CHAPTER – II

REVIEW OF RELATED LITERATURE

2.1 The purpose of Review

The Review of Literature is an important step in research. Often the insights of gained through the review save the research worker as much time in conducting his research as the review itself required. Although the general purpose of the review is to help the research worker develop a thorough understanding and insight into previous work and the trends that have emerged. Borg and Gull mention that the review can also help in reaching a number of important specific goals namely, delimiting the research problem, seeking new approaches, avoiding sterile approaches, insights into methods and sampling current opinions.

A systematic procedure has been followed in reviewing the related literature for this study. The investigator listed key words related to the topic and used preliminary sources such as resource in education, special education, current index to journals in inclusive education, psychological abstracts and educational index to locate relevant sources of information. After locating the sources, the investigator carefully analysed the studies related to the topic of current research. An internet search was also made to find appropriate sources as well as from the ERIC (Educational Resources Information Centre) Journals.
2.2 Foreign Studies

Prentice (1992) “Community Factors Can Make a Difference” a person with disability, has very clearly indicated the role of community and technology in achieving a good living standard. He says that everyday one hears on the radio or television or reads in the newspaper about untapped resources that are just lying there not being used. People with severe physical disabilities are one resource that can be used in job situations. Just because people are handicapped does not mean that they do not have the mental capacity to work; all that might be needed is support to guide them and open doors. With today’s technology, many adjustments can be made to work on sites to make it feasible for anyone be become a productive person. He further remarks that the cerebral Palsy Counsellor, the technicians and other who provided help has convinced him that it was community people who really made a difference having always been believers and supporters.

Ridgely (1992) ‘Beyond Vocational Services – Looking to Community’ explores a myriad of factors that contribute to the successful integration of individuals with disabilities into work place and community. She emphasizes the role of vocational rehabilitation specialists beyond their sphere of duties to influence and be influenced by all of the life experiences that people with disabilities enjoy. He said that one should not assume that getting someone a job would necessarily improve the quality of his or her life. One must get to know the whole person and the community in which he or she exists, and ask them, “What are the community factors that can be manipulated to ensure this individual's success?” and think of the person’s job as a connection with the
community as a whole, not just a placement.

The authors started that most visually impaired young persons are students of the schools where they live and become part of an orientation towards occupations, which for the most part does not consider the special needs of visually impaired individuals. Only a small number of visually young persons receive vocational training in special facilities outside of Schleswig-Holstein. They say that there have been distinct failures for both groups regarding their integration in vocational training and the labour market during the last few years.

The authors suggested that all the participants in the project should attempt to achieve innovations in the counseling process, e.g. by an interface of different levels of competencies and through changes in institutional postured and strategies in favour of an integrated system of vocational and social integration of visually impaired individuals. During transition from school to vocational training and work and employment opportunities, individual capabilities and personal and factual bases for the integration of visually impaired adolescents in the world of work were also examined.

According to Malissa Heston (1995), inclusive education operates from the assumption that almost all students should start in a general classroom, and then depending on their needs, move into more restrictive environments. Her study shows that inclusive education helps the development of all children in different ways. Students with specific challenges make gains in cognitive and social development and physical motor skills. They do well when the general environment is adjusted to meet
their needs. Children with more typical development gain higher levels of tolerance for people with differences. They learn to make the most of wherever they’re playing with. When we exclude people, it ultimately costs more than the original effort to include them.

Murray (1996) discussed in his study ‘Experience with disabilities’ in detail some of the specific adaptations that will need to be made to norm-referenced and criterion-referenced tests to be usable by learners with various disabilities. These adjustments to formal test instruments will need to be made not only to make them suitable for use by disabled learners but also to ensure that such learners are accorded a fair chance or opportunity of experiencing success, a major motivating factor in learning. In addition to modifying the formal evaluations, an inclusive education system also needs to use a number of informal assessments. A few examples have given in his study are: continuous assessment; experimental assessments; observational assessments; learning assessments; parental assessments; peer assessments; self-assessments; portfolio assessments; and project assessments.

Hatlen (1996), in his study, ‘The Core Curriculum for Blind and Visually impaired students’ has made observations on the role of technology in teaching the visually impaired, which is a tool to unlock learning and expand the horizons of students. It is not, a curriculum area, he says. However, it is added to the expanded core curriculum because technology occupies a special place in the education of blind and visually impaired students. Technology can be a greater equalizer. For the Braille user, it allows the
student to provide feedback to teachers by first producing material in Braille for personal use and then in print for the teacher, classmates, and parents. It gives blind persons the capability of storing and retrieving information. It brings the gift of a library under the fingertips of the visually impaired person. Technology enhances communication and learning, as well as expands the world of blind and visually impaired persons in many significant ways. Thus, technology is a tool to master, and is essential as a part of the educational programme.

McLeskey & Waldron (1996) have stated in their study that with the perspective of inclusive seems to reflect a relatively widespread belief that students with disabilities should be returned to the general education classroom only if their disabilities are ‘cured’. If that belief prevails, most persons with disabilities will never be included. Hence, it could just seen the difference in him; he had done like a 180 degree turnaround. He was just so happy – and he talked about kids in school all the time.

Hunt and Goetz (1997) reviewed 19 research investigations of inclusive educational programs, practices and outcomes for students with severe disabilities. Their meta analysis revealed that students with severe disabilities were actually also includable in ordinary schools and that they may achieve positive academic and learning outcomes contrary to the unfounded fears or concerns held by many stakeholders. In this case, school counselors may need to mount a lot of sensitization or awareness campaigns for school administrators, regular teachers, non-disabled students and parents of non-disabled students to change their negative attitudes in the opposite direction.
This is important because the success of both inclusive education school counseling will depend on all these parties concerned. The importance of school teachers and counsellors to have the relevant skills for intervening with severely disabled students was recently the subject of the curriculum guide for students with high support needs.

Conway (1997), discussed in his study ‘Educational testing service’ that students with special educational needs can learn anything and their non-disabled peers could provided teaching is effective. There are however a few common things that instructors and counselors of learners with various disabilities are supposed to be able to do. In the study the author started that by virtue of their training, expertise and experience, properly qualified educational counselors will be required to assist regular teachers to acquire in-depth knowledge of teaching techniques such as remedial teaching, individualized educational plans, cooperative learning, peer tutoring, role play, task analysis, project methods, team-teaching, computer assisted instruction, mastery learning, aptitude treatment interaction model, social learning, and discovery learning. Teaching and counseling in inclusive schools cannot just follow fixed curriculum and methods (Olivier & Williams, 2005). Teachers and counselors need to use a variety of strategies during lessons and counseling sessions (Engelbrecht & Green, 2001). The need for adaptive lessons is more when teaching students with mental retardation (Olivier & Williams, 2005). The application of assistive computer technology (ACT) in teaching and counseling interventions is another skill area where both school teachers and counselors might need training.
In view of this study, the school counselors may be required to help teachers to obtain these skills by organizing and conducting appropriate workshops, seminars and conferences as part of in-service training for ordinary teachers. This study suggests that school counselors might themselves need to receive in-service training in these skill areas before they could successfully mount meaningful workshops for other (regular) teachers.

Burgstahler (1998) mentions in his study ‘Teaching lab courses to students with disabilities’ that as scientific fields make increasing use of technology, new opportunities emerge for people with a variety of abilities. When students with disabilities and science teachers form learning partnerships, the possibilities for academic and career success multiply. Some students with disabilities have conditions that are invisible and some are visible. Their challenges include gaining knowledge and demonstrating the knowledge. He cites examples of specific challenges and accommodations by use of technology, which are as follows:

For the student who has difficulty reading standard text or graphics due to a visual impairment, materials can be provided in large print or Braille, on tape, or via computer and tactile drawings. Access to adaptive technology that provides enlarged voice and/ or Braille output can be useful.

1. If seeing material on a blackboard or overhead projector due to a visual impairment is a challenge, a student may use binoculars and the instructor can be sure to verbalize the content of all visually displayed materials.
2. For the student who cannot read output from standard science equipment because of a visual impairment, interfacing lab equipment with computer and providing large print and/or speech output may be tried. Also, marking scientific equipment with Braille and large print labels can be helpful as well.

3. For a student who has difficulty taking notes in the classroom because of a mobility or visual impairment, use of portable computer system with word processing and adaptive technology can allow independent note-taking.

4. A student who cannot operate lab equipment and conduct lab experiments due to mobility impairment can benefit from an accessible lab facility and adjustable-height tables. A lab partner or scribe can facilitate participation. In addition, computer-controlled lab equipment with alternative input devices (e.g., speech, Morse code, alternative keyboard) and modified scientific equipment can provide access.

5. For the student who has difficulty completing and submitting worksheets and tests because of a visual impairment and/or a specific learning disability, instructors can provide worksheets and tests in large print or Braille, on tape, or via computer. Access to adaptive technology that provides enlarged, voice and/or Braille as well as standard print output can maximize student independence.

The author says the examples provided above demonstrate a wide variety for helping a student fully participate in activity of gaining sufficient knowledge and skill.
Schall (1998) gives a strong opinion in the context of U.S.A. that little has changed regarding the employment of people with disabilities since the passage of ‘The Americans with Disabilities Act (ADA)’ in 1990. He reviews and analysis data from many sources regarding the employment of people with disabilities. He has also analyzed employment data, compliance data obtained from the Equal Employment Opportunities Commission and data regarding the attitudes of employers complying with the ADA. His final findings on the working of the ADA is:

The ADA is having limited impact considering the volume of employment if individuals with disabilities. This is not necessarily due to a weakness in the law but is more likely due to the prevalent discrimination that is yet to be addressed on a wide scale.

He recommends that individuals with disabilities must be given education in heterogeneous environments and social skills must be taught to them which are necessarily for getting a job, including how to research potential jobs, how to work with supervisors, how to sell one’s self, how to deal with customers, etc. He also suggested to increase the network of technical assistance offered in designing reasonable accommodations, to include employers in providing technical assistance to each other, and set a national goal to increase the employment individuals in disabilities by a given date.

An American President’s Executive Order (1998) for establishing National task Force on Employment of People with Disabilities in U.S.A., says that it will develop and recommend federal policy to reduce employment
barriers for persons with disabilities to the President. The key components of
the Task Force’s directive include analyzing existing programmes and policies
to determinate what changes, modifications and innovations may be
necessary to remove barriers to work: analyzing youth programmes related to
employment and the outcomes of those programmes for young people with
disabilities. The purpose of the Task Force is also to create a coordinated and
aggressive national policy to bring adults with disabilities into gainful
employment at a rare that is as close as possible to that of the general adult
population. The Task Force shall analyze youth programmes related to
employment, e.g., Employment and Training Administration programmes,
special education, vocational rehabilitation, school – to – work transition,
vocational education, and Social Security Administration, work incentives and
other programmes, and the outcomes of those programmes for young people
with disabilities.

In a paper entitled “School Education: From pre–school to 16”
(1998) it is observed that in Britain, which is a world leader in the field of
developing education – business partnership, over 90 per cent of secondary
schools and nearly 60 per cent of primary schools now have links with
business, while nearly all pupils in their last year of compulsory schooling
undertake work experience placement. It is further suggested that industry
needs a skilled adaptable work force and young people gain enormously from
real experience of the workplace, which reinforces classroom learning.
Partnership includes work experience for pupils, teacher placements into
schools and a range of strategies such as compacts and mentoring designed
to help underachievers. All pupils in their last year of compulsory education
have the opportunity to undertake a period of work experience. During a placement they carry out particular jobs in much the same way as regular employees. There are also increasing opportunities for young people to undertake more work related learning in their final two years of compulsory schooling.

Shaddock (1999) in his study ‘Segregated special education’ warns that just because one approach didn’t work; don’t assume that its opposite will. The inclusive approach may also be unsuccessful for a number of other factors. For example, several disability commissions, court cases, and efficacy studies have found evidence both for and against inclusive education being in the best interest of the included student and/or the students and teacher of the regular class (Power & Bartlett, 1999). The study therefore analyses that school counselors might need to do a lot of advocacy work to press for the success of inclusive education. Three of the practical issues at school counsellors may need to advocate for are listed and briefly discussed below.

1. **Teacher/pupil ratio.** The current high teacher-pupil ratios which are believed to range from 1:30 to 1:40 should be brought down to between 1:20 to 1:30 so that teachers in inclusive schools may give reasonable individual attention to learners with special needs. Research on education system shows that paying individual attention to students in large classes is very difficult. School counsellors could provide research-based advice to school administrators on this problem which complicates both teaching and counseling.
2. *Number of disabled children included in each classroom.* Only a manageable number of disabled children should be included in each class (e.g. 2 or 3) to enable the teacher to give them maximum individual attention. School counsellors will need to advise teachers and school administrators on matters regarding making reasonable placements on an individual basis to facilitate diagnostic teaching and intervention sessions.

3. *Expectations.* Teachers, non-disabled students, parents of non-disabled students and society in general should not only have positive attitudes towards disabled students but also have positive expectations from them. This will require school counsellors to mount more sensitization / awareness campaigns in the country to reduce perfectionist attitudes and tendencies among the above stakeholders under inclusive education.

Unlike the formal evaluations, the informal assessments are not well known by most regular school teachers. The informal assessments listed are extensively discussed by *Engelbrecht et al* (1999). School counselors might need to organize workshops to help train regular teachers on the use of adapted tests as well as informal assessments and explain why it is important to do all these things. Further to all the above adaptations, a special emphasis may need to be placed on continuous assessment.

*Miller* (2000) ‘Vocational Rehabilitation for the Blind’ gives the following information on vocational rehabilitation services for the blind being offered by “rehabilitation Services for the Blind”(RSB) at Missouri, U.S.A. He informs that
the mission is to create opportunities for eligible blind and visually impaired persons on order that they may attain personal and vocational success. He informs that people who are blind and visually impaired work with a rehabilitation team to develop an employment goal and success in employment.

Vocational rehabilitation services being offered by the organization include diagnosis and evaluation, physical restoration instruction in daily living skills, including Braille and travel training including that in the college, continuing education tools and equipment, adaptive technology, community – based rehabilitation services for adjustment to blindness and attainment of alternative skills. Most of these services are provided at no cost.

Whether it’s alternative skills training in daily living as activities or vocational training to prepare for a specific job or career, RSB services can be provided to meet individual needs. Resources available include rehabilitation counselors and teachers, orientation and mobility specialists, community based rehabilitation programmes, colleges, continuing education, vocational – technical schools, private vocational schools and on – the- job training. The organizations counsellors are also available to provide consultation for those having difficulty maintaining employment due to decreased vision.

He says that currently many technological aids are available in the U.S.A. to enhance blind individual’s ability to work. These range from the simplest and most inexpensive aids appliances to the most sophisticated personal computers which can convert print to speech or Braille.
According to **Punani** (2000), some state even a shift from integrated education to inclusive education is clearly emerging. An inclusive education is the most cost effective and result oriented approach for making “Education for all” a reality in India, this mode of education expected to grow from strength to strengths. According to him philosophy of inclusion is based on the aggregate of knowledge and it reflects what is stated in the Individuals with Disabilities Education Act (IDEA), following the provisions of the Least Restrictive Environment (LRE). The law states that students with disabilities be educated alongside non-disabled students in the general education setting to the maximum extent appropriate, and that removal of the student with disabilities occurs only when the nature or severity of the disability is such that education in regular classes, even with supplementary aids and services, cannot be achieved satisfactorily (IDEA, 1995). The key phrase here based on the student’s individual needs. The Individualized Educational Plan (IEP) looks at individual student before suggesting any services. An Inclusive school welcomes all children without discrimination and takes good care of them.

In the study of **Riggs** (2001), the mainstream schools education proposes the provision of interpreter and other appropriate support services. Adequate accessibility and support services, designed to meet the needs of persons with different disabilities, should be provided. Children with special needs should receive additional instructional support in the context of the regular curriculum, not a different curriculum. The guiding principle should be to provide all children with the same education, providing additional assistance and support to children requiring it.
The study concluded that services provided for an eligible individual to be served in the general education classroom, may include intensive short-term service specially designed instruction: educational interpreters: readers for individuals with visual impairments: special education assistants for individual with physical disabilities, for assistance to move about in and around school, and for transportation: materials: and specialized or modified instructionally related equipment for use in the school.

The Brunei Darussalam Country Report (2005) suggested that the government should look into the possibility of establishing a sheltered workshop facility to provide supervised work so that the more able of these young adults with special needs could be gainfully employed. The report further recommended that inducements should be built into the private work sector so that opportunities for employment are made available for young adults with special needs who have completed secondary school. School counselors may be required to follow up on these recommendations and lobby for employment of the disabled school leavers.

Lim and Yeo (2007) have presented papers in a conference ‘curriculum guide for students with high support needs’ that were deemed useful to both teachers and counsellors in inclusive educational settings. The Special Education Unit (2007) emphasized the use of ICT as a basic intervention tool that could be employed by schoolteachers and counsellors.

Chris Kliewer (2007), said in his lecture that inclusion involves all kinds of practices that are ultimately practices of good teaching. What good teachers do is to think thoughtfully about children and develop ways to reach
all children. Ultimately good teaching is a relationship between two people; teachers get good results because they enter into that relationship. Inclusion is providing more options for children as ways to learn. It is structuring schools as community where all children can learn. But there is no recipe for becoming an inclusive teacher or an inclusive school. It is not a mechanized format. He suggested that the special education in its long run have envisaged many up and downs by which a steady progress was made from hospital or institutions leading to inclusion.

2.3 Indian Studies

A report of Government of India (1962) discusses training of the blind along with the deaf and the orthopaedically handicapped. It is remarked in the report that primary aim of the training of the blind should be to assist the blind individual to achieve the optimum degree of socio–economic independence. It is stated that this will be possible only if the following conditions are satisfied:

1. The development of manual dexterity from the earliest stage.

2. Training in occupations selected in the light of employment opportunities and in the light of potential capacities and aptitudes of the individual.


The report says that training for the blind on the basis of the goals which the trainee wishes to attain, can be broadly divided into the following.
I. Training for Open Employment.

II. Training for Sheltered Employment

III. Training for Placement in Homework.

In the report it is suggested that steps are to be taken at different stages to foster the development of manual dexterity; to organize training in rural occupations: to ensure that the training programmes institutions for the blind have a definite relationship to employment opportunities; and to provide facilities for socio – psychological adjustment of the blind.

The report of the Education Commission (Kothari Commission, 1964–66) made national development the chief concern of education. Its report entitled, “Education and National Development” starts with the significant sentence, “The destiny of India is now being shaped in her classrooms”. The Commission suggested restructuring of education into a uniform pattern of education called the 10+2+3 pattern all over the country employing 10 years of general undifferentiated education for all, with diversification into academic and vocational streams at the +2 level. It gave priority in the plans of educational reconstruction to the Work Experience Programme (WEP) in general education and Vocationalisation of Education Programme (VEP) at the secondary school level. However, it mentioned nothing regarding education of the disabled in particular.

Kool (1981) ‘Memory of Blind People’, explained about the memory of the blind. He used a sample of 378 blind persons matched with sighted blind – folded subjects. Reproductions of movement were examined in relation to recall delays and also in relation to variety of activities using linear slide
experimental approaches. Findings were reviewed in the background of vocational educational and other rehabilitation issues of the blind. He suggested that the blind lack precision even when their task is pre–selected. It was advised that blind people would not be given job in vocations where targets change frequently. Development of effective motor programme was also recommended. Skill requiring dependence and integration of auditory and kinesthetic modalities in the blind should be encouraged.

The National Policy on Education (1986) mentions that education has continued to evolve, diversify and extend its reach an coverage since the dawn of human history. The present policy has come out after reviewing the National Policy of 1968, which was a significant step in the history of education, in post–independence India.

The policy of 1968 gave much greater attention to science and technology, the cultivation of moral values and a closer relation between education and the life of the people. However, the new policy has laid emphasis on the removal of disparities and to equalize educational opportunity by attending to the specific needs of those who have been denied equality so far.

The emphasis for reaching the handicapped has been defined in the objective as it should be to integrate the physically and mentally handicapped with the general community as equal partners, to prepare them for normal growth and to enable them to face life with courage and confidence. The national Policy recommends the following measures to be taken in this regard.
i) Wherever it is feasible, the education of children with motor handicaps and other mild handicaps will be common with that of others.

ii) Special schools with hostels be provided, as far as possible at district headquarters, for the severely handicapped children.

iii) Adequate arrangements be made to give to the disabled.

iv) Teacher’s training programmes to be re-oriented, in particular for teachers of primary classes, to deal with the special difficulties of the handicapped children.

On the issue of vocationalisation of education, the National Policy on Education has clearly indicated:

i) The introduction of systematic, well-planned and rigorously implemented programmes of vocational education is crucial in the proposed educational reorganization. These elements are meant to enhance individual employability, to reduce the mismatch between the demand and supply of skilled manpower, and to provide and alternative for those pursuing higher education without particular interest or purpose.

ii) Vocational education will be a distinct stream, intended to prepare students for identified occupations spanning several areas of activity. These courses will ordinarily be provided after the secondary stage, but keeping the scheme flexible, they may also be made available after Class VIII. In the interests of integrating vocational education better with their facilities, the industrial Training Institutes will also conform to the larger vocational pattern.
iii) The emphasis on vocational education and its expansion will need a large number of teachers and professional in vocational education, education technology, curriculum development, etc. Programmes will be started to meet this demand.

**Singh and Kulashrestha** (1986) “Researchers on Visually Handicapped” attempted to study various research works done in the field of Visually handicapped in the Indian perspective. The relevant conclusions are:

a) Researches conducted on the visually handicapped are neither sufficient nor comprehensive and, therefore, needs greater attention and efforts.

b) There is a need to work in the area of strategies and methods of early intervention and training during pre – school age. Research on training the deaf – blind is also needed.

c) Researches in the area of development of aids are still open including the production of Braille literature and preparation of notations and codes. There is also a need to develop aids for teaching Science and Mathematics to the visually handicapped. There are also possibilities of adapting foreign educational aids suitable for Indian conditions.

**Singh** (1990) ‘Vocationalisation of Education for Visually impaired Children’, says that rehabilitation services for visually impaired adults in India were set up during the post – independence era. He discussed vocational training, services for newly blind persons, blind women, rural projects, placement, information access, legislation, professional training and research since three of the areas touched upon by him i.e. vocational training,
professional training and research are of relevance to this study, the observations made in these contexts are given below.

He finds that there are no programmes to help multiple–handicapped blind persons nor is the level of services necessary to facilitate vocational training. The traditional trades like chair caning and weaving still dominate the vocational on which training is given. But given the increased number of educated blind persons, innovative and employment–oriented trades should be introduced in the training institutions.

He also observed that technological research should focus on developing prototypes and producing educational, vocational and recreational aids to facilitate the training and placement of blind persons, there is a growing need for such aids in India for facilitating the training programmes, he suggested.

Mani (1992) ‘Concept Development’, says that technology is for improvement. The application of technology is acknowledged in every aspect of life and in every field of development. However, the technological application in the field on education is far from satisfactory. The scenario is still gloomy in the education of visually impaired children. The capacity of technology is such that (i) It makes the complex problem simple; and (ii) it addresses the individual needs of the earner. We need to invent devices, which facilitates better learning for visually impaired children.

Technology in the services for visually impaired children and youth can be used in reducing the handicapping condition of the individuals by means of
compensatory devices. He concluded that technology is important in classroom situations, which will provide the fountain of experience to visually impaired children and youth in India.

The National Plan of Action on Commitment to the Child (1992) represents India’s response to the unprecedented opportunities which the nineties decade had ushered in both through technology as well as a global ambience for redeeming India’s age – old pledges. This Plan of Action identifies quantifiable targets in terms of major as well as supporting sectoral goals representing the needs and aspiration of almost over 300 million children of India in the spheres of health, nutrition, education and related aspects of social support.

If refers to the National Policy for Children of 1974 which reaffirms the Constitutional provisions and declared that “it shall be the policy of the state to provide adequate services to children, both before and after birth and through the period of growth, to ensure their full physical, mental and social development. the state shall progressively increase the scope of such services so that, within a reasonable time, all children in country enjoy optimum conditions for their balanced growth”.

It has advocated provision of protections of children in especially difficult circumstances and tackle the root cause leading to such situations. This would include children in following categories, physically handicapped, mentally handicapped etc.
It suggests that the staff of institutions and implementing bodies will receive pre and in service training and the Voluntary Organizations to be assisted to undertake projects for welfare and development of children in especially difficult circumstances.

The goal with has been set by the national Plan of Action is to assist children affected by one or more disabilities, having no access to proper rehabilitative services and especially to lift up the status of those most marginalized.

It further refers to efforts that are to be made to set in motion advocacy and services of disabled children in two main phases:

i) To help people understand that disabilities are a commonly occurring phenomenon with specific causes and that their own endeavour can help reduce both the incidence of disability and its severity: and

ii) To ensure that people recognize that rehabilitation is possible and to inform them about how to receive those services.

Advani (1993) “Educational Needs for Better Vocational Guidance and for Better Employment Opportunities for Persons with Disabilities” mentions that the tendency, particularly in schools for seniority limited children has been to follow the normal syllabus prescribed by the State Directors of Education. This is a welcome tendency, opines the author. Yet, if the quality of education for handicapped children is to improve and the aim is to prepare them for economic independence, a ‘plus curriculum’ must be introduced. For instance, in the case of the visually handicapped training in Braille, orientation in
mobility, daily living skills, music and certain other subjects needs to be greatly emphasized. He says, unless communication improves, it will be extremely difficult for people with hearing disabilities to secure and hold employment. Vocational guidance given in schools may be of little value unless their communication skills are greatly sharpened.

The concept of a strong ‘plus curriculum’ must be carried even to integrated settings. Unless every child is given training in accordance with the nature and complexity of his/her disability, it will be extremely difficult for him/her to enter the field of employment. While integrated education has several advantages, it must be ensured that in the resource room or through the itinerant programme, a ‘plus curriculum’ is given to children in accordance with the nature of their disabilities.

He further argues that vocationalisation of education has not yet taken deep root in this country. But, vocationalisation of education is of crucial importance for handicapped children. The concept of socially useful productive work should be implemented, if necessary, with some modifications in schools for the handicapped children. For this purpose the ‘plus curriculum’ must teach some activities involving manual dexterity. For example, pottery, sculpture, music, gardening and a host of other activities could be taught which will have important social implications.

What is important is that adequate imagination should be used and emphasis be laid on socially useful productive work. This will greatly enhance the scope of activities of children with various disabilities and prepare them better for employment, says the author.
For better vocational guidance one of the most essential requirements is the development of appropriate tools. In order to make education more meaningful it is absolutely necessary to bring in much greater use of technology. The youth of the country, retired post masters, ex – servicemen, teachers and others could certainly be given some orientation so that they could lead the movement for non – formal education of handicapped children in their own homes. In this way, a strong campaign could be launched to impart education to handicapped children designed to improve their opportunities for employment in various sectors.

Many newer occupations like plastics, electronics, cosmetry, bag making, chalk making, soap making, file cover making, envelop making and hat of other consumer products could be made by people with any disability.

The author then raises the issues of training. He says, of late there has been a tendency to impart skills concerning all disabilities to a student teacher in one year. This tends dilute the programmes very considerably. The blind could engage in a variety of occupations including injection moulding in plastic, electronic assembling, manufacture of gas lighter, fan regulators, T.V. antenna, chalk making, and a whole range of other products of daily use. The deaf have practically no limitations. If their communication could be improved, they could perform almost any task in industry. Watch repairing, costume jewellery making, textile printing, making of leather goods have already been practiced by many people with orthopedic disabilities.

To promote better vocational guidance and employment opportunities for people with any disability the entire educational system needs to be
remodeled. Vocationalisation of education and socially useful productive work in schools must receive much greater attention. The author opines that proper efforts must be made in research the object of which should be two fold: Firstly, it should examine newer occupations that could be practiced by people with a disability; secondly, newer technology should be introduced to make it possible for very severely handicapped people to engage in communication as well as in useful productive work. If such a concerted plan of action is evolved, it should not be difficult to greatly accelerate the pace of placing the disabled people in suitable employment and developing a society for all. Other important issues for consideration, according to the author, are:

i) Steps are to be taken to vocational education for handicapped children both in special schools and integrated settings.

ii) To consider admitting people with milder disabilities to ITIS.

The Persons with Disabilities Act (Equal Opportunities, Protection of Rights and Full Participation), 1995, which was adopted by the Parliament of India following the observation of the Asian and pacific Decade of Disabled Persons from 1993 – 2002, referred to the following in the area of education and employment of persons with disabilities:

The appropriate Governments and the local authorities shall:

a) Ensure that every child with a disability has access to free education in an appropriate environment till she / he attains the age of eighteen years;

b) Endeavour to equip the special schools for children with disabilities
with vocational training facilities;

c) Providing every child with disability free of cost special books and equipment needed for his education;

d) By notification formulate schemes for ensuring employment of persons with disabilities, and such schemes may provide for;

i) The training and welfare of persons with disabilities;

ii) Regulating employment;

iii) Health and safety measures and creation of a non – handicapped environment in places where persons with disabilities are employed.

Mohapatra et. al. (1997) “Research on Vocational Education-the Indian Scene” say that the present age is the age of science and technology. Modernization and rapid development are continuously taking place. As a result, a large number of employment opportunities both wage as well as self – employment are created. But there is dearth of suitably qualified persons with appropriate skill, knowledge and competencies to exploit these opportunities. They opine that in order to meet the national needs of trained manpower and also to divert a large section of students from University education to a variety of gainful vocations, vocational education was introduced at the higher stages along with the traditional academic streams. They have also quoted studies of individual researchers, philosophers, reports and policy statements and found out that “keeping in view the nature and variety of unresolved issues and problems in the field of vocational education
and its significance for national development, it is felt that the volume of research carried out in the country in this area is grossly inadequate.

**Sen Gupta** (1998) “Vocational and Technical Education” has commented upon various trends that have emerged, the rapid changes that have been witnessed in this field of Vocational and Technical Education. Besides, he has extensively surveyed the existing national and international research studies on subject.

He begins with the observation that Technical and Vocational Education are going through a period of intensive change and reorientation. Multiplicities of national models, forms and structure have emerged in an effort to cope with the rapid technological advances and the changing needs of the labour market. Rapid strides in the sphere of technology and maintenance of the high pace of economic growth require a qualitative transformation in the work force towards a manpower equipped with a high degree of skills in widely diversified vocational fields.

In India, he mentions, the programme of vocationalisation of education draws its inspiration from the recommendations made by the UNESCO in 1974, which defined vocationalisation of education as a comprehensive term embracing those aspects of the educational process involving, in addition to general education, the study of technologies and related sciences and the acquisition of practical skill, attitudes, understanding and knowledge relating to occupations in the various sectors of economic and social life.
He further adds that Vocational and Technical Education cannot remain isolated from the needs and realities of business and industry. A close collaboration between the school/polytechnic and the industry is considered essential not only for supplementing the physical and human resources but also to make education and training more practical and need-based. Development of desired skills and competencies among vocational and technical products is also prime concern of these courses, which are basically performance based.

Regarding research in technical and vocational education, they say suggest that the researches must address the right and relevant questions. Researches must be organized on a continuous basis so that the results have an impact. He further adds that only rarely have studies been done on what happens to people once they graduate from a technical and vocational education programs over a period of time. The answer to this question would prove invaluable in identifying what could be done to bring about better adjustments between education, training and the world of work.

Further, Sen Gupta observes an imbalance in coverage areas. The sociology of vocational – technical education, comparative studies, the economics of the filed issues in manpower planning, management aspects, curriculum analysis, and organizations and administrative issues have received little or no attention. A theoretical frame work and foundation of vocational education for balanced development of vocational and technical education in the Indian cultural context is just not available.
Taking a more global view it is observed by the author that four major problem areas common to most of the developing countries are:

a) Attitudes of resistance to change and negative views as to the value of technical and vocational education;
b) Financial restraints on development;
c) Lack of coordination between education and employment;
d) Problems of implementation and improvement.

In this opinion, all these problems are, in fact, closely interlinked and no one problem can be solved in isolation from another the author studies trends of research in technical and vocational education in twenty – three countries and mentions that, generally, structures and institutions for a coordinated research effort for the development of technical and vocational education are either non – existent or very weak.

He further adds that developing effective and functional linkages between the school/polytechnic and the industries is yet another area in which interventions are required. There is, therefore, need to extend policy support to the involvement of industry for greater relevance of education to the world of work, in order to inculcate among students proper work ethics and work culture, technical and vocational knowledge and skills of generic nature should constitute an integral component of general education which should commence from the early stages of education, says the author. Both full and part – time opportunities should be made available for retraining and continuing education to meet changing and emerging skill needs by using various modalities such as on – the – job, off- the – job and distance learning.
Punani (1998) “Training Strategies-Vocational implication for Employment” spells out the training strategies and their vocational implications for persons with low vision. He argues that all the existing training strategies like Sheltered Workshops, Transitory Employment Confers, Home Worker Programmes and on the Job Training Centres have completely ignored persons with low vision. There is, at present, no provision for extending individualized services to such persons, opines Punani.

He says that the exclusive coverage of the blind, limits the selection of vocations and tasks for skills development. In fact, inclusion of persons with low vision in groups coming together in the choice of skills, tasks, vocations, and professions would enhance the scope of integration at the training level, development of complimentary production teams, higher production turnover, modernization of activities, and ultimately the economic viability of the training centres.

He argues that the ultimate object of any vocational training is enabling a person to become a part of mainstream employment or self – employment. If children with low vision are integrated right from their early childhood years, their transition to employment would be smooth and uncomplicated, observes the author. Thus, Punami recognizes that there is need for shifting of roles from being merely vocational training centres, to modern well equipped support centres, advocacy agencies, and pressure groups. These have to emerge as fountainheads of integrated, most competitive, high quality skill development, employment oriented, and individual centred vocational as well as professional training courses.
Kareem et.al. (1999) “Vocationalisation: a Global Need” say that education was determined by the history of social, political, scientific, and economic developments, and what it will be, might be shaped by not only the interplay of factors presently at work but also by the interplay of the factors, in the future. More often, education is not a passive process. As it evolves, it interacts with environment and gets oriented and shaped.

They argue that, although education is to offer many things to people, its main function is essentially to impart knowledge and skills intended for employability. And we would find today that, to a large extent, both employability as well as the nature and quantum of employment in any society depends not so much on individual capabilities but on a multiplicity of factors well beyond the scope of individual initiatives. Natural resource endowments, economic factors such as the stock and investment of capital on infrastructure and social factors such as the work environment, ethics and consumption patterns as well as prosperity to save also have decisive impact on employment opportunities. With the process of liberalization and globalization of the economy, external factors particularly global competition, balance of trade and inflow of capital and technology, do emerge as determinants of economic opportunities in terms of employment. Getting practical training during higher education towards self – employment by way of vocationalisation is very essential.

They further add that the approach, which has been adopted for higher education, made a gulf between education and practical life. And it has, to a larger extent, missed to develop among students. Practical skills and
employment avenues leading to large-scale unemployment.

According to **Kabeer** (2000), in his study “Social Exclusion, Poverty and Discrimination: Towards an Analytical Framework”, he noted disability is not only closely related to poverty, but is also becoming widely recognised as a cross-cutting development issue that bears relevance to all dimensions of social exclusion. Although social exclusion is not necessarily the opposite of inclusion, the extensive literature that is fast developing around processes of social exclusion can potentially assist in our understanding of combinations of exclusionary dimensions.

In the report of **DFID** (2000), the women with disabilities are two to three times more likely to be victims of physical and sexual abuse than those without, demonstrating how being a woman and disabled can lead to double discrimination. In addition, more boys with disabilities go to school than girls with disabilities and people with disabilities are usually the poorest of the poor.

**Mani** et.al. (2000) “Transition from Schools to Employment” say that transition from the school to employment is the weakest link in the services for visually impaired children throughout the world. Teachers of visually impaired children are overburdened with the school curriculum and therefore, have less time to plan a sound vocational programme for the child. Many school leaving visually impaired children either pursue higher studies or join a rehabilitation centre. Still a significant section of them remain idle. Among the educated employed persons, there is usually a low correlation between their academic qualification and job obtained. An educational programme commences with a statement that it should make visually impaired children contributing citizens.
of the nation but fails to see this in reality. By the age of 18, the visually impaired adult tries to cope with the world. At this age, educational institutions shirk responsibilities for the world denies opportunities blaming that the school has not developed adequate skills in the child, the transition from school to employment is a traumatic period of any visually impaired individual in developing countries. The authors argue that teaching vocational skills to the child in the school itself will change this scenario.

According to Mani (2000), inclusion does not just mean enrolling children with disabilities in the regular classroom, but along with enrollment of the child with specific disability need to be assisted to cope with the regular classroom, thus adopting a child centered approach. He considered in his study as the support services rendered as identifying children with disabilities in the community, teaching skills peculiar to disability wherever necessary, assisting general classroom teachers if needed, arranging assessment for children with disabilities, arranging learning materials for children with disabilities, arranging aids and appliances and monitoring the progress of the child through classroom teachers.

Alur, (2002), in his study “Education and children with special needs: from segregation to inclusion”, said that there is a growing consensus that people with disabilities should be included in development programmes, as the exclusion to date of this marginalised group will probably result in the non-achievement of the UN Millennium Commission’s broadly inclusive global development agenda. However, if a person with a disability is dehumanised by cultural belief or stigma, as they are in India, then they can be ‘invisibilised’
and not considered worthy of rights. Disability is clearly a development issue that we ignore at a price, including that of human rights.

**Benu P. Behera** (2003) has stated in his study, “Education evils and remedies”, that even if a previously excluded child is given access to a mainstream classroom, what happens within that space can be anything but inclusive if the school quality is poor, they cannot access an inflexible curriculum, or they are ignored or bullied by the teacher or their peers. These children would be found in education is widely – albeit wrongly – perceived as inherently good. Getting all children to school is thus mistaken for their right to education. It is worth noting that the concept of inclusive education in the mainstream as opposed to specialist segregated provision is a matter of heated, inconclusive debate in the north, and yet it is seemingly being transferred unquestioningly as the panacea to the exclusion of children with disabilities in the south.

**Indumathi Rao** (2003) has presented a paper ‘Inclusive education in the Indian context’, in the meeting on inclusive education organised by NCERT. In this she started that the inclusive education must respond to all pupils as individuals, recognizing individuality as something to be appreciated and respected. Inclusive education responding to special needs will thus have positive returns for all pupils. All children and young people of the world, with their individual strengths and weaknesses, with their hopes and expectations, have the right to education. It is not our education systems that have a right to a certain type of children. Therefore, it is the school system of a country that must be adjusted to meet the needs of all its children.
From the view of Punani (2003), the Sarva Shiksha Abiyan is a historic stride towards achieving the long cherished goal of Universalization of Elementary Education through a time bound integrated approach, in partnership with states. This movement promises to change the face of the elementary education sector of the country, assumes to provide useful and quality education to all children including those with disabilities in the 6-14 age group by the year 2010. It is suggested that as a system, inclusive education should be flexible. Its principle should be education in the regular classroom whenever possible. This need for flexibility must be reflected in the methods and materials used to give these children the widest possible access to the regular curriculum. Inclusive education is more in tune with the social model of disability, which see the system as the problem. The school and the education system as a whole is enabled to change in order to meet the individual needs of all learners.

Subrahmanian (2003), in his study “Exploring processes of marginalisation and inclusion in education, in education inclusion and exclusion: Indian and South African perspectives”, he stated that there is a growing, although not comprehensive, literature in the south, which focuses more on external factors with its ‘community approach’. In developing contexts with large numbers of out-of-school children, inclusive education tends to be more broadly concerned with school access and education deprivations for marginalised groups such as girls, ethnic minorities, poor families and disabled children in CREATE zones one and two, who have never attended or dropped out of school. It seems that there is currently an expanding discourse on inclusive education developing amongst some
academics and teaching professionals in India, many of whom, see inclusive education as exclusively concerned with disabilities. This discourse is attempting to shift perceptions of disability from the medical model to the social model. However, there are many conceptual difficulties with the terms of integration and inclusion in India, which are often used interchangeably.

Peters (2004) in his study “Inclusive education: A strategy for all children”, said, while in northern contexts, the discourse around inclusive education is primarily concerned with segregation as opposed to inclusion in the mainstream, in the south the coverage of special schools is so limited that the discourse is concerned with inclusion being potentially the most cost and time-efficient way of improving access to educational institutions. It may be that the promotion by the World Bank and OECD of the cost-effectiveness of inclusion in the mainstream enabling both economic and social benefits may bear more relevance for resource-constrained governments and policy-makers than a child-rights approach.

Although inclusive education clearly has the potential to improve teaching and learning processes for all children as well as fulfilling their rights, for the purposes of this paper we will be looking at inclusive education mostly in terms of access for children with disabilities in India due to their ‘invisibilisation’.

Mohan Rao, (2005), in his study “Social exclusion approach offer education for all in India”, identified the factors like gender, ethnicity, disability, and poverty are rarely experienced exclusively, and as such are mutually reinforcing. Processes such as inclusive education could meet the needs of
students affected by any of these dimensions. Social exclusion frameworks go some way towards understanding the processes involved and their intersecting nature.

Bagarayya S. (2005), published an article ‘Education to all in India’ in ‘Jaya Publications, Chennai during May 2005. In this article he concluded that a twin-track approach to disability may assist not only in improving educational access for marginalised children, but also the reconceptualisation of inclusive education as a school quality issue to benefit all children. This could contribute in the long-term towards the achievement of education for all and fulfillment of the fundamental right to education enshrined in the Constitution of India in 2002.

Kamarajan Selva (2005) has discussed about vocational and recreational aids for visually impaired in his study, ‘The impact of vocational and recreational aids for visually impaired’. In this study he identified that there are many different aspects in the life of a visually impaired individual where technology can significantly increase the individual’s independence, educational potential, and productivity. Aids for daily living mathematical and calculation Aids, tools and test decampment, aids for writing, and aids and modifications that allow access to computers are also available for making the lives of such people less painstaking. He said that blind workers can also use many tactiley – adapted, mechanical tools in their work environment. A blind machinist can use an audible position indicator to measure depths or align material in a lathe with extreme precision. This device measures position or displacement form a preset reference position, and generates different tones
until it reaches the present value. By making use of readily available speech synthesis modules, the blind individual can determine the sign, numbers with a decimal point, and unit of the measurement without touching any Braille marks. He further adds, technology can be applied to a very wide range of activates of the blind and severely visually impaired individuals. These range from activities of daily living through computer access to the use of advanced information systems. Modern information processing systems may prove to be benefit to the blind individuals, but only if efficient and effective means can be developed to allow them to have an interface with these new electronic information systems.

Lawrence Mundia (2005), in his study ‘Implementation of inclusive education in Brunei Darussalam: Review of possible implications for school counselors’, looked at the provision of counseling services to students in government schools after the implementation of inclusive education in Brunei Darussalam. The creation of the Special Education Unit and the Division of Counseling and Career Guidance (both in the Ministry of Education) to coordinate the respective services was a welcome decision in the right direction. Inclusion, however, may have expanded the role of school counselors in many ways and possibly brought other unforeseen problems. Thirteen identified and selected factors that may impact negatively on the work of school counselors under inclusion are discussed. In addition it was observed that the Special Education Unit and the Division of Counseling and Career Guidance were not working closely as expected. There was also no information regarding the extent to which school counselors were working cooperatively with special education teachers (known as learning assistance
teachers, LATs) and regular teachers in schools. This lack of liaison among these key providers of educational and counseling interventions in schools is a source of concern because solving problems of young students (both disabled and non-disabled) often requires dyadic or triadic and sometimes multi-team consultations and interventions. The none-availability of school counselors in the preschools and special schools was also a worrying service gap. Further, the inadequate number and low level of school counselors at the primary school level (one counselor for every three schools) was considered insufficient for services to be effective. If not addressed satisfactorily, these and other related problems may become barriers to the provision of realistic, meaningful and beneficial counseling services to students under inclusive education. This is where more efforts and resources need to be channeled. A more in-depth evaluative study of the school counseling services in Brunei employing both quantitative and qualitative procedures is recommended to gain additional insights into the problem and its possible solutions.

According to Benejeer Karu (2006), A focus on disability in global development not only raises questions of diverse local interpretations of the same issue, but also the need to accept the diversity of needs within this 'group' depending on both the nature of impairment and cultural context. The linguistic translation, let alone personal understanding, of new, often 'northern', terminologies and ideas can be problematic, and the English word 'disability' does not escape this conceptual tension. In this light, it is useful to outline models and definitions of 'disability' which are in use.
**Remole Vardini** (2007) ‘Influencing factors on vocational rehabilitation of the blind’, study starts with an introduction of the history and contemporary approaches to vocational rehabilitation of the blind and discusses the role of the State Commission of the Blind, the rehabilitation process, physical influences which contribute to cause visual handicap, family and environmental influences, education, independence in travel, intelligence, aptitudes, personality, and how counseling changes the course of rehabilitation. The study looks into the factors which may lead to success or failure of rehabilitation to seek for ways in which unfavorable factors have been altered during the rehabilitation process and favourable ones encouraged, and to identify unmet needs not only in vocationalisation training and placement but in all phases in education, rehabilitation and social welfare. The important findings of the study indicates, although a programme was created to restore visually handicapped people to full – employment, it would adopt itself to the needs of those who required part – time employment. The most important factors for success in a vocational rehabilitation programme are related to health. Personality factors came next. A thorough diagnosis based on social history, psychological test and medical report must be made in order to have sufficient knowledge of the client to interpret the needs and abilities and judge his motives correctly. These make the process of rehabilitation easier. Principal causes of psychological problems which ultimately affect chances of successful vocational rehabilitation of the visually handicapped are: rejection at home and by the outside society. Therefore, the home and the community play a big role in effective rehabilitation of the blind.
Manivannan M. (2009), in his study, ‘Inclusive education for disabled children’, stated that owing to lack of knowledge, educational access and technology, disabled children were initially treated as unwanted and segregated from other children. Later their education was carried out in special schools. In recent times there has been a shift towards having children with disabilities attend the same schools as non-disabled children. The educationists now feel that each child should be allowed to learn in his own way. The concept of inclusive education has been spelt out in the Salamanca statement and the framework for action on special needs education 1994. It states that all governments have been urged to adopt as a matter of law or policy, the principle of inclusive education, enrolling all children in regular schools unless there are compelling reasons for doing otherwise. The basic premise is that the school should meet the educational needs of all children irrespective of their disabilities or limitations.

2.4 Conclusions

A plethora of researches have been reviewed which focused on various issues of special education. Inclusive education, as a new approach to bring the differently-abled to their normal life is a major step taken by the Government.

In India, although vocational education has been planned for the general population way back in 1966 (Kothari Commission) but there was no special consideration for persons with disabilities. Even research in the area of vocationalization of education for the handicapped is seriously lacking. A number of policies have been made or re-written for vocationalisation of
education but these are not up to a satisfactory level even in the case of sighted children, less to talk of the blind.

Even though inclusive education was adopted by the government. The grass root level of inclusive in still away from what had planned. Teachers are not well trained and equipped to cater to the heads of differently abled people in the classroom. The teachers neither motivated nor guided are in state of confusion or ill equipped. Hence, these are a need to study the “Implementation of Inclusive Education in Primary and Secondary Schools of Visakhapatnam – Identification of Barriers to Learning”. This study also focuses on identifying the barriers to leaning in an inclusive classroom.
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