CHAPTER I
INTRODUCTION

Child is most susceptible and responsive to learning experiences during his early years of childhood. Basic traits in the areas of motor, sensory, social-emotional, cognitive and physical development are formed, which provide a foundation for all subsequent learning (Lerner et al., 1987). All areas of development are so closely interrelated in childhood during the early years that the disabilities in one area can disrupt development in other performance domain. Failure to remediate one handicap can result in 'Spillover' of difficulties into the learning of other skills. This would be an ideal time to facilitate development and to capitalize upon a child's readiness for learning.

A child’s early experiences and environmental stimuli may be more powerful in eliciting certain responses or in producing certain types of learning. Childhood is a prime time for providing enrichment and special education for children whose development and learning are not progressing as expected. Disabilities block the avenues for a child to interact with the environment and thus cause hindrance in normal learning.

Early Childhood-Special Education (EC-SPED) is a field that represent a blend of the practices, teaching methodologies, service delivery methods, and values that
come from the three parent fields from which it has grown i.e. special education, early childhood education and compensatory education. Each of these parent fields contribute in significant ways to the beginning of a new focus upon educational needs of preschoolers with handicapping or at-risk conditions. Early intervention can make a difference in children’s lives and can enhance their chances for success in school (Peterson, 1987).

Special education has been and continues to be an important catalyst for change in the broader system of education. Special education tends to provide a scapegoat that reinforces regular education’s failure to provide equal opportunities for children to develop their potentials. It attempts to remediate the problems of the children who are differently abled and who require precise, comprehensive assessment and controlled environment to insure that the learning would occur. These children are extremely unlikely to achieve their full potential without a special programme designed to capitalize on their abilities and help them overcome their disabilities. Although categories of exceptionality may be labelled differently in different countries, the groups that are typically included in special education are gifted and talented, mentally retarded, emotionally disturbed, physically handicapped, hearing impaired, visually impaired and groups with speech and
language disorders, attention deficit disorder and learning disabled.

The field of learning disabilities is a quite recent field the last mentioned and needs further exploration and research. Prior to 1960s, educational services for learning disabled children were virtually non-existent. It was during parents meeting in New York city that Kirk (1963) proposed a phrase ‘specific learning disabilities’ because of the confusing variety of labels then being used to describe a child with relatively normal intelligence who was having learning problems.

There is little disagreement among professionals concerning the presence of academic deficits in children with learning disabilities. Indeed such deficits are the hallmark of learning disabilities. A learning disabled child is neither damaged nor permanently impaired. The disability is an inability to make use of the unspecialized instructions usually found in the typical classroom. Given proper and specialized instructions, the disability disappears. Some children have deficits in all scholastic areas, i.e. reading, spoken language, written language and mathematics, others have problems in only one or two academic subjects.

One of the most common problems attributed to learning disabled children is reading disability (Norman and
Zigmond, 1980). Reading is the base for all the academic learning. A child has a reading disability when there is a significant discrepancy between his reading level and his intellectual potential as measured by standardized tests. Other terms such as specific reading retardation, specific dyslexia, specific learning difficulties and many others are used interchangeably to describe the same syndrome.

The word ‘dyslexia’ is a Greek term and its literal translation is ‘difficulty with words’. The term dyslexia is used to cover a wide range of learning problems, from spelling difficulties to complete illiteracy. The concept of dyslexia can be defined as a specific difficulty in learning either constitutional or acquired in origin, in reading, spelling and written language, which may be accompanied by difficulty in number work.

The concept of ‘dyslexia’ has undergone the same changes as that of ‘learning disabilities’ and dyslexia is now usually considered a sub-classification of this category. It is also suggested that dyslexia is a cognitive language disorder of development (Snowling, 1987).

Dyslexic children have a number of symptoms. These symptoms are so diverse that they do not all occur together in one person. One dyslexic child may have a very different set of dyslexic characteristics to another but will share with all dyslexics the specific difficulty of learning to read, write and spell. The child may not be intellectually
disabled. Trumbull (1991) reported thirty scholastic symptoms in dyslexics but none of these appear in any predictable combination. However dyslexia varies in severity from person to person. Inattention to the problem of young children may compound their difficulties and make remediation more difficult at later stage. Early attention should be paid to prevent handicapping conditions of dyslexic children. Thus, early intervention benefits not only child, but also his parents, his teachers, and society in which he grows up and functions as a capable adult.

In the last decade of this century dramatic technological developments particularly in the areas of health, nutrition, education and related spheres have opened up new vistas of opportunities to reaffirm our age old pledges for the cause of children. World-wide efforts have been made to create an environment in which all children have been able to live securely and can realise their full potentials. As a result, today there are more than 80 International Laws, Covenants and Declarations setting out human rights of the children e.g., the UN Convention On the Rights of the Child (20th November, 1989), the World Conference on Education For All (March, 1990), The World Summit on Children (September, 1990) and the SAARC Summit on Children (MHRD, 1994) soon after the World Summit were part of this redeeming process which transcended national barriers.
In pursuance of the commitment made at the World Summit, the Department of Women and Child Development under the Ministry of Human Resource Development (MHRD) has formulated a National Plan Of Action For Children. Most of the recommendations of the World Summit Action Plan are reflected in it. The National Plan Of Action has been formulated keeping in mind the rights and aspirations of 307 million children, Report of Deptt of Education (1993) based on census of India, (1991) in the country and sets out quantifiable time dimensions to Indian Charter Of Action For Children by 2000 A.D.

The priority areas in the National Plan of Action are health, nutrition, education, water sanitation and environment. Existing constitutional provisions, policy framework, legislations and above all the commitments at the highest government level give an impetus to the efforts being made to meet the basic needs of children. Over the years, with the launching of sophisticated intervention techniques with long term benefits for the welfare and development of children, there is a marked improvement in the situation of children. It is encouraging to note that we have reached a stage where the country has the ability to cater to the basic needs of children which are relevant for promoting holistic development and full realization of the child’s potential.
The National Policy on Education (1986) and Programme of Action (1992) have perceived education as fundamental to all round development of children and stipulate free and compulsory education of satisfactory quality to all children upto 14 years of age before the turn of century. In the revised Education Policy, the thrust in elementary education is on enrollment, retention and achievement of minimum levels of learning by all children at the primary level. Since 1987-88 the Early Childhood Education (ECE) programme seeks to improve the children’s communication and cognitive skills as a preparation for entry into primary schools. Intervention strategies for learning disabled individuals have changed some what in recent years as professionals have begun to view this area as a constellation of specific problems rather than a generic category. Special remedial approaches to the teaching of reading are VAKT (Visual Auditory- Kinesthetic-Tactile), represented by the Fernald method and the Gillingham method, Distar method, Rebus method, Programmed reading, Glass analysis, Repeated readings, the Hegge-Kirk-Kirk remedial reading drills and the initial teaching alphabet (i.t.a).

The remedial specialists have developed their own favoured approaches like Multisensory Structured Linguistic approach, Alphabetic Phonic method, Behavioural Modification method, Eclectic method, Cognitive Psycholinguistic
intervention. Some specialists have also used medicine, computer, music therapy, drug therapy to reduce reading difficulties of dyslexic children.

Multisensory-structured linguistic method is systematic step by step, presenting small amount of materials at one time, assuring complete mastery through repetition and using simultaneous auditory, visual and tactile procedures. This method has been used successfully (Enfield, 1976; Hornsby and Shear, 1976; White, 1986; Karen et al., 1987; Roynolds and Cochran, 1987; Sparks and Ganschow, 1991; Sparks et al., 1992) to reduce reading difficulties and for improving spelling skills of dyslexic children.

The Alphabetic Phonic method is based on linking letter combinations of phonemes and digraphs to the appropriate sound (details in Chapter II). This method has been found successful in improvement of reading skills, word recognition, work attack skills, spelling, capitalization and punctuation (Kline & Kline, 1975; Frankiewicz, 1984; Roy, 1986; Guercio, 1987; Woodcock, Mather and Barnes, 1987; Hooks et al., 1993).

In Behavioural Modification method reinforcement (token and social reinforcement) have been successful for increased frequency of correct responses, increased accuracy of answer to comprehension questions and word recognition.
Even dyslexics improved in several perceptual and attentional measures as well (Lahey 1971; Lahey, McNees and Brown, 1973; Fray, 1973; Lovitt and Hurlburt, 1974; Collette et al., 1975; Moran, Schumaker and Vetter, 1981; Bereiter and Scardamalia, 1989; Pavchinski et al., 1989).

Eclectic approach is one of the accepted approaches and it means not following any one system, but selecting and using the best elements of all systems according to individual needs. Successful use of this approach has been reported (Chomsky, 1971; Cashdan, 1974; Cotterell, 1970; Pollock, 1976; Sartin, 1976; Clay, 1977, 1979b; Wagner, 1986; Mather, 1992).

A close analysis of review of related and relevant literature (Chapter II and III) clearly shows that various remedial strategies have been used to reduce the reading difficulties of the dyslexic children. A very few studies have been conducted to see their comparative effectiveness. Hence, the investigator felt inspired to see the comparative effectiveness of various remedial strategies. All studies reviewed have been carried out abroad.

In India, very scanty research has been done on developing tools for identification and assessment, development of instructional material, effectiveness of technologies in improving access of disabled persons to curriculum and training personnel. Special education being a relatively new field, the research in this field is at an
embryonic stage (Jangira and Mukhopadhyay, 1991). The few studies carried out till date have indicated positive effects of remedial strategies to reduce reading difficulties of dyslexic children (Ramaa, 1985; Ramaa & Lalithamma, 1987; Ramaa, 1991; Ramaa, Miles & Lalithamma, 1993; Swarup & Sharma, 1988).

There is a great paucity of research in the field of learning disabilities in India. Instead of basking in the prevailing climate of despair and institutional paranoia the investigator tried to explore several strategies of success that offer positive reinforcement to the motives and ideals of education for learning disabled children. Investigator was inspired to try out the effectiveness of different remedial strategies for reducing reading difficulties of dyslexic primary school children in Indian conditions. About 12.59 million children in school going age in India are disabled (NPE, POA, 1992). Children with LD in the age group of 5-14, figure is 3.60 million in India (POA, 1992). These children (more than 3.60 million) do not get attention or even consideration for the disability as it is not conspicuous like other disabilities involving sensory, motor, or intellectual aspects of the person. These children are perceived as dull, lazy, mischievous or notorious in class. Such children continue to stay and struggle in the mainstream in schools without detection and proper guidance.
If this problem is dealt with well in time i.e. during primary-school years, children can be saved from becoming delinquent or problem children.

Thus, the prevalence and severity and seriousness of the specific learning disability (dyslexia) insigated the investigator to deal with this troublesome problem of primary school children. Importance of early childhood years, necessity of early interventions to eliminate or at least reduce dyslexia, lack of intervention programmes in the educational settings to deal with this problem, effectiveness of various remedial strategies tried out abroad and lack of such research work in Indian conditions to improve the lot of a large number of children studying in primary schools, greatly inspired and encouraged the investigator to take up the present study.

Through the present study, the investigator endeavours to initiate a humble effort of examining the effectiveness of different remedial strategies for dyslexic primary school children in regular class room settings. The problem under investigation reads as:

"Differential Impact of Various Remedial Strategies on Reducing Reading Disability of Dyslexic Primary School Children".
OBJECTIVES

The present investigation took its shape keeping in view the following objectives:

1. To identify dyslexics from among primary school children studying in English medium schools of Chandigarh.
2. To assess the impact of remedial strategies to eliminate or reduce reading difficulties of dyslexic children.
3. To compare the effectiveness of various remedial strategies for reducing the reading difficulties of dyslexics.
4. To study the side effects of reduction in reading difficulties on other sub-skills of reading i.e. spelling and writing.
5. To find out the impact of reduction in reading difficulties on enhancement of intelligence quotient.
6. To find out the side effects of reduction in reading difficulties on reduction of neuropsychological deficits.
7. To find out the impact of reduction in reading difficulties on improvement of academic achievement in the form of percentage of marks obtained after intervention.
Delimitations

The present investigation was delimited to:

1. Children in the age group of 7 to 9 years; studying in second and third grade.
2. Children having IQ upto 90 and above.
3. Children having no evidence of sensory, mental & any apparent emotional deficits.
5. Children studying in English medium schools of Chandigarh.
6. Children having reading deficits upto one year and above were included in the study.
7. Only reading disability as independent variable was concentrated upon.
8. The study was restricted to few neuropsychological processes i.e., visual discrimination, auditory sequential memory, visual sequential memory, sound blending and sound discrimination.