-centered, transmission-of-information model of teaching and learning. The political economy of the academy is set up to front load the curriculum with large lower division classes in rooms immutably arranged for lectures, usually in classes limited to fifty-minute “hours.” Student-student interaction; extended, careful examination of ideas; the hearing-out of multiple perspectives; the development of an intellectual community—all these are hard to accomplish under these constraints.

Collaborative learning goes to the roots of long-held assumptions about teaching and learning. Classroom roles change: both teachers and students take on more complex roles and responsibilities. (Finkel & Monk, 1983; MacGregor, 1990).

The classroom is no longer solo teacher and individual students. It becomes more an interdependent community with all the joys and tensions and difficulties that attend all communities. This degree of involvement often questions and reshapes assumed power relationships between teachers and students, (and between students and students), a process that at first can be confusing and disorienting (Romer & Whipple, 1990). Not only is course content reshaped, so are our definitions of student competence. Because the public nature of group work makes demonstration of student learning so continuous, collaborative learning both complicates and enriches the evaluation process.

1.13 Collaborative Learning for Inclusive Classrooms in this Context

The gap between research evidence and classroom practices persists in both general and special education (Cook et al., 2008). And it seems that teachers with more negative attitudes toward inclusion report less frequent use of the instructional strategies believed to facilitate the effective inclusion of children with disabilities (Campbell et al., 2003).

The Collaborative learning process models what it means to question, learn and understand in concert with others. Learning collaboratively
demands responsibility, persistence and sensitivity, but the result can be a community of learners in which everyone is welcome to join, participate and grow.

Collaboration in inclusion classrooms is an equitable process where teachers value the importance of sharing educational responsibilities for students with and without educational disabilities.

Johnson, Johnson, Scott, and Ramola (1985) concluded that "having academically handicapped students learn individualistically may be detrimental to their achievement".

Similar to Collaborative Learning method, Avcioglu (2007) determined whether a social skill instruction program, prepared according to the cooperative learning method, is effective for children with hearing disability in learning the basic social skills, starting and continuing a relationship, conducting a work with a group, and the generalization of these skills. Nine learning groups, That is, three groups for each three different skills, are formed because the three target social skills applied on different students. Result showed that this program is effective for hearing impaired students who can learn some social skills.

Here in the study focuses on Collaborative learning considered to be effective for Special Need Children. Friend (2005) related that effective collaboration is dependent on a foundation of trust, respect, and shared responsibility for all students’ educational achievement. Teachers’ approaches to collaboration continually evolve as they learn more about working together. The learners involved in collaborative teaching must perceive each other as equal professionals and understand that they can learn from each other. They cooperate to plan the entire teaching process including preparing class lessons, sharing materials and resources, co-teaching the lessons while managing the inclusion classroom, and
making decisions about assessment of common goals for teaching and for student learning.

1.14 Rationale of the Study

Government initiatives in India for Inclusive Education can be traced back to National Educational Policy (1986) which recommended, as a goal, 'the integration of the handicapped within the general community at all levels as equal partners, to prepare them for normal growth and to enable them to face life with courage and confidence'. The PWD Act (1995) directs Government and Local Authorities to ensure that every child with a disability has access to free education in an appropriate environment until he attains the age of eighteen-years and promotes the integration of students with disabilities in the normal school. The Right to Education Act (2009) advocates an inclusive environment for all children, including those with disabilities. The Government of India implemented a comprehensive Education for All (EFA), the Sarva Shiksha Abhiyan (SSA) in 2003. This inclusive approach was not only regarded as conducive to children’s development and education but also critical from an economic perspective as the regular system of education was transformed to respond to needs of students of all ability levels.

According to EFA Global Monitoring Report (2010) that marginalized children with disabilities continue to be widely excluded from quality education. Disability is recognized as one of the least visible, yet most potent factors in educational marginalization. The Indian Government’s efforts over the past few years have been largely focused on increasing access to education. Though this is a critical step in improving the educational opportunities of that segment of the population with disabilities, it has inadvertently taken attention away from factors that have a direct impact on the quality of education delivered in the classroom. The First Joint Review Mission of SSA (Department of School Education and Literacy, 2005) and the Third Review (2006), commenting on the education of children with disabilities, noted that:
While invariably improving, coverage remains incomplete and an examination shows implementation to be poor, suggesting that this area is not receiving sufficient priority. Educational interventions that have thus far been widely implemented within the country tend to be based upon a medical model with primary attention directed toward providing aids and appliances children with physical challenges (Singal, 2008).

In a recent position statement, The National Council for Educational Research and Training (NCERT, 2007: an apex organization of the Government of India created to assist and advise the central and state governments on academic matters related to school education, noted that international research evidence suggests that pedagogical practices adopted for children with disabilities are primarily good teaching practices for all children. Government initiatives, however, continue to largely neglect this area. The NCERT paper provides useful reflection when it notes that: In India, the concept of Inclusive Education has not yet been linked to a broader discussion of pedagogy and quality education.

Inclusive education requires schools to respond to the varying competencies of children rather than children adapting to the school curriculum (Sandhil & Singh, 2004). A sizeable population of children with special needs is enrolled in inclusive schools but inclusive placement is not a guarantee for coping with the academics of the school. Lack of appropriate pedagogical provision is the main cause for their difficulty in mainstreaming. It is important to remember that children with special needs are not students who are not incapacitated to learn; rather they need differentiated instruction for learning (Heiman.T, 2000).

Collaborative Learning method is field tested and found successful for learning of all children learning method. This allows students to provide explanations of their understanding, which can help students, elaborate and reorganize their knowledge. Social interaction stimulates elaboration of conceptual knowledge as group mates attempt to make themselves understood (Van Boxtel, et al., 2000). Johnson and Johnson (1996) stated
that low activity group students work harder when grouped with higher activity students. Group competition promotes cohesiveness among group members and group spirit.

A thorough literature survey revealed that there were hardly studies available on the effectiveness of collaborative learning for the academic outcomes of students with special needs in Indian context. Hence a study was planned which intended to bring out the efficacy of all students and collaborative learning for learning enhancement of special needs children, its benefits to all children learning and for promotion of social skills thereby enhancing learning of all students and for promotion of social skills among students.

1.15 Operational Definition

The statement of the problem is worded as: “Effect of Collaborative Learning on Learning Outcomes of Students with Special Needs in Inclusive School”

Collaborative Learning in the study refers to the instruction method in which students work in groups toward a common academic goal and primarily assigning responsibility among themselves and experiment accordingly and thereby learning is taken place for the whole classroom including students with special needs.

Students with Special Needs

Students with Special Needs include two groups:

**Group 1** has students with sensory disabilities viz., Visually Impaired (VI), Hearing Impaired (HI) and Movement Impaired (MI)

**Group 2** includes student with Cognitive Impairment (CI). In Cognitive Impairment, Students with mild category was involved in the study.

Other than these special needs students, other students are denoted as Non-Disabled Peers.
1.16 Objectives

The objectives of the study were to:

1. Study the Academic Performance of students before and after introduction of Collaborative Learning.
2. Examine Academic gain and the level of Retention of students before and after introduction of Collaborative Learning.
3. Find out the Academic Performance of different groups of students viz., Non Disabled Peers, Students with Special Needs and Students with Cognitive Impaired separately.
4. Find out the Academic gain of different groups of students viz., Non Disabled Peers, Students with Special Needs and Students with Cognitive Impaired.
5. Study the effect of Collaborative Learning on the level of Retention of students viz., Non Disabled Peers, Students with Special Needs and Students with Cognitive Impaired separately.
6. Study the influence of Grade and Gender and their interaction on Academic Gain and level of Retention.
7. Analyze the influence of Collaborative Learning on Social Skill development of students

1.17 Hypotheses

1. There is no significant difference in the Academic Performance of students before and after introduction of Collaborative Learning.
2. There is no significant difference in the Academic Gain of students before and after introduction of Collaborative Learning with respect to Non Disabled Peers, Students with Special Needs and Students with Cognitive Impaired.
3. There is no significant difference in the Academic Performance of students before and after introduction of Collaborative Learning with respect to Non Disabled Peers, Students with Special Needs and Students with Cognitive Impaired separately.
4. is no significant difference in Retention level of students before and after introduction of Collaborative learning.
5. There is no significant difference in the level of Retention of Non Disabled Peers, Students with Special Needs and Students with Cognitive Impaired after Collaborative Learning.
6. There is no significant influence of Grade and Gender and their interaction on Academic Gain and level of Retention.
7. There is no significant influence of Collaborative learning on Social Skill development.

1.18 Scope of this study

- The study attempts to investigate effect of collaborative learning for students with special needs to improve their learning and social skills.
- The study will be benefited to students with special needs and cognitive impaired, non disabled peers to learn through collaborative learning in regular classroom and in inclusive settings.
- The study will be creating awareness among regular and resource teachers for updating their knowledge to make classroom learning is very constructive.
- The study may be model to incorporate collaborative learning in a inclusive settings.
- The research will be helpful to the policy makers to re-examine the present policy structure and to update their teaching and learning aspects to students with special needs and cognitive impaired.

1.19 Limitations of the study

1. The present study is limited to small sample of students with Special Needs in inclusive schools under SSA Programme.
2. The study was limited to students in Grade VI and VIII concerning learning science.
3. Due to Paucity of time, it was not possible to compare the experimental study with the control group of collaborative learning in inclusion for longer duration.

1.20 Organization of the thesis

This research work is organized and reported under the following five chapters:

1. The first chapter deals with introduction, Emergence and Concept of Inclusive Education in India and proceeds with the Meaning, Concept and Origin of Collaborative Learning, Elements, Method of selecting Collaborative learning groups, Collaborative learning in Inclusive classrooms, and Operational definition, objectives, hypothesis, scope and Limitations of the study.

2. The second chapter presents the review of literature related to the present study.

3. The third chapter explains the research procedure, which includes the methods adopted in the study, construction of tools, selection of samples, administration of the tools and Data collection procedure.

4. The fourth chapter deals with the tabulation, analysis and interpretation of the data in detail.

5. The fifth chapter reports the findings, recommendations and suggestions. This is followed by bibliography and appendices.

The next chapter deals with Review of Related Literature of the Study.