Chapter II  
REVIEW OF LITERATURE

2.1 Introduction

This study is focused on factors influencing the educational experiences of students with disabilities in higher education institutions. The chapter attempts to critically examine and review the type of research studies which have been undertaken and conducted in India and in the West, on students with disabilities in higher education, indicate significant trends in this field and point out gaps in research. The literature included in this study is based on resources available in the main library of the Tata Institute of Social Sciences (TISS). A great deal of research in the West has been conducted on diverse issues of students with disabilities in higher education institutions such as characteristics of students with disabilities, provision of support services, different kinds of problems encountered by them within higher education environment, attitudes of teachers and peer group and, university intervention and its impact on their social and educational experiences. But unfortunately there is a dearth of research studies in this area in the Indian context.

2.2. Western Studies

2.2.1. Research on Students with Disabilities in Higher Education Institutions

Students with disabilities (SWDs) represent an emerging population in higher education institutions, whose perceptions and experiences of higher education are ultimately shaped by their socio-cultural context and the existing environment and availability of specific facilities required by them in the higher education institutions. Despite notable progress in legislations and policies for these students in higher education institutions, many of them still face various challenges for successful completion of their studies. A review of
these studies shows that there are several factors, or barriers, which affect the social and educational experience of these students in higher education institutions.

The first section deals with research studies reporting the following:
1) Characteristics of students with disabilities in higher education,
2) Factors affecting the students with disabilities, and
3) Barriers encountered by the students with disabilities in higher education institutions.

a) Characteristics of Students with Disabilities (SWDs)
As the number of students with disabilities is increasing in higher education institutions, university management has begun to collect data on the demographic profile of students, along with their special needs. To obtain a greater understanding of the nature of students with disabilities, an exploratory study was conducted by Moisey (2004) at Athabasca University (AU). It examined the cohort of students with disabilities, who enrolled in one or more Athabasca University courses with a starting date between April 1, 1998 and April 1, 2001. The data showed that nearly half of these students had a physical disability. One fifth of them had a learning disability. In addition, 4 per cent students had a visual impairment and 3 per cent, a hearing disability. Of the 604 students with disabilities enrolled at Athabasca University between 1998 and 2001, two out of three (65.4 per cent) were female. Comparison of the age distribution reveals that students with disabilities tended to be older than the general AU undergraduate population during this period. Their overall course completion rate was 45.9 per cent, somewhat lower than that of the general population.

During the academic year 1995-96, the National Post-secondary Student Aid Study (NPSAS) studied a national sample of 21,000 undergraduate students (Horn 1989). The results indicate that there were 29 per cent students with learning disability; 16 per cent with visual impairment; 23 per cent with orthopedic impairment; 16 per cent with hearing impairment or deaf and; 3 per cent with speech impairment. Another important finding of the study was that, in comparison with students without disabilities, students
with disabilities were more likely to be: a) older, b) men, c) white and, d) non-Hispanic. In contrast to this, the National Council on Educational Statistics (NCES) shows that students with disabilities those who attend higher education institutions were more likely to be female, 59 per cent, as compared to 41 per cent male. It was also found that the average age of these students tended to be higher than that of the students without disabilities (NCES, 2002).

Further, to understand the background of those students with disabilities who enrolled in higher education institutions in the United States, the National Council on Educational Statistics (2002) conducted a research study. The findings indicate that 30 per cent of students with disabilities belong to families with low income background, in comparison with 23 per cent students without disabilities. It was also found that due to special requirements or assistance, they were less likely to live on the campus (11.3 per cent), as compared to students without disabilities (15.5 per cent). The study also found that 28.2 per cent of students with disabilities, enrolled in higher education, were noted to belong to an ethnicity other than white as opposed to 33 per cent of students without disabilities. In this study, the author also collected data on the subjects chose by the undergraduate students with disabilities. The results indicate that 16.3 per cent of students with disabilities chose the field of humanities, followed by 15.7 per cent enrolled in business or management related courses, 15.2 per cent in computer science or engineering related subjects, 10 per cent in social sciences, 8.3 per cent in health, 5 per cent in vocational/technical courses, and 9.8 per cent in others.

In summary, it can be concluded that most of the students with disabilities in higher education institutions are male and older than the general population. It was also obvious that there were a larger number of students with orthopaedic and visually impairments as compared with hearing, speech or any other impairments. In addition, it was also clear that these students preferred to choose humanities compared to any other subject. It is interesting to note that there were no studies which focused on the socio-economic background of these students who are pursuing higher education. Similarly,
there needs to be research on the factors which lead to gender differences in enrolment of these students’ to pursue higher education at the university level.

After a review of studies related to the characteristics of students with disabilities the subsequent section deals with the factors affecting their educational experiences in higher education institutions.

b) Factors Affecting the Students with Disabilities in Higher Education Institutions

The review of studies in this section indicates that success of the students with disability not only depends on the availability as well as accessibility of facilities, but also on various socio-psychological and personal factors. This section focuses on each of these factors in order to demonstrate how they have an impact on higher education of students with disabilities.

i) Personal factors

In general, personal factors are those that are individual to each student and may include self-determination skills, self-efficacy, and self-esteem and the way they (SWDs) experience symptoms of a disability. The review of studies shows that the students with disabilities require a number of self-determination skills such as ‘self-awareness (including self-assessment); self-advocacy (recognising and acting upon one’s right); self-efficacy (belief that the person can perform an identified task); decision-making; and independence (initiating tasks and adjusting goals)’ (Dowrick, Getzel & Briel, 2004).

Self-determination is an important construct for the general population but it is especially important for the students with disabilities who have enrolled in higher education institutions. For Ward (1988), the word self-determination refers to ‘the attitudes which lead people to define goals for themselves and the ability to take initiative to achieve those goals’. This definition also includes actions such as setting goals, identifying steps necessary to achieve the goals, and overcoming various barriers to goal attainment. In additions, the definition also includes key components such as choice-making, decision-making, problem-solving, and goal-setting and attainment. These kinds of skills must be
taught to these students who are enrolled in higher education institutions for the improvement of their living conditions.

Similarly, autonomy and self-determination of students is an important factor which influences their day-to-day life. To understand the level of autonomy and self-determination that students with disabilities exhibit in their day-to-day life, a qualitative study was conducted by Barron (2001). For this study, data was collected from 24 women and men with physical, learning and mental impairments. According to Barron (2001), parents have different kinds of relationships with their disabled children and do not always have the same approach to how autonomy in everyday life should be made possible for their children. In this study, the author focused mainly on mothers’ way of looking after their children. Firstly, some mothers give full autonomy to their children with disabilities in their day-to-day life, whereas some other mothers control their children by denying them certain things which they wish. The findings of this study show that those who had more autonomy had more social skills and exposure to the society than those who did not have autonomy. The author points out that due to lack of social skills and self-determination in those students, opportunities to make and fulfill the choices of their life are denied.

Some research studies have supported the view that self-determination is an important component for students with disabilities in higher education institutions for their better educational experiences. A study conducted by Gerber, Ginsberg and Reiff (1992) was intended to understand the factors behind the success of the students with learning disabilities. The findings of the study show that the self-determination skills such as control over their lives and surroundings, persistence, adaptability to their environments and social networks, facilitated their success. The respondents also expressed confidence that they were going to be successful long before they actually became successful. It strongly reflects the beneficial outcomes of increased self-determination skills. Mott (2004) collected data from 8 students (interviews with 4 students and a session of email interview with additional 4). The analysis of data
suggested that the range of academic success, as measured by the GPA, was the best predictor for academic persistence. Respondents listed the topics that they felt were keys for successful transition: study skills, time management, note taking, academic skills, stress management, classroom tips and how to feel comfortable with a disability. This study also suggested that students need to learn how to cope with college life. They need to have self-autonomy to empower themselves to succeed in whatever they do.

Similarly, it is very essential to explore what are the essential skills required for these students to success in post-secondary education institutions. In order to discover the essential skills for these students, Getzel and Thoma (2008) conducted a study in two year and four year colleges setting. This study mainly focused on identifying: (a) skills that effectively self-advocate the use to ensure they stay in the college and obtain needed supports, and (b) the essential self-determination skills to remain and persist in the college. Purposive sampling was used for this study to select focus group participants. 34 students (53 per cent were female and 47 per cent male) were involved in the focus group. The results of the focus group indicate that self-determination is important to their success in post-secondary education. Many respondents shared their experiences of not disclosing their disabilities and special needs (not advocating for services), failing, and then choosing to disclose their disability and needs to the support staff. Respondents of each focus group identified a list of key component skills of self-determination such as problem-solving skills, learning about oneself (one’s disability), goal setting, and self-management. In this study, the major themes that emerged from the data were: (a) seeking services on campus, (b) relationships with professors, (c) developing support systems on campus, and (d) self-awareness. They also reported that meeting their teachers on a regular basis and discussing their issues or special needs in class or helping the faculty obtain a better understanding of what they needed in terms of support in class, was helpful. They stressed the importance of developing friendships with peers, support staff members of campus, and of joining support groups or other group activities which really helped them achieve success in their studies.
Research studies show that disclosing information about one’s disability or special needs depends on person to person, situation and place. For one person disclosing disability may be comfortable and beneficial, whereas it may be awkward and even intimidating for other persons. Disclosure means different things to different people, especially, among students with special needs in higher education institutions, given that there are various costs and benefits associated with disability disclosure (Corrigan & Matthews, 2003). Similarly, Jourard (1971) noted that disclosure is a process where the individual decides the degree of intimacy they want to achieve with other people in the society. Students with disabilities in higher education institutions are aware that the verbal or non-verbal transmission of knowledge about their disability status could improve their learning opportunities and also alter the behaviour of others toward them (Olney & Brockelman, 2003).

For students with disabilities, the process of disclosing is based upon a variety of factors. For instance, a study by Braithwaite (1991) indicates that there are four factors which influence the disclosure behaviour of students with disabilities. These include: (a) their relationship with other persons, (b) dependence on situation, (c) able-bodied persons’ response and, (d) their own personal feelings about their disability. Braithwaite (1991) also points out that students with disabilities disclose their disabilities to their respective teachers in order to receive necessary facilities in the classroom such as getting extra time during examination, teaching aids, and other learning resources. But all these factors are based on the assumptions that the disclosure is purely voluntary in nature for them. He also indicates that disclosing disability can be viewed as both voluntary (for example, students who must disclose their disability verbally to be considered disabled) and involuntary (for example, students who use a wheelchair or a cane).

In addition to disclosing about the special requirements, one also need to understand the factors which might improve the educational and social experiences of students with disabilities in higher education institutions. For instance, the study conducted by Jacklin, Robinson, and Harris, (2007) aims to examine how useful the
category ‘disabled student’ is, as a basis for targeting support. For this study 195 questionnaires were returned. The research methods were mixed; drawing on quantitative analysis of educational and social profiles to provide a context for more qualitative analysis of students’ perspectives. Theoretically, the study was concerned with social construction of student identity. It drew upon the conceptualisation of the life cycle of a student’s experience which highlights key stages in his academic career. The majority of the respondents reported that overall their learning and social experiences of higher education were positive. Some respondents reported that they were not happy with both their learning and social experiences. Another important finding of the study was that the universities attempted to identify the number of students with disabilities and difficulties experienced by them, and that helped the university management in understanding how the curriculum and organisation could be improved for the benefit of all students including those with disabilities. The researcher found that the usefulness of the category of ‘disabled student’ seemed to lie partly in the power of the label. From these findings, it can be concluded that these usage of the term ‘disabled students’ has helped the policy makers bring legislative changes, such as enactment of new polices, and provision of more support services to these students in higher education, and also brought reasonable adjustments which could be enabling. Here we should also recognise the fact that usage of a label was not always positive. Sometimes it also leads to stigmatisation as a result students would not like to disclose their identity.

Similarly, self-advocacy and appropriate disclosure are ultimately responsible for management of higher education successfully for students with disability. To understand the role of self-advocacy and appropriate disclosure in coping with experiences of students with disabilities, including physical barriers in the environment, and support barriers, a study was contributed by Adrianne (2006). This study also aimed to understand the management of their impairment such as learning disabilities, psychiatric disabilities or HIV/AIDS which posed unique implications for students with disabilities, often involving labels which carry significant and societal stigmatisation. The author notes that, if accommodation was needed within a college setting, a student was required
to disclose the disability and related needs, but multiple dilemmas arose for the students as when to disclose, how to disclose, how much to disclose and whom to disclose. This is especially a challenging situation for students from multicultural backgrounds who face additional discrimination based on their minority status. The author found that disability of students increased the perception that they were devalued and stigmatised, and sometimes they felt concerned about negative results of disclosing their disability. The researcher has suggested that, in order to resolve this problem, higher education institutions need to encourage the students with disabilities to disclose their disability. Similarly, these institutions should ensure that these students are treated with respect and also work towards addressing and removing all the barriers to their learning within a positive culture.

In summary, it is understood that majority of the studies highlighted the importance and role of self-determination, knowing the availability of services in the campus and disclosing their disability and needs to disability support staff to obtain services as per their special needs. This, in turn, helps in improving their educational experiences in higher education institutions. The findings of these studies emphasised how students took responsibility, developed support systems, sought out services, developed problem-solving skills to overcome academic, as well as physical barriers, and worked to strengthen their skills to enable themselves to remain in higher education and achieve success in their studies. Much research needs to be done on students’ educational and occupational aspirations and their motivations to pursue higher education at university level.

ii) Social factors
Social factors refer to relations of students within and outside the education institutions, including those with the family, peers without disabilities, teachers and staff (Tinto, 1975). Inclusive programmes can have a number of positive educational and social benefits for these students. For instance, a research study conducted by McDonnell, Thorson and McQuivey (1998) revealed that student with disabilities have additional
needs such as living on their own and dealing with the disability in an educational environment. The tasks in the daily life of these students are more complicated than those without disabilities. For example, mobility impaired students face architectural obstacles during their late undergraduate and graduate years. Studying in inclusive schools helps these students to overcome issues. The main benefits of inclusive programmes are: more successful post-school adjustment, significant gains in communication, social and adaptive behaviour skills, increased social interactions with peers without disabilities and the development of friendships with peers/students without disabilities. Further, the findings of the study also reveal that students without disabilities also appear to benefit from inclusive programmes by developing increased sensitivity to and an awareness of the special needs of people who are different from them, improving their own self-concept and self-identity and, sustaining social relationships with peers with disabilities.

Similarly, Nunkoosing and John (1997) studied 15 students with learning disabilities to identify factors that both enhanced and hindered the development of friendship and relationship of people without learning disabilities. The results revealed that friendship was facilitated by mutuality and acceptance, whereas poverty, limited transport and absence of physical and emotional support prevented the development of friendship and lead to the experience of loneliness. It also found that participants managed their experiences of rejection and loneliness through the development of various coping strategies such as self-advocacy skills and positive self-image. This study suggests that there should be change in provision of support services from an independent (meaning economic, social, functional and psychological independence) model to a support and empowerment (it is a process which facilitates and maximises opportunities for people with disabilities to have control and authority over their own lives) model which pays adequate attention to the capacities of individuals with a learning disability, rather than their deficiencies.

Along with social identity and relationships, students in general, require self-conceptions for a better quality of life. In a study, Ping-Ying Li, et al (2006) explored the
self-conceptions of Hong Kong Chinese students with intellectual disabilities. The main purpose of the study was to analyse and understand the respondents’ self-conceptions in different life domains. Opportunity, or convenience, samples of 135 young adults with intellectual disabilities were interviewed. The findings showed that family self, the social self and achievement in school and work were the most important attributes of the self-conception of the students. Some respondents stated that conflicts with family members and poor relationship with peers and co-workers generated bad feelings in their daily life. The study suggested that counseling services and training in communication skills should be provided which help persons with intellectual disabilities develop appropriate interpersonal skills to maintain a sense of self-worth. The data also showed that these students had higher self-conception than the group of people without disabilities. From the findings of the study, it can be concluded that family involvement in the rehabilitation process, self-enhancement strategies and quality employment service can facilitate the development of positive self-conception of these people and lead to a higher level of community integration and better quality of life.

After a review of these studies, it is better to understand the impact of social support, relations, and friendships of these students on their educational success, failures and stress in educational institutions and students’ perceived social support, stress and sense of coherence. The study by Heiman’s (2006) evaluated the extent to which 191 university students with Learning Disabilities (LD) differed from 190 students without disabilities. Follow-up univariate analyses of the subscales of social support, success and lack of success, and stress measures revealed that students without learning disability perceived greater support from their family, friends, and significant others. Regarding academic success, students without learning disability reported higher study skills and were more liable to believe that they succeeded due to academic characteristics, such as a good memory, ability to be attentive and to concentrate on their studies; they were also less likely to report that their academic success was due to external factors. Most often than students without learning disability, students with learning disability explained that their lack of academic success was due to external factors. Thus, students with learning
disability expressed a higher level of academic stress than students without learning disability. There was no significant difference for stress in the daily life. The perception of lower social support reported by students with learning disability in the Open University can be understood as being a result of the different teaching methods of the distance-learning university, where most the students study on their own, and only a few of them study within a group of peers. Thus, probably, students had fewer opportunities to establish an on-going support-group. The perception of lower social support of the learning disability group highlights the importance of the social setting in supporting and helping students with learning disability to successfully adjust to higher education.

Similarly, Cosden and McNamara (1997) examined the self-perceptions of college students with and without learning disability. Data was collected from 50 college students with learning disability and 50 college students without learning disability. These findings showed that students with learning disability reported higher levels of support from friends, or more social acceptance, than their non-disabled peers. This study suggests that not all students with learning disability have problems with their social skills or in their social relationships. It is possible that students with learning disability who have stronger social relationships are more successful in the school and more likely to attend a college. However, it is also possible that these results are associated with the students' opportunities to develop social supports through campus programmes. It can be further speculated that students with learning disability may rely more on social support than their non-disabled peers when deciding whether or not to attend a university. Therefore, from these findings, it can be concluded that students with learning disability in this sample differed from those without learning disability not only by virtue of having weaker academic skills, but also by having perceptions of stronger social support.

From the above study, it can be understood that those who had more social support and relations achieved more academic success and vice-versa. In addition, it can also be understood that those who had less social support had less academic success. Further research also shows that lack of support, social skills leads to depression, and
anxiety in these students. For example, a study conducted by Hoy et al, (1997) attempted to gather empirical data on the presence of depression and anxiety in only two groups of adults with learning disabilities who receive social support and other services. The results of this study have significant implications both for the diagnosis and the intervention needs of adults with learning disabilities. Interestingly, differences related to depression have been identified in a study among students with learning disabilities classified as successful and unsuccessful. Successful students with learning disabilities reported less depressive symptomatology than those identified as unsuccessful, but more than their peers who are not in special education.

Another significant finding of Hoy et al, (1997) was the replication of the increase of anxiety-related symptoms among adults with learning disabilities attending college/university settings. This study supports that anxiety is a significant problem, particularly, for adults with learning disabilities in college and university settings. It also documents that children and adolescents with learning disabilities experience more anxiety than their normally achieving peers in terms of minor somatic complaints, disturbed sleep, and worries. The researchers point out that college/university students with learning disabilities as groups are more negatively influenced by levels of anxiety both in a testing situation and generally. The impact of anxiety on test performance is a significant consideration that professionals must be cautious about during differential diagnosis. Specifically, if anxiety is not carefully accounted for during an evaluation, it would be very easy to mis-identify an individual as demonstrating lower ability, less discrepancy between ability and achievement, and/or over identify attention deficit disorders. They conclude that ‘successful’ adults with learning disabilities display a variety of coping and stress-reduction strategies that are not always apparent in the ‘unsuccessful’ adults with learning disabilities.

This section has elaborated on the importance of social factors and thier impact on educational experiences of students with disabilities in higher education institutions. The activities or interactions between a student and the campus environment facilitate
developmental changes that imply either successful or unsuccessful integration, and adaptation and adjustment to the social and academic aspects of college life. The review of the studies in the section stresses the importance of social support, social relations, and friendships for a successful adjustment to higher education. It is surprising to note that many of the studies in this section focused on learning disability. The researcher could not find many studies on social experiences of orthopaedically and visually impaired students in higher education. Further, it is interesting to note that none of the studies explored how gender plays an important role in maintaining social and friendly relation, and how they are coping with their day-to-day activities. Similarly, much research needs to be done on family support received by students’ with disabilities and its impact on their education.

Till now, we reviewed some of studies related to the characteristics of students with disabilities. Let now examine some of the barriers encountered by these students in higher education institutions.

c) Barriers Encountered by Students with Disabilities in Higher Education Institutions

This section deals with studies reporting: (i) Physical barriers, (ii) Academic barriers and, (iii) Attitudinal barriers, encountered by students with disabilities in higher education institutions.

i) Physical barriers

Physical barriers continue to exist in higher education institutions for these students. The examples of physical barriers they face are: lack of access to buildings, classrooms, rest-rooms, and public facilities due to non-existence of elevators and parking facilities within a university (Brown, 1992; Schneid, 1992). For a student with disability, two obstacles must be overcome to have a successful and positive experience in the university. The remedy includes: availability of special needs or support services which enhance the
student’s ability to participate fully in the chosen course of studies and that the campus must be physically accessible.

Similarly, a study by Shevlin, Kenny, and Mcneela (2004) reported that students with disabilities experienced variable access within higher education and physical access remains a serious obstacle to full participation. Reports from participants indicate that they encountered access difficulties at every level in the college life. Despite focused support from the Disability/Access Officer, the physical/attitudinal environment was inadequately adapted to ensure full inclusion. Guaranteeing basic access to teaching and learning spaces appeared to be beyond these institutions. Thus, the prospects of developing the practice of universal access are extremely remote. Generally, there was a low level of awareness of student needs in relation to assistive provision and assessment. A positive and informed staff/college attitude proves crucial in ensuring access and equitable treatment. Further, Paul’s (1998) study indicates that students who use wheelchairs struggled as a result of inaccessible classrooms and restrooms. A study by West et al, (1993) also shows that barriers identified by students with disabilities were inaccessible buildings and classrooms, and lack of other accommodations.

Providing equitable participation for these students poses substantial and far-reaching challenges for higher education institutions and requires them to tackle difficult questions around institutional transformation grappling with the structural barriers that exist. Further, Howell and Lazarus (2003) argued that addressing challenges of increasing access and active participation in higher education institutions for students with disabilities in South Africa is essentially about the challenge of responding effectively to meet the special needs of these students. It also suggests that changes are needed to be made, not only in the physical environment in which teaching and learning takes place, but also in the way in which higher education curriculum is organised, delivered and assessed. Similarly, there is a real need to address attitudinal barriers at all levels of the institutions that continue to locate the problem of disability with perceived limitations in the learner, rather than the limitations of the system with its inability to meet the full
range of learning needs among the student population. Central to meeting the learning needs of students with disabilities is the development of an integrated and committed response to the provision of teaching and learning support for some students, but most importantly, it includes supporting the system as a whole, including the academic staff to meet a more diverse range of learning needs.

From these studies, it is clear that there are inherent limitations in the current piecemeal institutional response to the provisions for students with disabilities. A comprehensive access service that addresses the needs of all marginalised groups and becomes an integral part of the educational institutions, is required. Further it is important to recognise, as shown in the study of Howell and Lazarus (2003), that there should be change in provision of support services and people’s attitudes. Thus, it can be concluded that if there is no change in the ideology of the education institutions, its staff and its curriculum, the problem will continue.

ii) Academic barriers:
There is an abundance of studies examining academic barriers these students face in educational institutions (West et al., 1993; Vickerman and Blundell, 2010; Bierwert, 2002). These studies show that majority of the students with disabilities had encountered barriers to their education due to lack of understanding and cooperation from administrators, faculty, staff, and other students, lack of adaptive aids and other academic support services and, inaccessibility of buildings and grounds.

For instance, a study by Vickerman and Blundell (2010) examines the perspectives of these students in higher education institutions related to their experiences with course, course delivery, and barriers to their learning. For this study, a survey of 504 students with and without disabilities and interviews with 4 (2 male and 2 female) students with disabilities (1 from each discipline such as sport, dance, physical education and outdoor education) was conducted. Out of 504 respondents in this study, 5.6 per cent indicated that they had a disability. The findings of the study revealed that 25 per cent of
the respondents who had disability did not disclose their disability in their university application due to a perceived fear that they may not be offered a place during admissions. Another finding of the study showed that 11.1 per cent of these students indicated that their assessments did not cater to their needs, compared with 3.6 per cent of students without disabilities. One respondent reported that has learning and teaching assessment was restrictive and this tended to be a result of inappropriate learning resources, lack of modification of teaching by teachers, lack of discussion with students with disabilities regarding their problems, needs related to learning and assessment strategies that significantly disadvantaged them in higher education. Another respondent of the study reported, “When I asked my tutor about alternative assessments due to my impairments, he replied that it would not be fair on the others.” It may be that perhaps they were not aware of acts of the students with disabilities and the need to make reasonable adjustments. Overall from these findings, it can be concluded that barriers faced by these students reveal both a lack of awareness on the part of legislative requirements and lack of training on how to respond to diversity in learning, teaching and assessment affecting the education of students with disabilities in higher educational institutions.

In addition to the problems of disclosing their disability and lack of proper assessments strategies, these students had problems with the teachers’ knowledge or information regarding the availability of support services to them. A study by Bierwert (2002) indicates that majority of students felt satisfied with the services they received and felt they were familiar with the referral procedures and support services available; but they felt that professors were not familiar with their disabilities or available support services on the campus. Majority of the respondents in this study reported that requesting for a classroom accommodation was often stressful to them. Similarly, Holt and Mckey (2000) study identified a number of factors that impacted on students with disabilities and their ability to study successfully at the postgraduate level. These included: a supportive supervisor, full-time versus part-time study, fatigue, medication and stress and anxiety. Quantitative and qualitative data were collected from 53 students through personal
interviews and a questionnaire. The results indicate that approximately 1/3 not stated that they did not receive supervision of an adequate standard, while the remaining 65 per cent respondents were extremely positive about the experiences they had with their supervision. Another important finding was that a third of those who completed a questionnaire agreed that their disability did affect their relationship with their supervisors. The researchers suggest that it is important for any supervisor to be flexible to the changing needs of their students and accepting of any changes in circumstances. This is particularly important for the successful study of the students with disabilities at postgraduate level.

Students’ experiences in higher education, whether good or bad, depend greatly on the awareness and knowledge of staff of the institution. Some students reported very positive experiences where the staff was well-informed which is often because of personal experience or interest in disability matters, rather than because of institutional training or policies (Hall and Tinklin, 1998). This study concludes that the main challenges for higher educational institutions is to combine recognition of the individuality of students and their needs with policies and actions which are more than piecemeal attempts to ameliorate difficulties. Most of the student respondents said that the professors were accepting and considerate but some of them described the faculty as suspicious, reluctant, or negative. In a study conducted by Norton and Suzann (1997), one student perceived that some professors tended to focus more on disability than ability. Further findings show that several students expressed hesitation about requesting for support services or facilities until after they had attempted a test in the classroom.

The faculty responses indicated overwhelming acceptance of services or facilities; 95 per cent were comfortable with granting extra time, and those who were hesitant would grant extra time unless time was an essential part of the task being evaluated (for example, lab tests). Students’ responses show that half of those students who failed were enrolled first time and had not used any services or facilities; second time when they used services or facilities, they passed the class. In addition, two professors emphasised that
having students take examination at DSP&S (Disabled Student Programmes and Services) was more acceptable than granting extra time in the classroom because they believed other students would then want extended time. One instructor who taught at an off-campus site preferred to make her own arrangements for accommodation. Thus, a justifiable conclusion is that those faculties are more interested in discerning what students have learnt than in requiring them to express knowledge through a rigid form of testing.

The academic support services can be categorised into four areas: (a) course accommodation (e.g., changes to the content, extended contract time), (b) examination accommodations (e.g., additional time and assistance at the time of examination, providing an especially distraction-free room), (c) external support service (e.g., note-taker, interpreter), and (d) assistive technology (e.g., use of text-to-speech, speech-to-text, and screen reader software). Most of the students with disabilities received some type of service; only 7 per cent received no services at all. Overall, students who received more services had more success in terms of course completions in exploratory study conducted by Moisey (2004) at Athabasca University (AU). The author also examined the type of services that students received over the three-year period through the office for Access for Students with Disabilities (ASD). For example, 69.3 per cent of students who completed one or more courses had extensions to their contract time, in comparison with 65.6 per cent of those who did not complete any course. Similarly, 63.6 per cent of students who completed one or more courses had accommodation made to the time of their examinations (e.g. more time allowed) compared with only 51.5 per cent of those in the group who completed no courses. Moisey (2004) also found that certain type of disabilities appear to be more amendable to assistance. For example, nearly all students with learning disabilities who received assistive technology completed their courses in comparison with about half of students with other types of disabilities who received this type of service. Moisey (2004) suggested that a further study is required to explore the relationship between course completion and type of disability and support services received.
It can be understood from these findings that most of academic barriers experienced by these students in higher education institutions are due to lack of proper understanding from faculty and university administration regarding their special needs and problems. It is also clear from these studies that the students who received more academic support had more academic success and better educational experiences than those who received less academic support. Therefore, it can be suggested that, along with providing more academic support services to these students in higher education institutions, university management should ensure that all students without disabilities, teachers and non-teaching staff are aware of the support available to students with disabilities in their respective universities.

iii) Attitudinal barriers

Students with disabilities who attend higher education institutions often face attitudinal barriers from their peer groups and teachers. Attitudes play an important role in the success or failure of students with disabilities in higher education institutions. Attitudes of teachers, peer groups, non-teaching staff, and the administration as well as student services coordinator can all have profound effect on the social and educational experiences of these students (Nathanson, 1979). Lucas (1999) defined attitude as ‘a favourable or unfavourable evaluative reaction towards something or someone, exhibited in one’s beliefs, feelings, or intended behaviour’. The review of studies shows that most students with disabilities, like other minority groups, desire to achieve acceptance and integration in society. In this section, the researcher reviewed the studies (Dupoux, et al, 2005; Riddell, Tinklin and Wilson, 2004; and Lau et al. (1999) which are focused on attitudes of these groups and how it facilitates or hinders the integration of students with disabilities in higher education institutions.

Dupoux et al (2005) compared the attitudes of teachers towards integration of students with disabilities in Haiti and the United States. A sample of 152 high school teachers in Haiti and 216 high school teachers in the United States was asked to complete a background questionnaire and opinions on integration of students with disabilities scale.
Results showed that teachers in both countries had similar attitudes toward the integration of students with disabilities. Although advanced degree was a significant predictor of favourable attitudes toward integration and, more teachers in the United States had advanced degrees than the teachers in Haïti. Responses indicated that teachers varied in accepting students with different types of disabilities. Teachers in both countries seemed to have created a hierarchy of accommodations to severity of disability, by choosing the learning disability category as their first choice, and the emotional and behavioural categories as their least favorite. In addition, the data in this study suggested that for integration to be a success, teachers with a large stock of pedagogical knowledge and skills are more likely to hold favourable attitudes toward integration. Provisions should be in place for prospective teachers to take courses dealing with the prevalent disabilities and for teachers already in the system to participate in district training and professional development, to alleviate the fears of teachers who lack confidence in providing services to students with disabilities. By increasing the knowledge base, it is expected that negative attitudes will decrease. This study concluded that despite differences in philosophies, policies and school systems, economies, incidence of poverty and unemployment, teachers in Haïti seem to agree with the general concept of integration to the same degree as reported by their US peers.

Even though there are a number of policies regarding students with disabilities in to policies in a number of areas including admissions, estates and buildings and in some strategic plans in higher education in Scotland and England between 2001 and 2003, student case studies reveal gaps between policy and practice. For instance, Riddell, Tinklin and Wilson (2004) showed that significant barriers related to the participation of these students in higher education, continue to exist. Some students found that adjustment to teaching practice was difficult to obtain. Even where students had received formal agreements to provide reasonable adjustments (as required by law) such as handouts (either soft copies or hard copies) of lectures in advance, they often found themselves in the difficult positions of repeatedly having to ask for these, to no avail. Some lecturers, particularly in older universities, felt that adjustments to teaching practices would lower
standards and give unfair advantage to these students. In all institutions, academic staff felt that they were under pressure and were unable to devote as much time as they would like to individual students. The researcher concluded that support for individual students remains largely the province of student support service, with emphasis on providing individual support to get round institutional barriers rather than on more fundamental institutional change.

Similarly, promoting interaction with people with disabilities should be a viable educational step to improve the public’s acceptance, encouraging those ideal forms of acceptance which would include recognising target people’s individuality, mental abilities, reciprocation and constructive life experiences. For instance, a research study conducted by Lau et al., (1999) revealed that public patently expresses significantly higher tendencies of discrimination against people with mental health difficulty than those with intellectual disability. More than 45% of respondents indicated that people with mental health difficulty should stay in their hostels and service centers built for them and that they should be located far away from residential areas. More often, people prefer people with intellectual disability or mental health difficulty as their colleagues, people with whom to talk, rather than as their neighbours. Garvey (1991) investigated higher education institutions which developed accessible environment for students with disabilities. The results indicated that the attitudes of students without disabilities groups towards students with disabilities were more positive and favourable in these institutions as compared to institutions without services and focused on creating an accessible environment. Similarly, a study by Fichten et al., (1990) also found that staff and students without disabilities used to feel concerned about the needs of these students in the higher education institutions, which created an accessible environment and provided support services in their campuses.

Attitudinal barriers should not be ignored when it is determined to provide equal access for students with disabilities in higher education institutions. The attitude of
faculty members and peer groups may be important determinant in the successful completion of educational experiences for students with disabilities.

After reviewing some of studies related to the students with disabilities in higher education institutions let us now examine some studies on teachers’ attitudes and experiences of teaching students with disabilities in higher education institutions.

2.2.2. Research on Teachers

Teachers’ attitude is one of the most important variables in the education of students with disabilities (Smith, 2000). In general, teachers would be most agreeable and happy for integrating students who required only minor classroom accommodations or having minor special needs but less agreeable as the demands for accommodation increase. For instance, Wilczenski (1995) conducted a study to measure the attitudes of teachers towards inclusive education with the help of a new instrument called the Attitudes towards Inclusive Education Scale (ATIES). For this study, data was collected from 301 regular classroom teachers in New Hampshire. In addition, a cross validation of the sample comprising 144 New Hampshire College undergraduates was conducted. The findings of the study revealed that both groups were less willing to integrate students with social deficits than those with physical impairments in general education classes. It was also found that both groups were more willing to accommodate students with physical impairments than those students requiring more academic support services. An important finding of the study showed that both groups were more willing to integrate students with special academic needs than students with behaviour problems. Overall, the findings of the study show that teachers are more willing to accommodate students with relatively minor social problems, such as shyness, than to integrate the students who they considered disruptive in the classroom.

Similarly, faculty was more willing to accommodate students with learning disabilities or students with deafness or blindness than students with emotional problems or physical disabilities. The faculty members at the U.S. universities were more willing
than the Mexican faculty to accommodate only one type of students with disabilities. But that, both groups were very similar in their willingness to become friends and accommodate the other students with disabilities, underscores the commonalities between both professional cultures. Wolman et al., (2004) recommended conducting workshops in Mexico and other countries to increase the knowledge of and awareness about needs of students with disabilities, which aims at accommodation of all students, regardless of the type of disability. It was believed that through these efforts the accommodation of students with disabilities at all postsecondary institutions will become an imperative and no longer an option in most countries.

A survey was conducted by Kraska (2003) to discover the perceptions of postsecondary faculty members related to students with disabilities. For this study, data were drawn from 106 faculties (62 per cent male and 38 per cent female) at public four-year state-supported institutions of higher education located in south Alabama. The results revealed that there is no statistically significant difference in perceptions among faculty members towards serving students with disabilities based on age, gender, teaching experience, and extent of faculty member’s contact with students with disabilities. But it was also observed that academic rank and academic unit were significant variables related to faculties’ attitudes towards serving students with disabilities in higher education. Specifically, it was found that professional rank had lower mean scores (83.50) than non-professional rank. The faculty members of School of Education had a lower mean score than that of School of Arts and Science and the School of Business. This is mainly due to the fact there were numerous administrative and curricular changes in the School of Education which could have created a great deal of professional stress in recent years. Overall, the findings in this study indicated that most faculty members had positive attitudes towards students with disabilities at these institutions.

If teachers have a poor understanding of the signs and symptoms of depression, it will be more difficult to detect, given their impaired language and conceptual skills. Increasingly, research has shown that not recognising these signs and symptoms at the
appropriate time leads to poorer academic performance, an increase in challenging behaviours, school expulsions and social exclusion, possible hospitalization, and greater stress experienced by the young persons in their careers and also service providers (Taggart and Mcmulln, 2007). Furthermore, the teachers also highlighted a lack of confidence in working with these doubly disadvantaged students. The study suggested that teachers must also receive appropriate education and training in an attempt to prompt early referral to specialists for a detailed and comprehensive psychiatric assessment, rather than continuing to manage such young people’s challenging behaviors.

Further, a study by Foundation for People with Learning Disabilities (2002) suggested that by identifying the strengths or deficits of teachers’ knowledge, appropriate training can be developed that will enable teachers to play a central role in the early recognition of potential mental health problem. Teachers may also be able to advise the young person and their parents/relatives, and to seek support from the child and adolescent mental health teams and/or the community intellectual disability teams at an earlier age. Such assistance could, therefore, prevent existing problems from getting aggravated and school expulsions from occurring, and also avoid unnecessary hospitalization.

Similarly, in a qualitative study exploring the faculty’s experiences with students with disabilities, Farbman (1983) explored the experiences of a select group of science faculty members from a large urban university. Analysis of in-depth interviews revealed that faculty members had contact with mostly mobility impaired or visually impaired students. The approaches of the faculty members appeared to be polarised. Some of them were willing to modify their teaching styles to give out copies of their notes and to spend extra time outside of class. Other professors refused to do those things. These students with disabilities rarely used special equipment with the exception of Braille terminals. Majority of academic accommodations involved logistical arrangements, such as more time or scheduling. Based on the findings the researcher concluded that the degree of autonomy afforded to professors may be detrimental to students with disabilities and,
preparing these students with advocacy and negotiation skills would best enhance their educational opportunities.

In Baggett (1994), the faculty members indicated that they could identify only students who disclosed their disability. Data analysis showed that the faculty lacked the experience of teaching students with disabilities, and were unfamiliar with the various disability rights and laws, as well as with the various university-wide services available to these students with disabilities. It was also observed that among the students with disabilities, the faculty was more familiar with teaching learning disabilities than the other groups of disabilities such as mental and behavioural disabilities.

Literature showed that faculty members depend on administration and disability service staff for information regarding the availability of support services which has been provided for students with disabilities in higher education institutions (Burgstahler, 2002). This study mainly stresses the importance of the disability coordinators or other staff members who support faculty members by providing information about the available services, provision of accommodations for students with disabilities. In addition, the findings revealed that faculty members expressed their concern about the challenges faced by students with disabilities due to architectural barriers, inaccessible buildings, classrooms, labs and other facilities. It has also been found that those faculty members who are not willing to accommodate students with disabilities in inclusive education settings, express that their problem is due to lack of time to look after the needs of these students.

In summary, it understood that the teachers’ attitude is one of the most important variables in the education of these students in higher education institutions. Most of these studies focused on the factors which have been found to influence faculty’s attitude include age, academic discipline, experience of teaching students with disabilities, years of teaching experience and professional rank. Further, it is also clear that most of the teachers prefer to accommodate students with physical impairments than students with
behavioural or psychological problems. Since general educators’ willingness to include students with disabilities in regular education classes is critical to the success of inclusion, a number of studies have stressed the importance of understanding teachers’ attitudes, and their awareness about the needs and problems of students with disabilities in higher education.

After reviewing some studies related to the teachers’ attitude, let us now examine some studies on the attitude of peer groups or students without disabilities, and their awareness about the needs of students with disabilities in higher educational institutions.

2.2.3. Research on Peer Group or Students without Disabilities

The quality of life of students with disabilities primarily depends on the peer acceptance. Low acceptance of peer group deprives students with disabilities of ‘opportunities to learn normal, adaptive modes of social conduct and social cognition and undermines academic progress as well’ (Parker and Asher, 1987). A research study was conducted by Perry, et al (2008) to identify the factors which influence attitudes such as gender, age, and disability status, area of specialisation, university programme accreditation status and frequency of interaction with persons with disabilities. The results of the study showed that females had the higher ATDP scores, with a mean score of 119.4, as compared to 111.6 for males. It was also found that factors such as the area of specialization, age, and program accreditation status were statistically significant. The researcher used frequency of interaction (daily, weekly, monthly, and less than six times a year) was significant, using an analysis of variance. The results reveal that the participants those who interacted with persons with disabilities on weekly basis had the highest mean ATDP score (121.33), followed by daily interaction with a mean ATDP score of 117.90, monthly interaction with a mean ATDP scores of 112.34, and the lowest mean ATDP score 109.93. It was also found that 174 respondents indicated that they had positive interaction ranging from ‘somewhat positive’ to ‘very positive’, while only three respondents had mostly negative interactions with persons with disabilities.
To teach students with special needs, teachers need more experience and knowledge about their special needs and problems. The results of peer groups in Chen, Lau and Jin (2006) indicated that they believed that teachers might not be capable of teaching and looking after the needs of all students because some students with disabilities needed some extra time which would lead to serious management problems for teachers. It was observed that 90% of students from both locations strongly agreed that, in order to teach students with disabilities, the teachers needed more academic preparation for inclusion. The results also reveal that students from both the locations supported the philosophy of inclusive education but they also expressed their concerns about it. The major concerns included: performance of students with and without disabilities in an inclusive setting, discrimination against students with disabilities, worry about lack of professional knowledge, and government support and other safety issues.

In addition to peer understanding about their teachers’ skills in teaching their peers with disabilities, it is important to know the support they provide to peers with disabilities in their respective education institutions. For instance, a study conducted by Copeland et al (2004) attempted to explore the students’ perspectives on their support to the peers with disabilities regarding increasing access to general education. For this study, 6 focus group discussions (one in each school) in 6 high schools in a large metropolitan school district were conducted. For this study, 32 students (78 per cent female and 28 per cent male) were selected to collect data. The focus group size ranged from 2 to 11 participants and the participants’ age from 16 to 18 years. This study collected data on perceptions of students towards limitations faced by students with disabilities in general education, their understanding about the needs and problems of students with disabilities, their interactions, and friendships, benefits of peer support programme and their recommendations for the improvement of their educational experiences in general education. The results showed that participants from all 6 focus group discussions indicated that till attending the peer support programme, they were not aware of the skills needed to communicate with students with limited verbal skills or to support students with challenging behaviour. The respondents reported that peer support
programme helped them understand more about students with disabilities and improved their attitudes towards them. They also reported that they were more willing to interact with students with disabilities after attending this programme. Overall, from the findings of this study, it can be concluded that peer support programme helped the respondents of the study to effectively address the challenges related to the inclusion of students with disabilities and promoted their access to general education.

Cook and Semmel (1999) examined the peer acceptance of students with disabilities in general education based on severity of disability. For this study, data was collected from 285 students. There were 44 students with disabilities in their classrooms, out of which 29 were categorised as having mild disability (MD) and 15 having severe disability (SD). In this study, students with mild disabilities were identified as having specific learning disabilities, severe emotional disturbances and mental retardation whereas students with severe disability were identified as having mental retardation, multiple handicaps, severe orthopedic impairment, severe emotional disturbance and autism. In this study, multivariate analysis of variance (MANCOVA) and analysis of variance were used to measure the peer acceptance. The results showed that students with severe disabilities had more peer acceptance than the students with mild disabilities. It was found that in the absence of interventions, severity of disability might have a positive impact on peer acceptance, particularly for students with severe disabilities. The research in this study pointed out that, although students with severe disabilities were better accepted than students with mild disabilities, further investigation is required to study the quality of their acceptance. It was also reported that non-disabled students were too overprotective or helpful to their peers with severe disabilities. In addition, these results indicated that students with disabilities received significantly higher peer nurturance ratings from their peer group than did students with mild disabilities.

Although students accepted their peers with disabilities, the level of support and acceptance is based on the level of interaction and contact the students had with someone with a disability, and the amount of social anxiety the student had. For Budisch (2004), data was collected from a sample of 163 undergraduate students (52 males and 111
females) at Midwestern University. The Chedoke-McMaster Attitudes towards Children with Handicaps (CATCH) scale was used to measure the students’ attitudes in this study. The findings revealed that the more contact a student had with peers with disabilities, the more positive their attitudes towards those with disabilities. It was also found that students who had low social anxiety had significantly higher scores on the CATCH (M low social anxiety = 87.89, SD =7.73), indicating more positive attitudes than students with high social anxiety (M high social anxiety = 83.00, SD = 8.64) F (3, 148) = 9.72, p < .01. It was also found that the more a student understands the issues of persons with disabilities, the more positive his/her attitudes will be towards people with disabilities. It was also found that there is no significant relationship between the impact of a diversity course and improvement in the student’s attitudes towards persons with disabilities. The findings of the study suggest that a student/person may need more than a diversity course to understand the issues associated with persons with disabilities.

In summary, it is understood that, in addition to teacher teachers’ attitudes and experiences, peer groups attitudes their awareness about the needs of students with disabilities are important factors to understand the educational experiences of students with disabilities in higher education. In this section, studies mainly focused on peer group interaction, their understanding and awareness about their peers’ special needs. Further, these findings suggested that those who had more contact with peers with disability made them more aware and enabled them to take on a more sympathetic position towards those with disabilities. Further, it can also be suggested that friendship and social interaction between these students and those without disabilities help both of them to participate in academic and social activities. Therefore, university management should encourage cultural and social programmes which make these students involve together and build their social and personal relationships.

After review of studies related to the peers’ attitude, is the section which deals with studies on policy intervention and support services provided to students with disabilities in higher educational institutions.
2.2.4. Research on Policy Interventions and Support Services provided to Students with Disabilities in Higher Education Institutions

Internationally, provision for students with disability is gaining some ground. Although it is far from ideal, legislation has been in place for institutions to do whatever is ‘reasonable’ to respond to student’s special needs (Shevlin et al., 2004). Similarly, the study by Howell (2005) was designed to generate knowledge about the different ways in which public higher education institutions work to provide access for disabled students. The investigation probed institutions’ familiarity with policies, and examined instances of the creation and resources of specific structures to deal with the special needs of disabled students. The results of the study highlighted the need to start a process of development of indicators to monitor access and equity in relation to disability. The research findings suggested a number of areas for reflection and intervention. First and foremost, there is a need to develop internal systems to identify students with disabilities and their profiles to understand their needs and to monitor the extent to which these needs are met at individual institutions. The development of support mechanisms for students with disabilities and academic staff in order to facilitate teaching and learning process seems to be the second area for institutional intervention. It suggested that time resources and careful reflection are required for analysis of the specific policies and the establishment of adequate monitoring systems with a view to evaluate that the impact and to better understand existing practices, including in this process the voices of students with disabilities themselves.

Even though most of the higher educational institutions now have institutional policies for students with disabilities, the ways in which policy implementation was monitored varied greatly between institutions. For instance, a qualitative study by Hall (1998) examined the experiences of these students at a variety of Scottish universities and colleges. This study was intended to provide an insight into what it is like to be students with additional needs and to develop a list of key issues for policy makers. In the first phase of the study, data collected from 27 disability co-coordinators by using survey at
selected institutions to sought information on institutional definitions of students with disabilities, their enrollment numbers and provisions for catering to students with disabilities and monitoring systems used by the institutions method. In the second phase, 12 students with disabilities were interviewed about their lives, and experiences at higher education institutions. The findings showed that various forms of advice, guidance and support are now available to these students but more could be done to make people aware of this. The students’ academic experience varied greatly between institutions and departments. Most of the respondents reported that they are only looking for equal opportunities. The data revealed that there is still a great deal of uncertainty about disclosing disabilities in certain circumstances. The results showed that promoting non-academic aspects of life such as encouraging sport and cultural programmes in higher education are also important in ensuring that students are successful.

UNESCO (1999) conducted a survey which sought to present information on provision for students with disabilities in universities in the different UNESCO regions. A questionnaire was sent to 50 universities selected on the basis of information provided by UNESCO regional officers and other informed sources. The purpose of the study was to target universities which are likely to have developed some services for these students, rather than to establish a representative picture on the basis of random sample. Responses were received from 35 universities in time for this analysis. The survey gathered data on availability of services such as support to these students, financial support, social activities, environment and academic support. The study found that some existing higher education institutions were already providing support services for a range of students with disabilities; others were looking into ways of creating more supportive learning environment within their institutions. Universities were also varying in terms of their financial and human resources to respond to this challenge. The researcher suggested that the first step to equal access for all students is the will to address the diversity of needs of students and create a supportive environment to meet their needs. Similarly, a study by Riddell, Tinklin and Wilson, (2004) has identified five key issues for higher education institutions to address: (a) pre-orientation support, (b) the commitment of the staff to
facilitate a barrier-free curriculum, (c) consultation with and empowerment of students with disabilities views, and (d) a commitment on the part of higher education institutions to develop support services for students and planning for their personal development.

These students should be provided with all type of support services for active participation. In Weiss et al, (1997) study supports services were classified into seven categories: counseling services, equipment, campus environment, student-centered supports, developmental labs, programme or course flexibility, and unique programmes. It conducted a survey of services and supports provided to students with disabilities in Florida at 28 community colleges and 39 area vocational technical centers. The results indicates that Area vocational-technical centers, often operating with more limited budgets and on smaller, older campuses, tend to offer more counseling supports and special purpose programmes. Community colleges, on the other hand, tend to offer greater access to developmental and learning labs and more accessible campus environments. Both seem to be fairly equal in regard to equipment supports and student-centered accommodations. The findings also showed that all schools surveyed offered at least one support in each of the seven areas. In general, community colleges offered a greater variety of supports and modifications for students with disabilities than did vocational-technical centres. This study indicates that post-secondary institutions are continuing to move toward providing necessary individualised support services to students with disabilities. After students with disabilities learn to take full advantage of these support services, they will increase their chances of receiving the training and education needed to be competitive in the job market.

In summary, it is understood from these findings that most of the higher education institutions have formulated disability policies and established disabled support services for students with disabilities. But results of the study showed that still there is much gap between policy and practice. It also showed that students with disabilities are struggling to receive ad hoc support in higher education institutions. Therefore, higher education institutions and staff supporting these students need to consider several factors if they aim
to provide equal educational opportunities to all students. Thus, it can be suggested that those who work towards providing equal access to these students in higher education institutions should have commitment from the policy to practice level regarding the desire to adopt flexible approaches to all aspects of university life.

The review of Western studies related to the students with disabilities in higher education institutions is followed by the section which deals with studies on students with disabilities in higher education institutions in the Indian context.

2.3. Indian Studies

Out of the estimated 40 million children aged 4 – 16 years with physical and mental impairments, 90 per cent are out of school in India. In terms of enrolment in higher education, less than 1 per cent of students in India had enrolled in higher education in 1950, whereas today it is close to 10 per cent. Nevertheless, this is much less compared with the figures in many other countries around the world. This gives an indication that we need to increase access to higher education for these students (Thorat, 2006). The Planning Commission, in the XIth Plan, has set a target of 15 per cent by 2011-12. This can be done in two ways, firstly by expanding the intake capacity and infrastructure of the existing universities and colleges and, secondly, by overcoming various barriers that create hindrances in their way to higher education (Wiseman, Emry and Morgan, 1988). This section examines the studies dealing with research on students with disabilities in higher education institutions in India.

In India, students with disabilities have a significant lower level of academic achievements in secondary school than students without disabilities. This is mainly due to factors like lack of proper accessibility, awareness, learning and financial resources, and parents and social attitudes. However, Halder (2010) tried to understand the nature of dropout and stagnation in education of women with disability and various constraints faced by them in their way towards higher education. For this study, the author collected
data from 100 challenged women by using personal interviews. In this study, it was found that only 24 per cent of the women with disabilities are interested in pursuing higher education. Respondents in this study are on an average older than their peers without disabilities. This is mainly due to late entry into school or college and can often take longer to complete their education. The researcher also observed that majority of the respondents was first generation learners and lived in rural or semi-urban areas. The author also finds that most parents are not aware of the facilities, provisions, and scholarships provided by different government and non-government agencies for students with disabilities. In some cases, though they are aware of the whole process, it seemed to be too burdensome, very difficult and time consuming for parents as well as their wards.

It was also observed that due to shortage of money, some parents are not keen to carry on with the general education. Another important finding of the study was that even though women with disabilities face mobility barriers as they have to move from one class to another and also from one floor to another for each class, the teachers are unable to help students with disabilities in such restricted environments where they have to manage with many other students. As a result, many of the students are forced to drop out of the college. The author also suggested that students with disabilities need a career counselor at every stage to guide them regarding their career planning, job opportunities, government schemes and referral services for placement officers. Halder (2010) also maintained that translating the policies and training materials in Indian languages in print and non-print media could make the people aware of the policies and provisions.

National Centre for Promotion of Employment for Disabled People (NCPEDP, 2004) conducted a survey on the education scenario of students with disabilities in India. As part of the study, 322 universities in India were sent the research questionnaire. A total of 119 (36.9 per cent) universities responded. In the 119 universities, the number of students with disabilities enrolled was 1,635. This accounts to a meager share of the total student strength. In principle, as per the reservation policy, 3 per cent of the seats in educational institutions should be reserved for students with disabilities. The research
findings presented that only 0.1 per cent of the total strength are students with disabilities. This indicated the failure of the state in enforcing the rules vis-à-vis students with disabilities. In all 119 universities, 1,203 students with orthopedic impairments, 311 students with visual impairments, 38 students with hearing impairment and 22 students with mental disability were enrolled.

Another important finding was that out of 119 universities, only seven universities categorically mentioned that they do not admit students with disability, conveniently ignoring the law. Out of the 119 respondent universities, 47 of them mentioned that they gave scholarships to students with disabilities, and 29 universities gave financial assistance. It was clear from the minimal number of students with disabilities in these universities that these facilities were being provided in general for all students, and students with disabilities could get them by sheer chance. For example, though 73 universities mentioned that they provided hostel facility for students with disabilities, it was unlikely that any hostel had even a single toilet/room/mess area accessible for a wheelchair user. And it is the lack of proper hostels and financial constraints that greatly limit the choices students with disabilities have for higher education. Only 50 per cent of the 119 universities reported being aware of the UGC schemes and only 11 (9 per cent) universities had received UGC grant under the UGC scheme (HEPSN). About 80 per cent of the respondent institutions reported that students with disabilities were easily able to reach the classrooms, offices, toilets, auditorium, sports area, library, canteen, laboratories and the hostels. This study concluded that most of the institutions obviously did not understand the issue of access and were under the impression that all the places were accessible for all present and future students with disabilities (NCPEDP, 2004).

Many of the negative experiences cited by students were not related specifically to impairment, but were more of general concern. For instance, having sufficient time with their personal tutor, availability of books in the library, or feeling under pressure to become part of a student ‘drinking culture’ in order to feel ‘included’. In relation to the students’ impairment, negative experiences tended to result from the absence of, or delay
in receiving support: for example, some students felt that the tutors were not aware of, or not acting on reasonable adjustments; some other students reported a delay in funding for identified resources (Mohan and Pazhani, 2008). A particularly notable issue raised was the delay in receiving their Disabled Allowance. Once support was in place, this tended to have a substantial positive impact on their experience of higher education. However, it was not always the support itself that was of prime importance.

The review of studies conducted in India showed that only a few studies have been done in the area of students with disabilities in higher education institutions and hence there is a high scope of research in this area, specifically on the factors affecting the social and educational experiences of students with disabilities including, perceptions of teachers, peer groups and their own attitudes towards disability, development of policies, its implementation and its impact on students with disabilities in higher education institutions.

2.4. Gaps identified in Research on Students with Disabilities in Higher Education

The review of studies clearly showed that these students in higher education institutions face challenges not only in terms of gaining physical access to buildings, but also in relation to much wider access issues concerning the teaching and learning, availability of support services including accessibility to classrooms, learning resources in the campuses, and also perceptions of teachers, peer groups and their own attitudes towards disability. Despite growing interest in higher education as an important area in the distribution of life chance very little is known about the social and educational experiences of students with disabilities and the ways in which higher education institutions act as sites which reproduce existing inequalities. Furthermore, little is known about the interaction of policies focusing on these students in higher education institutions and those promoting widening access and inclusion. This research seeks to address these gaps in the existing literature.
A critical review of literature showed that the focus is on the characteristics of students with disabilities, factors and barriers affecting the educational experiences of these students, policy and support services provided to students with disabilities and also on teachers and peer groups’ attitudes towards them in higher education institutions. Much of the literature regarding the experiences of students with disabilities in higher education institutions focus on students’ difficulties in accessing classrooms, learning resource, tensions inherent in teaching and assessment modalities and dimensions of university policy and practices that work against or contribute to student marginalization and discriminatory practices. These studies tend to fix attention on the piecemeal efforts of universities to provide disability services, equitable treatment, and access to students with disabilities. Much of this literature highlighted the attitudes of teachers towards the inclusion of students with disabilities in higher education. Such studies contribute important insights into areas where university and national policies can strive to improve the treatment of students with disabilities and ensure equal access in higher education institutions.

Finally, this study suggested that future research studies need to examine areas which are unexplored in this study. It will provide adequate data on how students manage, and cope up with their studies where they do not have learning and e-learning resources in higher education institutions. The concept of gender and their social and educational experiences are very important areas which have been left almost unexamined. The research on socio-economic background of students with disabilities at higher education has been very limited. The pattern of life in campus, friendships and social relationship of the SWDs with their peer groups needs to be studied. The researcher could not find studies focused on perceptions of students with disabilities towards the relations with students without disabilities, faculties and staff. Further, it fails to specify what are the factors hindering most of the universities to support and accommodate diverse range of students with disabilities and what’s lacking in the existing system.
Despite much literature on attitudes of teachers towards inclusion of students with disabilities, there are no studies which focus on their experiences towards the inclusion of students with disabilities in higher education institutions. A similar finding was that the researcher could not find studies which have focused on teachers’ perceptions on facilitating and challenging situations affecting successful inclusion of students with disabilities at higher education. Surprisingly, the researcher could not find much literature on attitudes and experiences of peer groups or students without disabilities towards students with disabilities in higher education institutions. Friendship formation and interaction between students with a disability and their friends or peer groups are among the important areas that need to be researched in the future.

2.5. Conclusion

From the above review of literature, it is evident that the researcher could hardly find relevant studies from the Indian context. Thus, this study will contribute to the Indian context. In the absence of authentic empirical probe, it is proposed to undertake the study in the state of Andhra Pradesh. There is a growing need now to focus on these issues. With this study, the researcher aims to provide a framework for policy makers forwards enabling the students with disabilities to receive a better education by accessing available resources, making friendly environment, etc., to achieve good results at higher education.