III. LITERATURE REVIEW

In order to place the present investigation in a more easily understandable perspective, it is important to review the directions that research has taken in the field of early intervention at the preschool level. In the all round development of a child, the factors that play an important role are: (a) parental involvement, (b) socio-economic status of the family, and (c) educational environment of the child. This investigation caters to children having developmental delays and mild mental retardation, so the field of early childhood special education has been reviewed with regard to the efficacy of early intervention programmes in integrated settings.

In the present chapter, the literature reviewed has been classified under the heading: Effectiveness of early intervention programmes for handicapped and non-handicapped children. The other areas reviewed, namely, (a) parental involvement, (b) effect of socio-economic status on child's development, (c) effect of curriculum content, and (d) training of teachers, stem out of the claims made by early intervention practices. This has been shown in figure 3.1.1.
Feijo (1982), Sevigny (1982), and Stedman (1988) have summarized their findings after a review of literature on the effectiveness of early stimulation programmes. These support the development and use of early stimulation as a primary prevention strategy.
strategy for preventing intellectual and social retardation. Stedman has also stressed the need for early identification of preschoolers with potential or apparent disabilities. Kirk (1987) has also concluded from the case studies of preschool children with developmental learning disabilities that early diagnosis of a child’s abilities as well as disabilities is important for amelioration.

Guralnick and Bennett (1987) have specified children who might be the recipients of early intervention services. The specific groups are: (a) infants and children at increased environmental risk, (b) at increased biological risk, and (c) with established developmental delays, deviations or disabilities.

Dunlap (1989), has provided a list of functional skills associated with two year old children, as ranked by special education teachers. The factor analyzed results have shown a classification of four types of children in greatest need of early childhood special education placement: (a) children environmentally at-risk, (b) children
lacking gross-motor skills, (c) children lacking readiness and fine motor skills, and (d) children having marked self-care.

Meta-analysis of various research studies on the efficacy of early intervention has indicated significant positive benefits for most children. White (1986) has supported this finding on the basis of his analysis of 326 studies on early intervention efficacy. His findings show little support for the necessity of parental involvement. In a similar analysis, findings from 74 studies on early intervention with handicapped preschoolers have indicated positive effects of early intervention (Casto & Mastropieri, 1986). Other findings indicate that more intense and larger programmes have more efficacy, and the degree of parental involvement and the age of the child at the commencement of intervention have little importance in the efficacy of intervention. Fine and others (1985) studied 377 early intervention programmes on young handicapped and "at risk" children in Ohio. The findings indicated a bulk of support for early intervention services from public sources of funding, while
private sources provided supplementary support for these services.

Early intervention programmes have been effective in overcoming reading difficulties (Gray, 1988; Hawkins, 1985; Pinnell, 1988). Hawkins has stated that the students attending the programme acquired foundation skills of fine motor coordination, listening, expressive language and attention control as a result of early intervention.

Emphasizing the importance of preschool special education programmes for the handicapped children, Glimps (1984) has stated that handicapped preschool children who participate in special education programmes gain more in mental age and skill development than similar children not enrolled in special programmes.

Janko and Bricker (1987) have discussed ways and means to enhance communicative competence in young handicapped children through language intervention. Through a review of research on early receptive language development of normal and language
handicapped children, Goldstein and Wetherby (1984) have emphasized that developmental changes are effected through interaction of children with their environments.

In an effort to improve educational effectiveness of 14 preschoolers with minimal cerebral dysfunction, Revelj (1987) took up a remediation project. The findings showed that of the 14 children, 12 children showed improved performance and 6 children increased their level of competence. In 1985, the National Joint Committee on Learning Disabilities (NJCLD) Baltimore, MD, stressed the importance of systematic observations, screening instruments, testing, and teacher rating scale etc. in identification of preschool learning disabled children. The importance of interdisciplinary approaches, personnel preparation in terms of competency standards, and education of medical and other service providers in identifying and referring preschoolers with suspected deficits was stressed upon for positive outcomes of intervention.

Positive impact of intervention on disabled
infants and preschool children has been reported in many studies (Bailey & Bricker, 1985; Hanson, 1985). Anderson and Bower (1986) carried out a study to evaluate the quality and efficiency of early education programmes for handicapped children in Louisiana, covering approximately 5000 handicapped children in the age 3-5 years. The results were: (a) quantitative outcome measures included children's developmental gains in skill areas, (b) 40 percent children were placed in regular kindergarten, and (c) communication and co-operation among related services staff and the classroom teacher were the factors associated with efficiency and effectiveness.

In an evaluation of two levels of a centre-based early intervention project for toddlers and preschoolers with mild to moderate cognitive delays, Wolery and Dyk (1985) have reported positive effects in terms of developmental enhancement and the number of objectives achieved.

The need of early intervention programmes for assessing indicators of giftedness or talent in preschool children has been stressed by Plowman
He has further stressed that the learning needs of the gifted should be identified, extra learning experiences should be provided, and adequate preschool programmes should be selected for meeting with the needs of talented and gifted preschool children. Williams (1988) has outlined learning patterns which identify the gifted learning disabled, and discussed the importance of early diagnosis and student’s participation in the programmes for helping the student succeed.

In India, Muralidharan and Kaur (1986) assessed the impact of intervention on the language and cognitive development of tribal preschool children. Noticeable changes in the experimental group were observed and the findings indicated that with proper orientation and encouragement, the AWWs are capable of bringing about positive changes in the language and cognitive skills of children, no matter how disadvantaged the children are. In a study Bharath Raj, Vidyasagar and Bhavani (1981) attempted to assess if intelligence among the socially disadvantaged normal children could be improved. The findings supported their assumption as the
experimental group significantly improved in intelligence.

Gorny (1987) instituted a pre-referral intervention programme to identify special needs children within a Head-Start programme. This timely identification helped in preventing mistaken referral and labelling of children with mild delays who did not require intervention. Results showed that many of the children, including the severely handicapped, showed growth in academic and social areas. Smith and Strain (1984) have provided three reasons for early intervention namely: (a) for enhancing the child’s development, (b) for supporting the child’s family, and (c) for maximizing the child’s and family’s benefit to the society. Further they state that early intervention increases the developmental and educational gains for the child, improves the family’s functioning and provides long term benefits to the society. Also mentioned in their findings are factors that are important in making an intervention effective namely, intervention should be given as early as possible; involvement of parents should be ensured; programmes that feature a high degree of
structure should be implemented, intense services and an individualized approach should be introduced.

Greenberg and others (1984) have reported a positive impact of an early intervention programme for deaf children under 3 years of age in Vancouver, British Columbia. The results have been reported in terms of more developmentally mature communication and higher quality of interaction in families who had received intervention.

Anastasiow (1986) has reviewed and supported the three themes from a 1985 conference on early childhood special education namely, (a) the effort to improve lives of impaired children and their families is effective, (b) in the efficacy studies of intervention there is variability of research methods, and (c) early intervention is needed for young impaired children.

Most of the studies mentioned above support early intervention programmes for reducing various kinds of handicaps and developmental deficits in young children. However, there have been studies that
do not support this practice. In a study on hearing impaired children, Weisel (1988) has reported that early intervention is not associated with improved performance of children’s academic achievement, social-emotional adjustment, and speech comprehension. Similarly, Klein (1989) has described the role of early intervention programmes in helping children with disabilities, focusing on parents and infants needs, the family service plan, and the role of case managers. The inference drawn is that the effectiveness of early intervention is unproven. Early is not always better, and more is not always good.

The literature review on early intervention puts the author in a position to quote studies stating long and short term benefits of early intervention. For the convenience of the readers long term benefits of early intervention have been grouped under home based, centre based and studies in integrated settings.

**Long term Effects**

In a follow up study of 42, 4 to 14 years old
children who had participated in a home based infant stimulation programme, the results indicated that approximately 66 percent of the participants (with serious developmental disabilities) were in full time special education programmes, 20 percent were mainstreamed and 15 percent were in regular class rooms (Widerstorm & Goodwin, 1987). Watkins (1987) reported his findings of a longitudinal study designed to measure language, academic achievements and social functioning of 92 hearing impaired children divided in four groups. The results indicated that children who had received home intervention performed better in most areas than no-intervention children, with slight advantages in students who had received earlier intervention and attended preschool.

On the basis of evidence from health, social services, family support, child care and preschool education programmes, Schorr (1989) has stated that damaging outcomes for at-risk youth, and the risk factors that precede them, can be reduced substantially by early intervention programmes. Friedel and Boers(1989) have stressed the need for
early intervention in the primary grades to avoid secondary school dropout, maintaining that most at-risk secondary students have major deficiencies in reading, writing and listening as well as low self-esteem, which can be overcome by timely introduction of effective early intervention programmes.

Hudson and Clunies (1984) reported long term benefits of an early intervention programme by examining the progress of 15 intellectually handicapped children, who had attended an early intervention programme and were in their first to third year at normal primary school at the time this study was conducted. The data showed that most children were well adjusted in their classrooms and were well accepted by their peers, though there were differentials in the progress of children.

Rothenberg (1988) assessed long term effects of an early education intervention on 37 kindergarten children identified at-risk for specific learning abilities namely, perceptual-motor, auditory, visual, cognitive and social emotional. Immediate post
intervention results indicated positive impact of
intervention and then the results from an 8 year
follow up study showed that these children continued
to perform average or better on achievement levels
for their age group. The intervention effects were
most salutary upon children moderately at-risk.
Askins and Cornett (1985) have reported positive
findings from their 10 year follow up study on
Spanish-American, low birth weight children who had
taken responsive environment programme. The
significant finding was that 86 percent of these
students had normal school progress.

In a longitudinal study of 20 children who had
attended a prekindergarten 17 years ago, the findings
on the relationship of learning experiences to later
life events of students and their parents showed that
the achievement of students was better after the
prekindergarten years and both parents and students
benefited from the early intervention (Feldman,
1988).

Enduring effects of early intervention
programmes have been reported on the achievement and
motivation of students who participated in early intervention programmes (Bryant & Ramey, 1984; Gray, 1983). More hours of contact and parental involvement had more positive intellectual effects on the children (Bryant & Ramey, 1984).

One of the strongest and best known sources of support for the long term efficacy of early intervention with disadvantaged children has been conducted on the Perry preschool programme since 1962. Data was collected on 123, 3 and 4 year old disadvantaged black children during the preschool programmes, early elementary years, at age 15, and age 19. Analysis of this data has shown significant positive effects on the preschool children. Divided into six sections, this report deals with programme effects in each category namely, (a) immediate consequences of the programme, (b) elementary and secondary education, (c) higher education, (d) delinquency and crime, (e) welfare, and (f) employment and earnings (Barnett, 1985).

**Short term effects**

Researchers have involved themselves in
ascertaining not only the long term, but also the immediate or short term benefits of early intervention programmes. In an analysis of 162 early intervention efficacy studies with disadvantaged, at-risk, and handicapped children, White and Casto (1985) have drawn the conclusion that early intervention has substantial immediate benefits for at-risk and disadvantaged children.

Terrisse and Dansereau (1988) have described the findings from an early intervention project that was set up in day care centres for 85 children in the age group 3 to 5 years. The intervention programme was structured to suit individual needs of children. The result have favoured intervention effects on a short term basis.

Many researchers have linked the success of early intervention programmes with careful planning and implementation. McDonnell and Hardman (1988) have provided a synthesis of “best practices” from the field of disability which can be applied to develop exemplary early childhood special education programmes. Exemplary programmes are determined to be
those that provide integrated services, are comprehensive, normalized, adaptable, peer and family referenced, and outcome based.

Integrated services have been a trend for the past three decades in the developed countries. In India too, the integrated education for the disabled children (IEDC) is fast picking up its roots. The National Policy on Education (1986) states that "Wherever it is feasible, the education of children with mild handicaps will be common with that of others". This move is not as simple as it is stated, because it involves serious moral issues that need to be clarified. Sarason and Doris (1979) have considered integration as a moral issue based on three questions: (a) How do we want to live together?, (b) on what basis do we give priority to one value over another? and, (c) how far does the majority go in accommodating the needs of the minority? They have further stated that the moral issues underlying integration will not be changed over a long period of time, as these are deeply rooted, ingrained and reinforced by tradition, institutional and social structure, and practice.
There is a difference of opinion among researchers over the success of the integration move. Some hold the view that the move to integration is premature and may not be proper for same group of children (Blacher-Dixon et al., 1981; Carlberg & Kavale, 1980; Meisels, 1977). There is general consensus amongst researchers that social integration is the key element in educational integration, but some researchers have taken a broader view of this concept maintaining that there are three parameters of mainstreaming: (a) integration, (b) educational planning and implementation, and (c) clarification of responsibilities among educational personnel.

Many researchers have investigated the interaction of handicapped children in preschool settings. While some researchers have reported social interaction between handicapped and non handicapped children (Dunlop et al., 1980; Peterson & Haralick, 1977), majority of research findings (Cavallaro & Porter, 1980; Feitelson et al., 1972; Kennedy et al., 1976; Simon & Gillman 1979; Sinson & Wetherick, 1981; Wilton & Densem, 1977) have shown that handicapped children demonstrate less mature forms of
play, less social interaction, and are socially isolated from their normal peers. Most researchers seem to agree upon the view that some type of intervention is required to stimulate interaction between handicapped and non-handicapped children.

Integration in education being a recent move, issues relating to goals, outcomes, and evaluation criteria for mainstreaming will continue to be debated upon for sometime (Guralnick, 1981). It is difficult to structure the research for presenting the literature on integrated education as the studies carried out lack commonality. Moreover, there is dearth of well researched methods for evaluation (Allen, 1980).

**Factors Effecting the Efficacy of Early Intervention Programmes**

**Parental Involvement.**

An important factor in a child’s development is the involvement of parents. Aristotle had recognized the significance of parental involvement in early
childhood education and believed that education during the first seven years of a child's life should take place at home, under the direction of a mother or a nurse.

A plethora of research studies stress the need and effects of parental involvement in a young child's education. Greater parental involvement in programmes of children with or without special needs has been stressed by a number of researchers (Allen & Hudd, 1987; Arndt, 1987; Barry, 1982; Beckman & Burke, 1984; Fitzgerald & Fischer, 1987; Rowen, 1982; Wehrly, 1982; Whitmore, 1988). Allen & Hudd (1987) have also concluded that the nature of parents' involvement must be individualized and increased at the initiative of parents and not merely to relief professional responsibilities.

In a study 45 mothers of developmentally delayed children were surveyed on family resources, personal well being and adherence to professionally prescribed child level interventions. The results have indicated that adequacy of resources is related to both well being and intervention commitment (Dunst
Karnes and others (1987), have examined the importance of including families in the education of young handicapped children. Describing the family involvement component of the Precise Early Education of Children with Handicaps (PEECH) outreach project, the need for parental involvement in the young child's education has been stressed. Realizing the need of parental involvement in child's education, Nelson and Rogers (1987), have mentioned the Volunteers in Partnership with Parents (VIPP) programme which uses volunteers as partners in working with parents, to alleviate the pressing problems of rural families as well as provide early intervention to the children.

Generally speaking, parental involvement refers to the involvement of mother in a child's education, as she interacts the most with the child. Results from some studies have proved this notion. Brown and Wolery (1988) conducted a study wherein three mothers of handicapped children were taught to imitate their child's behaviour. Subsequently, the number of mands
displayed by the mothers during play sessions were measured. Results showed increases in the percentage of sample intervals during which mothers imitated their children, and as imitations increased, mands decreased. In a similar study, Lowry and Whitman (1989) taught toy play behaviours to the mothers of developmentally delayed infants. The results indicated improved maternal teaching behaviour and a generalized positive parenting style.

In an early intervention programme designed to minimize adverse effects of low birth weight, the mothers of the experimental group reported significantly greater self confidence and satisfaction with mothering, and more favourable perception of infant temperament than the control group mothers. At 36 and 48 months of age, the differences between children on cognitive scores became significant when the experimental group caught up with normal children (Rauh & others, 1988).

In the year 1988, Mahoney and Powell implemented an intervention programme designed to modify interaction patterns between parents and their
handicapped children in a home-based setting. The results with 41 children showed decreases in parents' interactional dominance and frequency of directives, increases in responsiveness, and relative developmental gains for the children.

Terrissee and Joly (1986) have reported findings on the effectiveness of the Family Education Programme of the Early childhood and intervention project - a programme of the social and school adjustment research group of the university of Quebec in Montreal. The findings in general suggest that it is possible to get parents' participation in an educational intervention with their preschool children under certain conditions, and both the children and parents benefit from this involvement.

Positive results of parental involvement have been noticed in home-based intervention programmes with developmentally delayed, handicapped and non-handicapped children (Affleck & others, 1982; Nicassio, 1980; Pressman, 1984). These results have been noticed with regard to positive responsiveness of the child to parents, more organized involvement
of parents and increased home environment ratings.

Effects of a short term Title 1 parent involvement programme for improving reading skills of primary age children by using individually prescribed activities sent to homes, have been summed up as: A parent involvement programme using individually prescribed activities sent home is an effective means of improving some specific reading skills of primary age children and increasing parental involvement in the school setting (Holsinger, 1980; Wile, 1981).

In a similar study Brooks (1984) ascertained how parents and educational professionals perceived parent participation in the IEP. The results described a more positive view of parent participation than earlier studies. Parents saw themselves as more involved than did educational professionals. It also appeared that educators were more accepting of parent involvement than they were initially and that as a group they would like to see parents more involved. Richardson (1980) has evaluated the effects of parent involvement in the educational process by conducting interviews,
meetings, follow up and workshops, and distributing booklets to parents. The findings are: (a) Parents are willing to seek help from professionals in bettering their parental and teaching skills, (b) they want to help their children learn, (c) parents can be a valuable resource for administrators in deciding what type of parent activities are helpful for individual school districts, (d) parent programmes built on direct needs seem to generate more interest than parent programmes developed from programme needs, and (e) a video tape is an effective medium in presenting actual at home parent child learning activities.

In a longitudinal study on the effects of parent child educational interaction, Land (1983) has focused on the value of parental involvement in a young child’s education. The results emphasize that parent involvement beyond kindergarten years is necessary. Jipson (1984) carried out a study with the purpose of explaining the relationship between some parents’ home curriculum selection and instructional practices, and their children’s knowledge of a variety of information. The findings have supported
parents as providers of instruction and the importance of early experiences at home.

The findings of a study on the significance of parental involvement within early childhood education (Cason, 1984) stress a closer relationship between parents and schools. Home and community have been identified as influences linked with student success.

Most of the early childhood education programmes stress the need of parental involvement, and have incorporated parental services within early intervention programmes for environmentally at-risk and developmentally delayed children. Significant developmental and achievement gains have been observed as a result of parental participation in the above mentioned research studies. However, this is but one side of the picture. There are findings that do not support the view of parental involvement.

In a paper presented at the Biennial meeting of the Society for Research in Child Development, White and others (1989) have provided a detailed analysis of evidence concerning benefits of parent involvement
in early intervention programmes. White has remarked that two dimensions should be considered in defining parent involvement in early intervention programmes: (a) the type of activities in which parents engage or the types of resources, and assistance offered to parents as a function of their involvement; and (b) the attitude and context in which the activities are presented. After examining the reasons for the importance of parental involvement in nearly 200 early intervention and non-intervention studies, and a few experimental studies, White has concluded that there is little evidence for the position that early intervention programmes that involve parents are more effective than those programmes which do not.

Casto and Lewis (1984) have carried out a Meta-analysis of parent involvement in early intervention programmes as a part of a study on efficacy of early intervention with disadvantaged, at-risk, and disabled preschoolers. Evidence has suggested that there is little support for the position that parental involvement leads to more effective intervention programmes.

Researchers have given conflicting views about
While most of them have favoured parental involvement, some have given their views against this position. After examining both the sides of this issue, the investigator has drawn the following inferences: (a) for a programme to be successful, its goals must be clearly articulated; (b) the programme should be properly utilized by parents; (c) the use of parent training programmes is a prerequisite for helping parents to provide remediation of child rearing problems; and (d) a closer contact between school, parents and community is an important factor in bringing about continuous positive outcomes with regard to child's achievement.

Parents can be a valuable resource for optimizing all round development of children, provided they are made to know what is expected out of them and how they have to go about it. They need assistance with the developmental process and should effectively collaborate with educators and health workers in assessing health and development of pre-primary children.
Effect of Socio-economic Status.

Revicki (1981) has investigated the relationship among socio-economic status, sib-size, social, psychological family environment and child achievement on two samples of 11nd grade children and their families, representing a variety of socio-economic and ethnic groups. The findings have indicated that (a) Socio-economic status and sib-size are related to child's achievement, (b) years of involvement in intervention programme and home visitation are related to child's achievement, and (c) parent involvement is related both, directly and indirectly to positive changes in child's achievement.

There is empirical evidence for the position that disadvantaged children benefit more from early intervention programmes. Findings from a study (Brown, 1985) on the role of early childhood education in preventing future unemployment support this belief. Brown has stated that results from longitudinal studies clearly demonstrate that high quality early childhood development programmes
targeted to children from poor families pay enormous returns. Early education experiences double the adult employment rate of these children, and the public pays fewer special education, job training and welfare costs.

Poverty is related to health and learning disabilities, and economic level, home environment and culture are the factors associated with economic discrepancies between disadvantaged and advantaged groups (Murphy, 1986). Murphy has further stated that early intervention programmes in the form of parent and infant training and compensatory education, can significantly improve the chances of academic success for this group of children.

Economically disadvantaged children are likely to have developmental delays. This has been revealed from the findings of a study (Kendall, 1987). In a study Helge (1984) has described the causes of mental retardation. Relevant findings have indicated that higher poverty ratios, educational disadvantageousness, inadequate parental care and lack of early intervention programmes contribute to higher prevalence of mental retardation in rural than
It has been established repeatedly that children who perform most poorly scholastically and intellectually tend to come disproportionately from lower socio-economic families (Heber, Dever & Corny, 1968; Knobloch & Pasamanick, 1953; Kushlick & Blunden, 1974; Ramey et al., 1978). This is often attributed to impoverished environments, but it is also that many other potential causes of developmental retardation are associated with low socio-economic status.

In U.S.A., from a nation-wide study for assessing the effectiveness of various delivery systems providing early intervention to young handicapped children, Lowitzer (1989) has reported that low socio-economic status families are less involved with their children’s programmes than the high socio-economic status families. These low socio-economic status families have fewer resources and sources of support available to them.

Responding to Scarr and McCartney’s (1988)
Bermudian study, Levenstein (1989) has cited recently published research in support of the conclusion that poverty alone is not so much a predictor of school disadvantageousness as are poor parents with less than high school graduation and low motivation.

In India too, many researchers have reported adverse effects of parental and environmental deprivation on the academic achievement of children (Das, 1968; Khanna, 1980). Significant differences in the academic performance have been reported from the findings of a majority of studies on the lower and upper socio-economic group children. However, in a recent study preschool intervention on lower economic status children has been found ineffective on long term basis (Halimbin, 1989).

**Effect of Curriculum Content.**

An ever growing body of research indicates that education is the best source of bringing a person out of poverty, and educational achievement is the most accurate predictor of a person's future economic success. Therefore, the need for reviewing and
introducing relevant updates in the curriculums from time to time have been stressed by researchers and educators (Hansen, 1989; Lober & Norton, 1989) in order to encourage excellence in student’s achievement.

Zantal and others (1988) have listed factors that effect the success of preschool early intervention programmes. These are: (a) a high quality programme, (b) maintaining quality instruction, and (c) integrating related services etc.

In the year 1987, the Department of Education, Washington DC, outlined a wide range of school improvement recommendations in their “What Works” series which provide the most reliable, useful, practical and research based information and strategies in educating disadvantaged children. The recommendations were: (a) schools must create an environment for achievement, provide early intervention to disadvantaged children through programmes tailored to individual needs, and ensure parental participation, (b) parents and community
must instill in children, the values needed to progress in school and life, monitor their educational progress and invest specially in the education of disadvantaged children.

In the year 1969, Weikert studied the effect of various curriculum models namely, the verbal didactic model, verbal cognitive model and the child development model on children. In each model, the intensity of interaction between child and teacher, child and material, and one child and another was different. The findings regarding efficacy do not indicate any statistically significant difference in results based on intelligence tests, classroom observations and teacher ratings. Usually high gains were reported on intelligence tests in all the three programmes.

In a study on the curriculum of preschool, Dye (1984) conducted over 130 different tests, observations, assessments and measurements grouped into 35 areas of development, on a sample of 36, four year old children. Considerable subjective evidence was also gathered in addition to the tests and
observations. The results showed that careful selection of adult inputs and thoughtful preparation for children’s investigation, discovery and first hand experience supplemented by appropriate support from adults can result in significant gains in many areas of child development as compared with those obtained by using normal nursery programmes.

Optimal learning by children (particularly the preschool children) takes place when children can actively and spontaneously try to discover things around them and the emphasis is on learning rather than teaching. Children should also be provided with ample opportunities in the learning system - opportunities that help them become more effective in their interactions and transactions with others.

Normally, the various developmental and behavioural anomalies among children from under privileged families are attributed to natural endowment or heredity, whereas they, in fact, are due to unfavourable living conditions or environmental deprivations before or shortly after birth. If favourable environmental remediation is provided to these children, they can grow up to be competent persons with pride of self-achievement.
Realizing the need for providing an appropriate learning system, Thakkar (1979) sought a rationale for a preschool curriculum and provided helpful guidelines in planning and implementing learning opportunities for preschool children.

Farquhar and others (1987) studied the curriculum diversity in London’s infant schools. As a part of a longitudinal study, the data was collected with regard to the progress of children. The findings indicated significant differences at every stage of the infant schools, between the curricula introduced by different teachers, as well as the curricula experienced by children in the same classroom. The results also showed that the teachers in British infant schools exercised their freedom in deciding what to teach, how, and to whom.

Most of the researchers hold the view that selection of a specific curriculum model is not the answer for ensuring success of any intervention programme rather what is required is a curriculum that is theoretically sound and dependably structured (Allen, 1980; Karnes, 1979).
Training of Teachers.

Curing the problem of under achievement requires a sizeable investment of time and effort, and depends heavily on sufficient teacher and family awareness of their respective roles for prevention and early intervention, (Rimm, 1989). Personnel training - preservice and on the job, is a prerequisite for achieving success in early childhood programmes (Effgen, 1988; Hanft & Humphry, 1989; Siders & others 1987).

For dealing effectively in special education classes, it is important that the teacher’s skills incorporate competencies of both, early childhood and special education. Meisels (1977) has suggested important competencies for the teachers in integrated programmes namely: (a) a knowledge of normal growth and development, (b) training and practice in working with children who exhibit a variety of handicaps, (c) skill in analyzing developmental tasks and engaging in step by step programming to individualize programming for the handicapped child, and (d) ability to work with special disciplines so as to
match the programme content to child’s developmental needs.

Generally, the researchers agree that attitudes of preschool teachers are more favourable toward integration than teachers of upper grades. Therefore, attention can be focused on skill development rather than positive attitude development at this level. It is rather unfortunate that most of the teachers feel unsupported, unprepared and negative toward teaching in integrated classrooms. Childs (1981) surveyed 200 regular teachers teaching in mainstreamed classrooms at all levels and his findings indicated that only 38 percent teachers supported the idea of mainstreaming, and they generally felt unprepared. Crisci (1981) attributed this to lack of skills necessary for teaching handicapped children.

After culling the literature, several issues have been clarified and these have provided a proper direction and organizational framework for the present investigation. A bulk of research findings have claimed efficacy of early intervention
programmes at the preschool level for optimizing the all round development of children.

As regards the integration of handicapped and non-handicapped children, an ever growing body of research has proved that integration is easier with younger children (Guralnick, 1976) as they are less bothered by individual differences, and moreover, with integration of handicapped and non-handicapped in regular programmes, the handicapped children benefit academically, socially and behaviourally by interacting with their normal peers.

There is lack of commonality among the findings of studies on the issue of parental involvement within the child’s education. However, there is more research evidence of positive outcomes as a result of parental involvement.

The studies on the relationship between socio-economic status and child’s development as well as achievement have by and large favoured the belief that lower socio-economic status children are less mature, both in social and cognitive play styles, and
there are adverse effects of environmental and parental care deprivations on the children. Most of the lower socio-economic status children show developmental delays, and in some cases, signs of mild to moderate mental retardation too. Research findings have also indicated that appropriate early intervention programmes are needed for prevention of disabilities among younger children and that, the sooner the intervention is given, the better and more enduring are the effects.

The selection of a suitable curriculum model is the crux of the problem. While some researchers favour individualized instruction plan for dealing with diverse group of children, others favour small group, integrated academic instruction as feasible and beneficial in integrated classrooms. Because of diversity of opinions, generalization of findings has become rather difficult. However, in the selection of the curriculum for the present intervention the author followed the guidelines set by McDonnell and Hardman (1988) in which they have given the characteristics of exemplary programmes as those which provide integrated services, are comprehensive,
normalized, adaptable, peer and family referenced and outcome based.

Most researchers seem to agree on the issue of preservice and in-service training of teachers for effective interaction with children, particularly with children exhibiting diverse characteristics in a single classroom. For achieving success in the blended classroom, there is no substitute for a well equipped teacher.

**Rationale**

A considerable volume of research literature indicates that social and physical environment during the early years of life can significantly alter the developmental outcomes. Educators and researchers have always considered early childhood experiences and continuity of development as important issues in human development - hence there is a need for early intervention programmes.

"It is also recognized that discontinuities are as much a part of human development as are
continuities, and that certain aspects of behaviour are susceptible to change, sometimes radical change, at virtually any point in the life cycle. Moreover, it is worthwhile examining, at least at a more global level, developmental processes that might account for the continuities that do exist, as well as the significance of these processes in relation to early experience and early intervention" (Guralnick & Bennett 1987).

In the developed countries, the concern for helping the disadvantaged children has resulted in a widespread movement aimed at providing special services to these children so that their developmental delays can be reduced at an early age. In India too, the policy planners and educators have taken a keen initiative in providing early intervention programmes to preschool and Kindergarten children but these practices are in their infancy only. The small number of studies carried out so far fail to provide a complete view about the efficacy of early intervention programmes in integrated settings. Moreover, these studies do not cater to all round development of a child (Azad,

Secondly, the desire to help the disadvantaged group of children, who, in the absence of any timely intervention remain devoid of educational and social exposure, and eventually become a stigma on their society, inspired the author to explore all possibilities of rendering services to this population.

The review of literature has clearly pointed out the directions this investigation can take. The instruments and procedures used in implementing this investigation have been described in the next chapter.