CHAPTER THREE
REVIEW OF LITERATURE

3.1 INTRODUCTION

Quite a number of studies have been attempted on inclusive education. The scholars have been paying more attention to such studies for the last ten years or so. Such studies are listed under this sub-head.

3.2 RESEARCH IN INCLUSIVE EDUCATION

Inclusion began in the United States and Europe as a special education initiative on behalf of students with disabilities as early as the 1980s. Now, more than two decades later, schools in these countries are changing as educators, parents, politicians and communities try to prepare for the new challenges and promises of the twenty-first century. How students with disabilities and special education continue to fit into this future is the ongoing challenge of inclusion.

Ferguson (2008) suggests that trends point to some troubling results especially for minority students, and students with some kinds of disabilities. The newest challenge is to make inclusive practices available to everybody, everywhere and all the time.

Michael Arthur-Kelly et al (2008) suggest that interpersonal variables are the key to improvements in educational support for multiple disabilities students.
3.2.1 Mainstream-Special school Inclusion

Frederickson et al (2004) collected views from pupils, parents and teachers in the UK and analyzed using a qualitative procedure and commonalities and differences of view identified. All groups reported academic and social advantages as positive benefits of returning pupils with special educational needs from special to mainstream settings. Teachers identified changing attitudes and values and sharing staff expertise as important. Teachers’ main concerns were organizational (planning, timetabling, curriculum). All groups highlighted some academic and social concerns, though for pupils relatively higher incidences of social concerns were recorded. All groups considered pupil progress to be a primary indicator of successful inclusion: parents placed greater emphasis on academic progress and pupils on social progress. Teachers and parents identified good planning and preparation and supportive communication as prerequisites for successful inclusion.

Zaveri (2001) found that teachers felt inclusion to be desirable but not feasible. Whether Private or Govt. aided, elementary or high school level the factors such as large class size, vast curriculum content, lack of training awareness to deal with the handicapped population, rigid curriculum, and rigid time frame work have critical influence. The awareness about issues related to the provisions and the policies formulated for the challenged population was very low amongst the general educators.
3.2.2 Views of general education teachers about inclusion

Avissar (2000)’s purpose was to examine regular teachers’ views about inclusion. Pre-service education trainees conducted in-depth interviews with 50 general education teachers. The major findings revealed that inclusion was practiced in all the schools, however not all teachers felt that they were actively involved in it, despite the fact that students with disabilities were mainstreamed into their classrooms. Several educational models of inclusion were identified, yet each school seemed to have used its own variation and interpretation of inclusion. Teachers’ attitudes toward inclusion were favourable, yet they identified several difficulties and issues related to inclusion. These included teacher knowledge in remedial practices, lack of professional support, class size, behaviour problems and school climate. With regards to the understanding of the concept of inclusion, teachers’ responses revealed a varied yet somewhat blurred picture.

3.2.3 Teacher’s views on inclusive classrooms

Kuyini and Desai (2007) investigated primary school teachers’ views and experiences in implementing the Inclusive Education Policy in regular schools in five districts of the Enga Province of Papua New Guinea. Six primary schools were selected and involved 77 teachers who responded to questionnaire items, while 12 teachers within the group were chosen to be involved in interviews. The findings from the study revealed that most teachers supported the notion of Inclusive Education Policy and would like to implement it. However, they
indicated that there needed to be a change in attitudes of teachers, peers, boards of management, and parents/caregivers to provide assistance for children with special needs. Most teachers felt that there needs to be more awareness of the principle and the importance of inclusion. Kuyini and Desai (2007) reported that teachers admitted they needed more training in the field of educating children with special education in order to accommodate and teach children with special needs which shows that teachers’ colleges and universities need to have trained lecturers to develop more courses in special education. Teachers expressed concern that school inspectors do not know enough about the inclusive education concept and need to be trained as well so collaboratively they could implement the policy. This includes training of specialists to support teachers, funds for teaching and learning resources and facilities in schools. Government support is needed to effectively implement the inclusive education policy.

3.2.4 Teacher’s Attitudes towards Inclusion

Teachers’ attitudes play a significant role on whether inclusive education can be fully be implemented in the regular school or not. Teachers who have positive attitudes about inclusive education accept children with special needs into their classrooms and involve them in all academic learning and social interaction with other children (Frost, 2002).

In order to fully understand the attitudes of the teachers towards the implementation of an inclusion policy, a considerable amount of
research has been carried out to investigate this phenomenon. In one study, general classroom teachers described their inclusive education programme as “transforming experiences” for them (Hunt and Goetz, 1997 pp.77). It was a complete change in their views and understanding to teach children with special educational needs, while at the same time they have expressed the reality of implementing the inclusive programme. They had learned and gained a lot of confidence in their teaching and developed positive relationships with the students. The school administration and support staff supported them in making

Other general classroom teachers, who supported the inclusion programme however, were selective in the type and degree of disability that they felt they could accommodate. According to Bailey and Plessis’ (1998) research, most general classroom teachers felt comfortable teaching students with mild or moderate learning, sensory and physical disabilities. However, they would not include students with severe disabilities and students with emotional and behavioural difficulties as they felt these students were not easy to teach or interact with. Some teachers stated that teaching a student with an identifiable disability could be less of a problem than one unidentifiable problem, while others prefer to teach children with mild disabilities (Foreman, 2005). A similar study by Cook (2001) in the United States indicated that teachers have an attitude where they would prefer to select which students with special needs to work with in the classrooms.
Cook (2001) stated that teachers do not want to work with students with hidden disabilities and those with behavioural problems but are willing to teach those students with obvious disabilities. This negative attitude was seen in further research where general classroom teachers in New York reported their responses to inclusion as “hostile and anxious” (Soodak, et al., 1998, p. 492). These teachers were more aggressive when having children with intellectual disabilities, learning difficulties and emotional and behavior disorders than those with hearing impairment or physical handicaps. The findings were in line with other research that found that teachers hold more positive attitudes towards including children with social and physical disabilities, compared to those with academic or behavioral disorders (Wilczenski, 1992 cited in Soodak et al., 1998). Therefore, it appears that certain children with disabilities are considered easier to include in classroom programmers than others.

Many teachers seem to have the attitude that teacher aides are responsible for providing academic support for children with special needs and therefore they do not need to spend much time assisting these children. A study in New Zealand indicated that most general classroom teachers depend too much on their teacher aides to provide academic work for children with special needs. However, these teacher aides do not have formal training and competences to provide academic work for children with special needs in the classrooms (MacArthur, et al., 2005).
Ward (2005) found that administrators’, teachers’ and aides’ primary concerns for successful inclusion were teacher compatibility, followed by positive attitudes and finally teacher training as the most essential components for successful inclusion of students with disabilities.

Teachers of normal schools were eager to teach in an inclusive environment, specialized training and sought assistance of special teachers to remain effective in the inclusive class (Jyotirmayee Nayak, 2008).

Reddy and Sujathamalini (2005) in their survey of 527 teachers in 76 normal schools of four districts in the states of Andhra Pradesh and Tamil Nadu found that in most of the disability aspects in children, the school teachers possessed only moderate and low awareness and attitude with moderate competency.

Mohanty (2008) notes that regular teachers were asked to teach special needs students without receiving any formal training as well as administrative assistance; but inclusive education demands the class teacher to be innovative, flexible, creative, ready to learn from the learners and capable of initiating active learning.

The challenges encountered in course of implementing IE emanate from different directions such as attitudinal factors, rigid school system, and resistance to change, lack of clear educational guidelines and fear of losing one’s job on the part of special school teachers (Mohanty, 2008).
Usharani (2008) reported that the awareness of teachers of inclusive education for the disabled was average. Female teachers had more awareness than their counter parts. No significant difference in awareness was reported according to groups such as a) head teachers – assistant teachers; b) junior and senior teachers c) Secondary grade, B.T. and PG Teachers.

Chhabra, Srivastava, and Srivastava (2010) undertook a study to identify the attitudes and concerns of teachers toward the inclusion of students with disabilities in the general classroom. The findings indicate that teachers in Botswana have somewhat negative attitudes with some concern about inclusive education. Significant correlation was observed between attitudes and concerns ($r = .323$). The results also reveal that many regular teachers feel unprepared and fearful to work with learners with disabilities in regular classes and so display frustration, anger, and negative attitudes toward inclusive education because they believe that it could lead to lower academic standards.

Padmanabhan (2007) reported a definite trend towards a favorable attitude towards inclusion. Teachers of both inclusive and integrated schools were more sensitive to the academic needs of special children. Teachers work was exhausting, all were not competent to handle them, and they can change their strategy to make them all learn. In the role of teaching, teachers of inclusive classes should not be strict with special children about home work issues related the education of the challenged children in inclusive setting with reference
to curriculum transaction and evaluation and co-curricular activities; teachers working in inclusive schools seem to be more adaptable of providing a warm and conducive socio emotional climate in the class that promotes inclusion.

As reported by Sharma and Desai (2007) Australian teachers were significantly more in favour of including students with disabilities into regular classrooms than Singaporean counter parts. Australian teachers were more positively disposed to include students with disabilities who required physical and social accommodation. A Lower degree of concern was about including students with disabilities into regular class rooms compared to the Singapore sample.

Only one background variable ‘Knowledge of Disability Discrimination Act’ was significantly correlated into Australian pre-service teachers’ attitude toward Inclusive Education. In the case of Singaporean pre-service teachers four variables were found to be significantly correlated to their attitudes towards inclusive education. Positive correlation between age and Singaporean pre-service teachers’ attitudes suggested that the older teachers were more positive towards including students with disabilities. A positive correlation was found between training in special education and confidence in teaching students with disabilities. Very high degree of positive correlation between knowledge of the Disability Discrimination Act and pre-service teacher concerns about inclusive education was found. Teachers who had some experience of teaching students with disabilities in school
setting were less concerned about including students with disabilities into regular class rooms. A high correlation was noted between training and confidence ($\beta=0.70$).

Stoler (1992) pointed out that in service training might not be accomplished in one day workshops. In fact, training must be comprehensive, and be in-depth before the process of inclusion takes place. Topics may include techniques on team teaching, collaboration, and the ability for teachers to recognize any physical or emotional problems students may exhibit. It was found that teachers who received in-service training in special education showed more positive attitudes toward inclusion than those without any training (Stoler, 1992). It was also emphasized that more research on teachers' attitudes toward inclusion might be needed (Stoler, 1992).

Jobe and Rust (1996) studied the attitudes of teachers who completed coursework or in-service training to see how the differing levels of training affect attitudes.

Bennett, Bruns, and DeLuca (1997) indicated that training had increased teacher confidence and promoted a positive attitude. The results also showed a positive correlation between teacher training and their attitudes toward inclusion, indicating the need for ongoing training for regular education teachers.

Cook, Gerber, and Semme (1999) found positive attitudes existed among special education teachers due to their expertise and knowledge in the educational field. They indicated how these professionals have
roles that are dedicated specifically to meet the needs of students with disabilities. Happendorf and Leyser (2001) explored attitudes and practices regarding inclusion using an attitude scale. They found that special education teachers as compared to regular education teachers perceive themselves as more competent in teaching students with disabilities because of their professional training.

3.2.5 Mainstream teachers’ attitudes towards the inclusion

Bayliss and Avramidis (2000)’s analysis was concerned with the presentation of a three years’ project looking at mainstream teachers’ attitudes towards inclusion in one Local Educational Authority in the Southwest of England. The study used both quantitative and qualitative techniques. The first phase of the project involved a survey which indicated that educating students with significant disabilities in mainstream classrooms results in positive changes in educators’ attitudes. Here, the study confirmed previous research, which reported that teachers show positive commitment after they have gained mastery of the professional expertise needed to implement inclusive programmes. Further, the survey highlighted the importance and effectiveness of substantial self-reflective critical professional development, which results in the acquisition of generic teaching skills necessary for meeting the needs of all children, as opposed to short term technical responses to specific needs. The qualitative phase of the project involved in-depth case studies of two individual schools which looked at the whole issue of inclusion within a holistic approach. The
results of the qualitative phase indicated that there are distinctions to be drawn between integration (seen as "participation") and inclusion ("participation" and "belonging") -this was highlighted by students' personal accounts of bullying within the schools which described themselves as 'inclusive'. The qualitative aspects of the study highlighted the outcome that "inclusive practice" is seen more in terms of integration than inclusion -students have their specific learning needs well met within the schools, but their personal needs are not well supported. The results indicate that in order to achieve inclusion, schools must look to restructuring to support personal as well as learning needs. Such restructuring is dependent on specific professional development (as indicated in the quantitative study) which supports the needs of learners within 'inclusive' (i.e. holistic) frameworks.

3.2.6 Regular education teachers and special education teachers’ attitude toward inclusive education

Regular education teachers and special education teachers' attitude toward inclusive education and other related issues in inclusive classrooms, such as co-teaching, teaching strategies, instructional planning, learning capabilities, accommodations, and mutual respect were surveyed by Bayliss and Avramidis (2000) and the results showed a significant difference between regular education teachers and special education teachers on their perspectives of co-teaching. No significant differences were found on teaching strategies,
instructional planning, learning capabilities, accommodations, and mutual respect.

Padeliadu and Lampropoulou (1997) examined the attitudes of regular and special education teachers towards integration of students with special educational needs in schools of Greece. The study aimed at revealing possible differences in teachers' attitudes when different disabilities are involved and when issues such as the best time for integration and the area of most benefit for the integrated students are raised. The results showed that, although both regular and special education teachers held neutral attitudes towards school integration, the regular education teachers were more positive towards integration than their special education colleagues. Moreover, younger and less experienced teachers were more positive towards school integration, while no differences were found between male and female teachers' attitudes. In regard to the best time for initiating school integration, teachers' views differed only in a few choices, with the regular education teachers being more positive towards integration earlier than the special education teachers. In regard to the area of the most benefit for the students in the case of integration, again, the two groups of teachers differed in few areas, with the special education teachers perceiving only the social benefit of integration.

Weisel and Dror (2006) examined the effects of school organizational and educational climate, and a teacher's sense of efficacy, on general education teachers' attitudes toward inclusion of
students with special needs. The sample included 139 teachers from 17 elementary schools in the Northern District of Israel. The results of Pearson correlation and multiple regression analyses indicated that school climate and teachers’ sense of efficacy as well as participation in special education training were positively associated with teachers’ attitudes toward inclusion. Self-efficacy was the single most important factor affecting attitudes. School climate included six factors: supportive leadership; teachers’ autonomy; prestige of the teaching profession; renovations; teachers’ collaboration; and workload. Examination of the inter-correlations among these factors and with attitudes revealed that those teachers who perceived their school as having supportive leadership, encouraged renovations and collaboration but did not threaten teachers’ autonomy, tended to express more positive attitudes towards inclusion.

Koutrouba, Vamvakari and Theodoropoulos (2008)’s study, in Greece, aimed at recording Greek teachers’ attitudes towards inclusion and determining the factors that enhance positive attitudes or negative ones. Greek teachers, despite obvious infrastructural and institutional hindrances, favor SEN students’ inclusion, and this attitude is strengthened when specialized knowledge, further training and incentives for acquiring professional qualifications are provided to teachers.

Avramidis and Kalyva (2007) conducted a survey on the attitudes of Greek teachers to inclusion. The 155 respondents were general
education primary teachers drawn from one region of Northern Greece, with a proportion deliberately selected from schools identified as actively implementing inclusive programmes. The analysis revealed positive attitudes towards the general concept of inclusion but variable views on the difficulty of accommodating different types of disabilities in mainstream classrooms. Teachers who had been actively involved in teaching pupils with SEN held significantly more positive attitudes than their counterparts with little or no such experience. The analysis also demonstrated the importance of substantive long-term training in the formation of positive teacher attitudes towards inclusion.

3.2.7 Attitudes of teachers towards inclusive education

Attitude is to a large extent a reflection of a person’s fundamental beliefs. It influences the way a person thinks and behaves. To understand and appreciate a person’s attitudes, we often need to understand his or her beliefs. Many social problems and much discrimination occur because of the attitudes of people. Teachers’ life experiences, beliefs, attitudes and values tend to influence teachers’ commitment toward education of children with special needs in the general classroom setting. Teacher attitudes to inclusive school also are affected by class size, inadequate resources, inadequate teacher preparation, Teacher related variables influencing their attitudes to inclusion are gender, age, teaching experience, grade level taught, experience of contact and training, special education qualifications acquired from pre or in service training courses.
The number of interactions between student and teacher lead to greater attention given to constructing student understanding. A collaborative culture involving a variety of professionals from diverse professional and institutional backgrounds in inclusive schools to be established and maintained, as the support from specialist support teacher is important in shaping positive teacher attitude to inclusion.

3.2.8 Student Teachers’ Attitudes Towards Inclusion

Avramidis, Bayliss and Burden (2000) a survey was undertaken into the attitudes of student teachers toward the inclusion of children with special needs in the ordinary school. Student teachers held positive attitudes toward the general concept of inclusion but their perceived competence dropped significantly according to the severity of children's needs as identified by the UK “Code of Practice for the Identification and Assessment of Special Educational Needs”.

Forlin, Loreman, Sharma, and Chris (2009) utilized an international data set of 603 pre-service teachers, consideration was given to the effect of a range of demographic differences on changing pre-service teacher attitudes toward inclusion; sentiments towards people with a disability and in reducing their concerns about inclusion when involved in a focused unit of work. Pre- and post-training comparisons were made which identify a range of variables that impact on changing pre-service teacher perceptions about inclusion.
3.2.9 Teacher's Training Impacts Teacher's Attitude

Teaching requires skills and strategies, and formal or informal training will prepare teachers in order for them to develop confidence in their instruction (Campbell, 1996).

Teachers also felt that they were not provided with training strategies that would prove to be helpful in teaching students with special needs. They expressed that workshops on instructional modifications for students with special needs were necessary. It seems that there needs to be continuous pre service and in service education that focuses on attitudes that will enable all teachers to work effectively with special need students (Nevin, Meyers, Thousand, & Villa, 1996).

Evans, Duchnowski, Hocutt and Townsend (1996) reported that innovative practices such as dual certification would better prepare teachers to meet the needs of students with disabilities in an inclusive environment. It was also found that positive attitudes result from teachers who have professional certification, training, and higher levels of education. This indicates that training should not only be a consideration for teachers who are already in service, but a priority for pre-service teachers.

Kirk (1998) investigated the effects of an inclusion course on teachers' attitudes, and found no significant change in attitudes after the teachers had completed a course on inclusion. All the teacher participants felt more training was needed to better prepare themselves for their inclusive classrooms.
Teachers’ negative perceptions of inclusion may be because of insufficient training, and lack of knowledge in special education (Synder, 1999). Maimlin (1999) investigated a school district as an example. Despite the best intention of inclusive education, the district failed to fully understand and implement the inclusive programs. It was found that teachers struggled for using effective instructional strategies to teach students and lacked training. The only training regular education teachers received was a two hour in-service, which did not provide sufficient knowledge in learning curriculum instructional strategies because of the limited time period (Maimlin, 1999).

In order for the inclusion movement to be successful, the regular education teachers must be trained to be competent to work with students with disabilities (Synder, 1999). In the study, Synder (1999) found that regular education teachers had little confidence in working with students with disabilities due to the limited training and knowledge, and all regular education teachers did not have one course or an in-service workshop in the field of special education. Because of this situation, teachers’ who graduated years ago did not feel prepared to effectively deal with special education students. Teachers who were not satisfied with the implementation of inclusive programs, felt overwhelmed due to their limited training.

In their study, Daane, Latham, and Smith (2000) investigated three groups of regular education teachers and found all teachers indicated that they were not prepared to meet the needs of students
with disabilities. It was found that regular education teachers lacked confidence, especially in the area of curriculum adaptation. The formal preparation for teacher education programs focused specifically on special education methodologies in most colleges nationwide. These programs are usually completed by teachers who want to specialize in teaching students with disabilities (Marino, Miller & Monahan, 2000).

According to Shade and Stewart (2001), teachers report frustration, burden, fear, and inadequacies because they don’t believe they have the abilities to meet the individual needs of students with special needs in their classroom. Overall, studies such as Voltz, Brazil, and Ford (2001) and McLeskey and Waldron (2002), indicate that the most crucial factor behind positive teacher attitudes toward inclusion is that there is a support system in place. With positive teacher attitudes, students with disabilities will be given more educational opportunities with their peers and will more likely benefit to the fullest extent. Jones et al., (2002), found that teachers saw their workload increasing during the inclusion of students with disabilities into their classroom because they viewed the academic needs of these students as different in quantity and quality as the general education students. For instance, teachers may already feel they don’t have enough prep time to prepare for their daily lessons, so when the idea of having students with disabilities in their classroom arises, they may feel overwhelmed that they simply will not be able to accommodate the individual needs
of students. Besides the additional workload, it appears some teachers believe that some students with disabilities do not gain a lot themselves academically or socially from inclusion.

According to Chow and Winzer (cited in Jones, Thorn, Chow, Thompson, and Wilde, 2002) “exposure to special needs students tends to increase teachers’ confidence levels” (p.628). Teachers must be knowledgeable about the benefits of inclusion, as well as ways it can be successful without overwhelming them or burdening them with extra work. It also appears that their attitudes may become more positive with increased positive experiences with students with disabilities in their classroom.

3.2.10 Reasons for teachers’ negative attitudes

According to Baumgart, Doyle, and Giangreco (1995), teachers who feel unprepared tend to feel overwhelmed to be responsible for accommodating special need students, and assumed the special education teacher to take the responsibility. Therefore, this leaves no room for collaboration. It appears that more communication between the regular and special educators, more professional collaboration should be ideal, and becomes an integral part of any educational program.

According to Jobe and Rust (1996), teachers’ attitude was also impacted by different levels of education. It was interesting to realize that the higher the education level, the more negative attitudes toward inclusion. It is also found that teachers who were educated many years
ago, with years of experience, demonstrated negative attitudes toward inclusion.

It seems that the presence of students with disabilities in the regular education classroom has increased the instructional load of the regular education teacher (Beirne, Daane, & Latham, 2000). Another reason teachers have negative attitudes toward inclusion is due to the fact that they feel unprepared to teach students with special needs (Beime, Daane, & Latham, 2000).

### 3.3 ROLE OF THE TEACHER

Teachers play a major role in planning and implementing teaching and learning strategies to all students in the regular classroom, regardless of their status. They play an important role in the success of inclusion in the classroom. It is the teachers’ who make sure students with special needs have the same rights to a quality education as students without special needs (Mitchell, 1999; Spedding, 2005). If teachers have positive attitudes in providing the best education for all the children then inclusion will be more likely to succeed. That means, valuing and interacting with children with diverse learning needs (Gillies, 2002; Whyte, 2005).

Providing appropriate teaching and learning strategies is an important role for teachers. Mentis et al., (2005), emphasized that in order to meet the academic needs of children teachers have to provide appropriate learning instructions and strategies for them. Curriculum has to be modified and designed in order to meet the needs of students
with special needs (Mentis et al., 2005; Smith et al., 2005). Teaching resources should be adequately provided to support learning, and lessons must be children-centered and accommodate the needs of every student. It is important for class teachers to develop effective teaching outcomes and good lesson structures, which would motivate children to become actively involved with challenges appropriate to them (Mentis et al., 2005). However, some researchers have expressed concern that teachers may not provide effective support to challenge children with special needs academically, such as with remedial work. These researchers contend that teaching approaches are often not modified to meet the needs of children with special needs (MacArthur, et al., 2005). Teachers should organize the classrooms in order to have access so children with special needs can move around without too much difficulty (Smith et al 2004). Therefore, the role of teacher makes a difference in the learning of all the children in the classroom.

3.3.1 Teachers' Workloads

Teaching children with special needs clearly takes a lot of commitment. It inevitably means there is more planning and preparation to meet the needs of a range of abilities. Forlin (1998) stated that having children with special needs in a regular classroom means additional work, which is appended onto teachers existing workloads. A study carried out by Male & May (1997) on primary school teachers in England showed that regular classroom teachers spend between 60 –70 hours per week working at school to meet the
needs of children with special needs. As a result many teachers were stressed and eventually burnt out. However, Prochnow, Kearney, & Caroll-Lind, (2000) stated that not all children with special needs required additional work from the teachers, and it depends on the type of disability. He further elaborated that different disability levels gave different levels of exhaustion for teachers trying to meet children’s needs. This means to prepare work for children with mild disabilities would be less exhausting than for children with moderate and severe learning difficulties.

In addition, the issue of class size has also contributed to the amount of work teachers have to do to meet the needs of every student. Prochow et al., (2000) stated that if the number of children with special needs in one class is more than five then the class teacher is under pressure to plan and prepare for each individual student. The teacher would not find enough time to prepare work for the children with special needs as well as the other regular children. The attitudes, stress and workload of teachers to accommodate children with special needs in the regular classroom can only change when there is collaborative support from other children, teachers, parents and other specialists. Workloads can be shared and supported by everyone, which can make inclusion work effectively (Andrews & Lupart, 1993; Smith et al, 2004).
3.3.2 Collaboration with colleagues

For inclusion practice to be effectively implemented in the regular schools, the collaboration of the teachers; special education teachers, Board of Trustees, parents, teacher aides, and specialists such as school counselors, psychotherapists, and occupational therapists is important. Such collaboration will help children with special needs to gain confidence and learn and develop good social relationships within the learning environment (Smith et al., 2005).

3.3.3 Psychologists and Specialists support to teachers in inclusive practices and teaching methods

Anderson.K, Klassen, and Georgiou (2007) examined the inclusion-related beliefs and perceived needs of primary teachers in Australia and concluded that school psychologists need to be more proactive and involved in providing training, disseminating research, developing behavior and learning plans and advocating for teachers.

Dockrell, and Lindsay, (2000) reported the findings of a two-stage project in two local education authorities investigating the characteristics and needs of children with specific speech and language difficulties (SSLD). Teachers, educational psychologists, and speech and language therapists in two local education authorities identified 133 eight year-old children who experienced primary difficulties with speech and language. Fifty-nine children and a subsample of 10 children of the same age who attended specialist regional schools participated in further investigations. Each of the children was
assessed using a battery of instruments covering language, basic attainments and self-esteem. In addition, their teachers completed behavior rating scales and an individual interview. The teachers comprised those working in specialist provisions, but also those in mainstream schools. Data derived from the interviews with the teachers was supplemented by information from the assessments of the children’s skills. The teachers faced three challenges: the additional difficulties experienced by the children, their own knowledge gaps, and the barriers in meeting the children’s needs.

Lacey et al (2007)’s aim was to seek out examples of good practice in teaching and learning literacy that includes students with severe learning difficulties and disseminate them as widely as possible. Thirty-five schools were visited and observations made in 122 lessons. Sixty-one teachers were interviewed and their paperwork examined. Ten focus groups and five ‘expert witnesses’ were consulted, alongside desk-based research designed to locate ‘good practice’. Teachers used a mixture of conventional (e.g., texts) and non-conventional (e.g., pictures, film and oral) media, although more observations were made of conventional literacy teaching (e.g., phonic work) than of non-conventional (e.g., filmmaking). Results from the research suggested that few students with severe learning difficulties are likely to learn to read and write conventionally (i.e., read for pleasure, work and study) and teachers may be relying too much on teaching traditional literacy to them. It may be useful to explore teaching and learning around
alternative media such as still and moving images, live theatre and storytelling, digital technology and the arts. Although some teachers are making good use of these media, the potential of these media for providing inclusive literacy experiences could be further developed.

### 3.3.4 Special Education Personnel

Special educational personnel are qualified trained specialists that are associated with helping students with special educational needs. They are actively involved in assisting class teachers to address children’s special needs, which may be academic and or social. These professionals include; the psychologist, speech and language therapist, the occupational therapist, physiotherapist, the Resource Teacher of Learning Behaviors (RTLBs).

Ideally the professionals as part of the team or individually, with the classroom teacher, will develop specific strategies to assist the class teacher to meet the needs of each child with special needs (Bauer & Shea, 1999; Porter, 1995). They should develop a variety of activities to help teachers solve problems and workout the best alternatives for these children (Porter, 1995; Vargo, 1998). For instance, an occupational therapist will assist in developing the motor skills of a pupil who has a physical disability. A speech language therapist deals with children who have language and communication difficulties (Wright & Graham, 1997). The physiotherapist deals with children’s gross and fine motor skills and the behavior specialists work with
teachers to help support students with moderate learning and behavioural difficulties (O’Brien & Ryba, 2005).

Research has indicated that both the specialist and the teachers can learn a lot from each other. A study by Wright & Graham (1997), on how teachers and specialists work together to provide academic support for children with special needs, discovered that teachers who worked with physiotherapists gained more understanding on how to assist children with physical disabilities. A similar study, again by Wright and Kersner, (1999) on collaborative efforts between specialists and teachers, noted that effective collaboration meant more effective teaching and assistance to students with physical disabilities. Another study in New Zealand by Rangi (2001), revealed that Maori students with learning and behavioral difficulties were able to develop positive learning outcomes and improvement in behavior when RTLBS and teachers worked collaboratively.

3.3.5 Professional Supportive Staff

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3.3.6 Individualized intervention program in the classroom

Imellou (2000) examined Individualized Intervention Program in the Classroom (I.I.P.C.) that was applied to five fifth-grade pupils who were characterized as low achievers in Sentence Completion, Graphemic Discrimination and Right - Left Body Discrimination sub-tests of Athena Test for Diagnosis of Learning Difficulties in order to improve their scores. The Learning Together co-operative learning model was used to group the 26 pupils of the class into four-pupil heterogeneous teams considering control groups. I.I.P.C. was designed for the five selected pupils but the whole class got involved in its activities. Intervention consisted of 18 sessions, 6 for every sub-test, which took place at the end of the language lesson and were
thematically attached to the particular unit each time. It included word games, board games, etc that were closely observed by the researcher, offering hints useful for future intervention. I.I.P.C. was planned co-operatively by, the researcher/special and the general educator. Pre-test and post-test measures indicated that the scores of the selected children had improved 3.9, 5.1 and 3.45 times over the scores of the corresponding control groups in the three sub-tests. All pupils reported that they enjoyed working together with the intervention material.

3.4 PEER SUPPORT TO LEARNING OF CWSN

Peer tutoring also provides assistance to ease the class teacher’s workload and pressure. Studies have indicated that most teachers use peer tutoring in class work so that the teaching concept is well understood by children with special needs. This is done by assigning tasks to capable students as peer assistants to help children with special needs (Clark, et al., 1995; Hughes, et al., 2001 cited in Smith et al., 2005). In contrast, peer teaching has been associated with some negative outcomes for children with special needs. There is a concern that interactions between children with disabilities and their non-disabled peers may look more like caregiving. This equates to assisting and instructing them to follow rather than allowing them to contribute in the discussions (Hall & McGregor, 2000).

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Most children with special needs would like to seek academic assistance from adults, especially their teachers rather than their own non-disabled classmates. It appears that they may feel more comfortable asking their class teachers for assistance in academic work they have difficulty with. In one study children were reluctant to ask their peers for assistance (Kishi & Meyer, 1994 cited in Hall & McGregor, 2000). Another study in a Singapore high school by West, et al., (2004) revealed that children with vision impairments had great difficulty asking peers for assistance. They were too scared of asking for
‘continuous support’ they might get from peers and at the same time feared being bullied. Therefore, they sought assistance from their class teacher.

Sometimes non-disabled children are not willing to provide constant support for children with special needs because they do not want to share their knowledge. A report from Benin by UNESCO (1997) indicated that poor peer support in primary schools has made it difficult for teachers to provide assistance individually to children with special needs.

3.4.1 Co-operative Learning

Co-operative learning (a term that explains how teachers involve students working together in small groups to complete a given task) has been used successfully in schools and has promoted inclusion for students with special needs. According to many authors, cooperative learning has promoted academic achievement, self-confidence, positive attitudes among the students and developed effective social interactions (Gillies, 2002; Suhmidt & Harriman, 1998).

Cooperative learning strategies may be used to support and promote children’s diverse learning needs as this helps to develop their academic and social competencies (Smith et al., 2004; Thorburn, 1997) Communication skills can be effectively developed through cooperative learning. When working in a mixed ability group children are able to speak freely among themselves and develop confidence in their language communication (Gross, 2002)
However, studies have also indicated that co-operative learning does not benefit all children. Children with mild disabilities have benefited from the co-operative learning situation but children with severe disabilities have been found to be ignored (Gillies, & Ashman, 2000).

Gillies, (2002) reported that the use of cooperative learning has been successful in reading comprehension, problem solving in maths, and understanding the main idea of science experiments. One study provided evidence that children with intellectual difficulties were able to work with their non-disabled peers in science activities easily because they are able to talk with each other and work cooperatively together (Putnam, Rynders, Johnson & Johnson, 1989 cited in Gillies, 2002).

3.4.2 Social outcomes of Inclusive Education

Four key themes could be distinguished within the concept of social participation: friendships/relationships, contacts/interactions, the pupil’s social self-perception and acceptance by classmates. On the basis of these themes a model of social participation was constructed, which was used to develop the ‘Social Participation Questionnaire’. This questionnaire, comprising four subscales representing the key themes of social participation, is intended to help teachers accurately assess the social participation of pupils with special needs (Koster 2008).

The outcomes concerning the current state of affairs with regard to the social participation of pupils with special needs in regular primary education are quite worrisome, as in three out of four key themes of social participation; pupils with special needs perform less
well than their fellow pupils without special needs. However, the outcomes should be seen in context: the vast majority of the pupils with special needs involved in the study are being accepted, have one or more friends in the classroom, have a reasonable number of interactions with classmates and have a positive social self-perception.

3.5 BARRIERS TO INCLUSIVE EDUCATION

Pivik, Mccomas, and Laflamme (2002) examined the extent of inclusion in schools after 25 years of educational reform, students with disabilities and their parents were asked to identify current barriers and provide suggestions for removing those barriers. Based on a series of focus group meetings, 15 students with mobility limitations (9-15 years) and 12 parents identified four categories of barriers at their schools: (a) the physical environment (e.g., narrow doorways, ramps); (b) intentional attitudinal barriers (e.g., isolation, bullying); (c) unintentional attitudinal barriers (e.g., lack of knowledge, understanding, or awareness); and (d) physical limitations (e.g., difficulty with manual dexterity).

Chang (2000) in his study on Restructuring Organisational conditional: A Conceptual Framwork to Foster Inclusive Practices observes that barriers of inclusive practices are rooted in certain conditions of organizational structures as well as in the manner of training teachers and administrators. These barriers are hurting the level of participation of disabled students, meaningful collaborative efforts among the specialty faculty, and compatibility of the teacher
training program and inclusive practices. Therefore, neither various, fragmented forms of classroom practices nor specialized techniques can adequately respond to the needs of diversified students. Conditions that should be changed to foster inclusive practices may include, among others, redefining the role and function of administrators, centring the special education program curriculum in all courses of study, and leaving decision making on planning, implementing, assessing, and revising of the inclusive teacher preparation program to solely the faculty.

3.6 STUDIES CONDUCTED IN INDIA

Shevde (1997) conducted a feasibility study of models of inclusive education. She had tested the feasibility of three models: (i) Level – appropriate Academic (ii) Age – appropriate co-curricular, (iii) Age – appropriate. A number of factors stated as essential for inclusive education were a flexible curriculum, a different system of evaluation and changes in the organization of the classroom. A commonly stated concern was that the effect of inclusion if initiated without the support system would increase the workload of the regular school teachers. Parental resistance also came out to be a strong factor among the barriers to inclusive education. It was felt desirable that the parental involvement be increased.

Swarup (1998) developed and tested the feasibility of a teaching – learning programme called Learning Enhancement and Progress (LEAP) for general school teachers to Make Inclusion a Reality through
Cooperative Learning. The programme is based on the principles of cooperative learning and is aimed at answering most often asked question. “How to manage children with special learning needs in a large class of 70-80 children.” This programme was presented in the National Conference on Dyslexia held at Chennai organized by Madras Dyslexia Association.

Reddy, Ramar and Kusuma (2000) make a distinction between inclusive education and exclusive education and describe how the students with special needs can be placed in an inclusive classroom. They further list out the educational programmes that will reach out to all the learners in the inclusive setting.

Swarup (2000) notes that most of the researches in inclusive education are action researches; very few have been reported and documented.

Zaveri (2001) developed an awareness module on Inclusive Education for students with disabilities for administrators and teachers of general schools. The module was implemented using “printed media” approach and “interactive approach” The results indicated equal effectiveness of both the approaches for creating awareness. The teachers felt inclusion to be desirable but not feasible. Factors such as large class size, vast curriculum content, lack of training and awareness to deal with the handicapped population, rigid curriculum and time framework seem to be pervasive in present educational system irrespective of the type of the school (Private or Govt. aided) and
irrespective of the levels of the school (Elementary or High School). These factors seemed to be having critical influence on the teachers’ perspectives of inclusion being feasible. The awareness about issues related to the provisions and the policies formulated for the handicapped population seemed to be very low amongst the general educators.

Viannae Timmons and Mithu Alur (2004) made a study on Transformational Learning: A description of how inclusionary practice was accepted in India. This supports inclusive education in India. They point out how developing inclusive education practice in a country with one billion people, an attitude of charity towards people deemed less fortunate and extremely limited resources is a challenge. They further stress that the key components of sustainable inclusive practice understand the concept, ownership of the approach and a commitment to further the process through proper policy channels. The paper brings to light the transformation of the organizations from segregation to inclusion.

Ragunathan (2005), in his study “Awareness, Attitude and Competences Revived by the Teachers in Dealing with Low Vision Children at the Primary Stage”, found out that there was a positive correlation between awareness, and attitude, awareness and competency, attitude and competency in primary school teachers.

Ward (2005) found that in order to develop successful inclusion practices, which could then be utilized in new inclusion classrooms,
the necessary practices were teacher compatibility, positive attitudes, supports, collaborative teaching, team-teaching, teacher training, materials and resources, and curricular modifications.

Sandhill and Singh (2005) reported from 10 inclusive private schools in Delhi, and in-depth exploration of the private schools contrasted widely in their approach. In one school, IE was not being implemented by the teachers due to lack of communication with the management, and resulted in misunderstanding of educational inclusion. In contrast, the second school had excellent communication, well planned, gradual and sensitive implementation for children with diverse abilities. Saini (2006) made a probe into a study of inclusive education for the disabled in union territory of Chandigarh. The study reveals that education, which is a primary tool to equip to meet the challenges of life, plays a crucial role in social and economic development of all societies. The disabled children need all the more education so as to supplement their latent talent. But the situation is quite glaring in our country; as there is widespread illiteracy in India among the persons of school going age. Within the persons of school going age, the disabled persons are lagging much behind as compared to their able bodied peers. In India, it is estimated that 100 million children have no access to schooling. Despite major emphasis on education with zero rejection, only a small fraction of the disabled children get mainstreamed. Most of the schools, irrespective of their ownership, do have a number of constraints. In such a situation,
providing inclusive education to them at primary and secondary level schools has become a challenging issue.

Chandra Kala Singh et al (2008), conducted a study “Children with Learning Disabilities in Relation to Different Ecological Factors”, which was carried out in Haryana on 60 respondents from various schools of rural area of Hisar district, preferably students with low academic performance in the class were selected for the study which were of age between the 6-8 years. McCarthy scales of children abilities, visual motor integration test (VMI) directionality sub test were used to detect the LD among the children. The mothers of LD children were also interviewed to find out the opinion of mothers and causes responsible for disability among the children through self structured interview schedule. It was observed that the parents who were not able to provide their children with good resources, proper care, academic and play material suffered from two or more learning disabilities. Parents also had opinion that due to lack of resources, education and motivation, they could not provide their children healthy environment for learning

Reddy.G.L et al. (2008)’s research on “Problems Faced by Special Education Teachers of Mentally Retarded Children” involved developing a checklist to identify the problems of special education teachers working in schools for mentally retarded. Survey of the sample consisting of 293 teachers for mentally retarded children drawing from 40 special schools located in four districts of Andhra Pradesh
(Hyderabad & Chittor) and Tamil Nadu (Chennai & Madurai) states revealed that the problems like lack of clarity in the concept of disabilities, non availability of academic records, inadequate infrastructure facilities, lack of collaboration with other professionals, inadequate salary and job security, problems in involving parents, competency in organizing special sports and cultural activities to mentally retarded children. Under the dimension ‘Teaching and Training’ the problems faced by the teachers were inadequate knowledge about the fundamental aspects of human body, lack of skill in modifying the curriculum to the needs of children with disabilities, lack of knowledge in the use of novel methods such as peer-tutoring, co-operative learning, problems in auditory and speech training in classroom setup and lack of proficiency in multi-sensory approach. Similarly, under the dimension ‘Guidance and Counseling’, the teachers face the problems such as lack of conceptual clarity about the disabilities and development delays, lack of expertise in group counseling to develop positive attitude towards with different disabilities.

Mani Bansal(2008), conducted a study on “Modeling as a Technique to Develop Self Help Skills in Mentally Retarded Children”. The aim was to study the effects of modeling in developing self-help skills of mentally retarded children. The study was conducted in a school for the mentally handicap children. Subjects were five mentally retarded children, age ranging between 9 to 14 years. A.B.A.
experimental design was used to study the effectiveness of behavioural intervention. The intervention techniques included modeling and contingent reinforcement of target behaviours like tooth brushing and hand washing. Intervention program was conducted over a period of 3 months 15 days. Follow up data revealed significant improvement in the target behavior.

Rangaswamy et al. (2008), found in their research “Impact of Disability on the Family and Needs of Families of Disabled Children” that when the parents learn that the child is having some form of disability, it causes enormous distress to them. They struggle to cope with the additional financial costs; parents also confront new and unexpected experiences. The social and economic needs of families with a disabled child are high, but remain largely unmet.

Sreedevi et al. (2008), conducted a study on “Stress and Coping among Parents of Children with Learning Disabilities”. Ex-post facto research design was adopted for the study. 60 parents of LD children (30LD children with associative disorder + 30 children with Specific LD) were selected by purposive random sampling from twin cities (Hyderabad and Secendrabad) of A.P. Results revealed that majority of parents experienced greater financial burdens, reduced social and recreational participation and mental worries about child’s future. They also experienced moderate level of physical care burdens, strained relationships with family members and teachers, reduced family support and self-esteem due to presence of LD children. Majority of the
parents adopted medium followed by high-level approach and avoidance coping strategies to cope with stress. Positive reappraisal, logical analysis, emotional discharge, and resigned acceptance were frequently used strategies.

Bharti Sharma et.al. (2009) in the study “Influence of Self Esteem of Learning Disabled and Non Disabled on Academic Achievement in Inclusive Setting” concluded that learning disabled children in inclusive schools of Bareilly city have lower self esteem as compared to non disabled children. Learning disabled boys and girls were found different with regard to their self esteem. Learning disabled and non disabled boys were found different with regard to their self esteem whereas learning disabled and non disabled girls were not found different with regard to their self-esteem.

Ramya (2010) reported in her Status study of inclusive education of disabled students as part of Sarva Siksha Abhiyan that female disabled children were better than the male disabled children in managing personal needs, communication, attendance, time management, interpersonal relations and academic learning. Male disabled children were more active participants of classroom activities. The IED teachers did not have job security, attended training programmes due to compulsion. School teachers were not happy with the inclusion scheme and did not pay attention to normal children in the classrooms.

From the review, it was noted that research all over the nations is extensive regarding various issues and practices of inclusive
education, teacher attitudes occupying a major part. General teacher’s role, need for collaboration with special and supportive staff to minimize the problems and realize the true spirit of inclusion extending quality education to the children with special needs are minimally focused in the studies. Hence, the investigator decided upon the variables, namely, teachers’ attitude, role performance of teachers and problems faced by them in teaching children with special needs in inclusive schools.

3.7 SUMMARY

In this chapter studies under the concept of inclusion and teachers’ views of inclusive education were listed. Studies on teacher attitudes to inclusive education were followed by impact of training, negative attitudes. Significance of specialists, professional supportive staff and collaboration were surveyed in a few studies Teacher’s role various methods of teaching children in the inclusive classroom were examined in research studies. Finally Research related to social outcome of inclusion and barriers to inclusion was analyzed from studies.

In the next chapter, research methodology followed in this study will be presented.