

Dyslexia: Some Perspectives

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Abstract

Learning disability is one of the major problems prevalent worldwide owing to which many affected children are deprived of the basic opportunities of life. Much has been done, with motives of alleviating the problems associated with it, by researchers engaged in understanding the nature of the problem. However, most of the efforts have been made in conceptualizing the problem rather than formulating intervention procedures that are more empirical, scientific and practically applicable as remedial measures. This paper makes an in-depth analysis of dyslexia as a particular form of learning disability and the gap within its fundamental and applied forms. Reading disability, also referred to as dyslexia, is the inability to read or comprehend and is a major obstacle to learning amongst many children. It has long term educational, social and economic consequences. The analysis however is not simply focussed on understanding the nature of the disability but assesses, as a secondary research, available methods of the identification, assessment, remedial measures and their efficacy in dealing with the complexities of the problem in a scientific and an applicable way.

Keywords: Learning Disability, Dyslexia, Phonological Assessment, Miscue Analysis, Orton Gillingham Method.

Each and every child is born unique and precious, so each must be nurtured with much love, affection, care and understanding in order to foster their all-round development. There are children with special needs for whom the intensity of care and understanding should be in large quantum or significantly high. These children have always lived neglected and segregated lives from the wider society. It is the duty and responsibility of all concerned beings to understand and help such children lead a normal and an integrated life at par with their non-disabled counterparts.

Shifting Perspectives on Learning Disability

Learning disability is one of the major problems prevalent worldwide owing to which many affected children are deprived of the basic opportunities of life. In people with learning disabilities, severe discrepancies exist between their intelligence and academic performance. This has been a dominant approach in diagnosing children with specific learning disabilities, for a considerable period of time.¹ These children face difficulties in one or many educational activities such as reading, writing, arithmetic and so on. But they may simultaneously excel in other fields. In the backdrop of such situations there are several definitions of learning disabilities available to the novice who wishes

¹ S.P.K. Jena, *Learning Disability: Theory to Practice*, New Delhi, Sage, 2013.

to undertake a tour of the subject. There are various factors responsible for causing learning disabilities (henceforth LD). These include biological and medical reasons as well as social and environmental ones such as poverty, parental illiteracy, unfamiliarity with the medium of instruction in the classroom, poor instruction, overcrowded classrooms, lack of proper understanding and awareness among teachers, bilingualism/multilingualism (to name only a few). Amongst the two broad above-mentioned categories of factors responsible for causing LD, a strong interplay is observed between 'biological endowment' and 'environmental factors'. According to the National Joint Committee on Learning Disabilities.

Learning disabilities often occur concurrently with other conditions, for example, other developmental disabilities such as 'perceptual dysfunction', attention deficit hyperactivity disorder, conduct disorder or co-ordination disorder but the clinician should note that LD is not a result of the co-morbid disorder.²

In earlier times, within the 'medical approach framework', terms such as 'minimal brain damage', 'minimal brain dysfunction' and 'development dyslexia' were used to describe LD.³ In the 1960s, a gradual shift was observed from defining learning disability within the medical framework to defining it in the educational context. Nonetheless, the 'medical model' provides a reasonable starting point for investigations of abnormal states and distinctions are made between cause, symptom and treatment.⁴

Since 1980 the broad definition of LD formulated by the US National Joint Committee on LD (NJCLD 1981/1988) with representation from all concerned disciplines has been widely used. It reads as follows:

'LD is a general term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning or mathematical abilities. These disorders are intrinsic to the individual, presumed to be due to central nervous system dysfunction and may occur across the life span. Problems in self-regulatory behaviours, social perception and social interaction may exist with learning disabilities but do not by themselves constitute a learning disability. Although learning disabilities may occur concomitantly with other handicapping conditions (for example sensory impairment, mental retardation, serious emotional disturbance) or with extrinsic influences such as cultural differences, insufficient or inappropriate instruction, they are not the result of these conditions or influences'.⁵

² National Joint Committee on Learning Disabilities (NJCLD), (1981/1988), In B. Y. L. Wong, "Making Sense of all the Definitions of Learning Disabilities", *The ABC's of Learning Disabilities* San Diego, Academic Press, 1991, pp.26-48.

³ P. Karanth and J. Rozario (Eds.), *Learning Disabilities in India: Willing the Mind to Learn*, New Delhi, Sage, 2003.

⁴ Fawcett A. J., *Dyslexia: Theory and Good Practice*, London, NY, Whurr Publishers, 2001.

⁵ P. Karanth and J. Rozario, *op. cit.*, p.19.

This definition presents an overview of LD and highlights the occurrence of 'individual difference' in reading achievement. It also leads to the recognition of LD as a 'language based difficulty'.

Owing to the language based difficulty such children face varied problems such as 'poor motivation', 'self-esteem', 'self-efficacy', 'meta-cognition' because of which such children also encounter failure in life along with criticism, rejection and isolation. Several subtypes are available within the broad framework of LD. Some children with learning disability may have severe reading problem, some children face short/long term difficulties with memory. Other subtypes of LD may include auditory processing difficulties/ language disorders and specific difficulties in arithmetic.

This paper will explore various dimensions of one of these subtypes - reading disability also commonly known as Dyslexia. Though much research has been undertaken on the subject much of it is still in the rudimentary and primary stage. Most of the efforts have been mainly fundamental and focused on conceptualizing the problem rather than formulating intervention procedures that are more empirical, scientific and practically applicable as remedial measures. However, Jena and Reid do not simply focus on understanding the nature of the disability but is also concerned with the remedial measures and their efficacy in dealing with the complexities of the problem in a scientific and applicable way.⁶

Dyslexia: A Reading Disability

Reading is considered a fundamental activity of our daily life. Speaking occurs naturally without training unless one suffers from some medical ailment. Reading, however, is not an evolutionary achievement like speaking. For it to develop, training and instruction are very essential. In our 'age of information', reading is regarded as a quintessential skill needed to accommodate oneself in this constantly changing world. It is even accepted as a survival skill. "Training in reading begins at an early age (3 years) to facilitate communication because that is the very essence of the existence of our complex system of education and social order".⁷

In simple words, 'reading' is described as the process of extracting meaning from written symbolic characters. To quote S. P. K. Jena, "reading is a process of extracting meaning out of the written or printed symbols because of learning – a complex skill that requires encoding and decoding of a wide range of materials including letters, pictures and symbols".⁸ It incorporates a number of factors such as good vision, ability to recall

⁶ G. Reid, *Dyslexia*, London, NY, Continuum, 2011.

⁷ S. Krishnamurthy, "From Learning to Read to Reading to Learn", in P. Karanth, & J. Rozario, (Eds), *Learning Disabilities in India*, New Delhi, Sage, 2003, p.91.

⁸ *Ibid*, p.31.

the shape and sound of the letter, ability to blend words to form meaningful words, ability to process and assimilate what is read.⁹

The term 'Dyslexia' is often used interchangeably with 'Reading Disability'. 'Dyslexia' is derived from, *dys*, difficulty in; *lexia*: reading. "Reading poses a challenge not only to the learner but also to the teacher because it is not just a general ability but a composite of many specific abilities".

The World Federation of Neurology has defined dyslexia as a disorder manifested by difficulty in learning to read despite conventional instruction, adequate intelligence and socio-cultural opportunity; it is dependent upon fundamental cognitive disability, which is frequently of constitutional origin, it is a disorder in children who despite conventional classroom experience, fail to attain the language skills commensurate with their intellectual abilities.¹⁰

Joe Rozario provides the following checklist of certain common reading errors for children with dyslexia is word by word reading, incorrect phrasing, poor pronunciation, omissions, repetitions, inversion or reversals, substitutions, basic sight words not known, sight vocabulary not upto grade level, guesses at words, consonant sounds not known, vowel sounds not known, lack structural analysis and unable to use context clues.¹¹

Dealing with Dyslexia: General Responses

Dyslexia has been divided into two broad categories, 'acquired dyslexia' and 'developmental dyslexia'. Acquired dyslexia is a reading disability that occurs due to brain damage and developmental dyslexia occurs during the developmental period that is roughly between 0-18 years of life.

A significant scientific progress has been observed in the field of studying dyslexia in recent years. The importance of developing new policies for dyslexia is being felt by a vast number of countries both at the national and local levels. Gavin Reid says that it is 'impressive to note how in other countries, such as, Scotland, dyslexia and other specific learning difficulties have been seen a government priority area and supported with funding to enable innovative intervention, research and training programme to be developed'.¹² There are several organisations that are working towards dealing with the educational and social needs of children with dyslexia. According to the *International Book of Dyslexia* (2004) fifty three countries are featured showing a commitment to tackling dyslexia.

⁹ *Ibid*, pp.92-93.

¹⁰ *Ibid*, p. 94.

¹¹ P. Karanth and J. Rozario, *op. cit.*, pp.103-104.

¹² G. Reid, *op. cit.*, p. 2.

With the on-going efforts of researchers and practitioners, a considerable amount of information has been gathered on dyslexia and now there is a felt need to work on basically three broad categories: 'undertaking', 'identification/assessment' and 'intervention'.

The need of the hour is to bridge the gap between theory and practice and develop among teachers the necessary skills and understanding and an awareness of the needs of the children with dyslexia in order. The aim is to help children with LD to develop to their full potential, academically and socially so that they can have 'a sense of belonging' in the community. The emphasis should also be laid on providing education to the children of dyslexia in an inclusive educational setting with access to special services in order to cater to their diversified need. The prime focus, however, should be to explore the innovative identification/assessment and remediation approaches which can be contextualized in classroom set up.

The classroom conditions, at present, are far from ideal. A single teacher, inadequately trained and equipped, has to handle a strength of 50/100 students. In such a scenario teaching is greatly hampered, as the teacher cannot cater to the needs of the individual children and a lot of problems just go unnoticed.

Research Undertaken

Numerous research works have been undertaken in the area of LD. According to Gavin Reid, the salient features in current research have been divided into three broad categories: 'Neurological', 'cognitive' and 'educational' areas. Research in these areas have helped in generating an understanding and providing a general overview in dyslexia and how its findings can be practically applicable.

Neurological Research

There is considerable evidence today that dyslexia is a neurological syndrome affecting the development of the brain. Brain considered to be one of the most complex organs of the body, 'among other higher intellectual functions, ... mediates the learning process and therefore, it is assumed that either morphological abnormality or damage to some of its specific areas may affect cognitive activity necessary for academic performance'.¹³ The brain is divided into two hemispheres: the left and the right - and the role of both the hemispheres in relation to dyslexia is quintessential.

The left hemisphere processes language and it means that the left hemisphere is important for decoding tasks that are necessary for accurate reading. The right hemisphere on the other hand tends to 'process information that incorporates a more holistic perspective. This involves processing pictures and other types of visual

¹³ S. P. K. Jena, *op. cit.*, p. 19.

information. The right hemisphere also usually deals with comprehension and some aesthetic aspects such as the appreciation of art and music.¹⁴

So, from the above statements it can be analysed that the skills necessary for accurate reading lies in the left hemisphere. This is known as the phonological skills – ability to discriminate different sounds in words. This will be discussed further in the section on research from the cognitive perspective. From the perspective of studies of brain structure and the neural connections needed for processing information, that may develop differently in dyslexic children, factors like ‘Asynchrony Phenomenon’ and remedial programs like ‘Brain Gym’ are well known.¹⁵ Dyslexic learners exhibit difficulty in transferring information from one hemisphere to the other. Reading is thus a balance between left and right hemispheres. Training children with learning disabilities also means training their brains and modifying their brain functions.

Stein places heavy emphasis on visual processing and argues that the magnocellular system plays a very crucial role in stabilizing the eyes during reading. These fixations on each word only last a quarter of a second, but it is only during these moments that the fine details of the letter in a word can be recognized. Stein further argues that it is very important to keep the eyes stationary and the magnocellular system ensures this happens. Some children with dyslexia have a faulty magnocellular system and are not able to fixate on the features of the word efficiently. Children in this situation may find that the words become blurry, fuzzy or jump off the page and some corrective treatment will be necessary.¹⁶

Advances in the field of genetic research have also highlighted on the hereditary factors of dyslexia. The ‘cerebellar deficit hypothesis’ and ‘automatization deficit hypothesis’ of Fawcett and Nicolson have contributed much in explaining the developmental disorders of dyslexic children.¹⁷

Cognitive Research

Cognitive Researchers and theorists are concerned with the processes that go into reading and writing. Within it ‘phonological deficit’ is considered to be the most dominant cause of dyslexia. Children with phonological deficit are unable to discriminate different sounds in words and have problems in learning the alphabetical principles that letters represent sounds. Remedial reading programs for dyslexic children thus

¹⁴ G. Reid *op. cit.*, p. 20.

¹⁵ G.E. Dennison and P.E. Dennison, “Educational Kinesiology Brain Organisation Profiles”, *Teachers’ Training Manual*, Glendale, CA, Edu-Kinesthetics, 2001.

Z. Breznitz, The Origin of Dyslexia: the Asynchrony Phenomenon, in G. Reid, A. Fawcett, F. Manis & L. Siegel (Eds), *The Sage Dyslexia Handbook*, London, Sage Publications, 2008, pp.11-29.

¹⁶ J. Stein, “The Neurobiological Basis of Dyslexia”, in G. Reid, A. Fawcett, F. Manis & L. Siegel, (Eds), *The Sage Dyslexia Handbook*, London, Sage Publications, 2008.

¹⁷ A. Fawcett and R. Nicolson, “Dyslexia and the cerebellum”, in G. Reid, A. Fawcett, F. Manis and L. Siegel (Eds), *The Sage Handbook of Dyslexia*, London, Sage Publications, 2008, pp.77-98.

should also have a strong phonological element. This view was strongly supported by many because they believed that acquisition of phonological skills is in fact crucial for successful reading.

Educational Research

'The educational perspectives relates to the observed characteristics of dyslexia, that is how the child performs in the classroom within the different areas of the curriculum. This relates to not only reading, spelling, writing and maths but also with the pace and level at which children cope with the curriculum presented'.¹⁸ The educational research can be explained in terms of the skill development and curriculum adaptation approaches. In 'skill development approach', the child's weak areas are identified and special programs provided accordingly with the purpose of developing the skills; be it in reading, writing, spelling or whatever area they are weak in. 'Curriculum adaptation approach', focuses on the presentation and preparation of task materials keeping in mind the individual differences of the learners, just to ensure that they are able to access the curriculum well.

Identification & Assessment : Informal & Standardized Diagnosis

There is consensus among researchers and clinicians about certain factors that needs to be assessed. Assessment procedures for learning disabilities require informal observation, diagnostic case history and formal testing.¹⁹ A systematic and a well-planned procedure for identifying specific reading disability should be adopted for the purpose of its successful remediation. The identification and assessment of dyslexia is a specialized endeavour. However, the teachers' roles in identification and assessment cannot be completely ruled out. They are the first ones to note the discrepancies in the child's performance. According to Jena, reading is considered to be a complex combination of cognitive and behavioural skill; therefore, it requires a comprehensive assessment. The identification and assessment of dyslexia should involve much more than testing. It should consider preferences of the child, as well as his or her specific difficulties and strengths'.

The assessment can be both formal and informal but the purpose of it should be diagnostic. Informal assessment cannot provide a proper diagnosis of dyslexia but can be used as a preparatory screening which may provide impetus for a more detailed diagnostic assessment. Informal assessment involves the use of checklists that the teacher can use with a child and which can provide varied information which is effective in portraying the child's strength and weaknesses. It is observed that in many ways, informal assessment can generate better results than formal standardized assessment as the former is dynamic unlike the later and can report and collect information on a children's behaviour on a regular basis and throughout. 'It may be more area and culture

¹⁸ G. Reid, *op. cit.*

¹⁹ P. Karanth and J. Rozario, *op. cit.*

specific and more reliable if remedial teachers prepare an assessment package to identify the concerned child's strength and weaknesses'.²⁰ This type of informal assessment will help the teachers to study the minute details of the students properly and over a long period of time, provided that teachers have an adequate knowledge and awareness of the reading processes. Informal assessment can be carried throughout the school level. Early screening is essential for developing an understanding about dyslexia which will lead to its successful remediation. However their role is limited and cannot lead to a comprehensive and contextualized assessment. Although, they can yield detailed information of dyslexia but for its proper diagnosis it has to be based on the findings of a formal standardized assessment.

Screening should mainly focus on the following areas of learning: emotional, personal and social development. Home-life and culture are likely to have a strong influence; communication and language-children with poor phonological skills and lack of awareness of rhyme and rhythm may experience difficulties learning to read and write; memory in language and communication skills - for e.g., remembering a sequence of events in a story or repeating syllables that make up words; speech - ensuring the child has sufficient control of the tongue and helps to reproduce sounds in the desired way.²¹ This can be assessed when the child is telling or retelling a story.

Standardized or Diagnostic assessment is a process of focussing on the kind of difficulties exhibited by a child and what this might mean in practice. It is always important to link assessment with teaching. The areas of diagnostic assessment, according to Gavin Reid, include spelling, language concepts, reading comprehension, writing skills, following instructions and directions, focussing on text and working independently. These are the areas of difficulties experienced by dyslexic children. The task is to provide suggestions which can be contextualized in the classroom.

There are a variety of inventories being used by reading researchers to make a qualitative evaluation of the reader's word recognition and comprehension abilities. A few of the 'diagnostic assessments' which can also be linked to practice are as follows:

Miscue Analysis During Oral Reading - Miscues or errors refer to the deviations/diversion/shift from the printed text that the student makes while reading orally. Miscue analysis is a method of assessing a child's reading level by analysing the errors made while reading. It is also known as the psycholinguistic process and was developed by Goodman and Burke in 1970. 'It is based on the 'top down' approach to reading; the reader has to make predictions as to the most likely meaning of the text. Such predictions are based on how the reader perceives the graphic, systematic and semantic information contained in the text.'²²

²⁰ S. Krishnamurthy, *op. cit.*, p.95.

²¹ G. Reid, *op. cit.*

²² *Ibid.*

Various types of errors are also noted in miscue analysis, such as omissions, additions, substitution, repetition, reversals and self-correction. But it has the potential to pave way for the development of a more diagnostic approach to the assessment of reading which can prove beneficial for the teachers to develop a better understanding of the student's language patterns. This approach was further emphasised by Marie Clay in the reading recovery programme which used miscue analysis as one of the fundamental approaches to diagnosing a child's reading level.²³

Phonological Assessment

The importance of the phonological element in remedial reading programs has already been discussed above. According to Gavin Reid, phonological assessment covers the following areas: 'non word reading', 'sound recognition', 'syllable segmentation', 'recognition of prefixes, suffixes and syllables', 'rhyme recognition and production', 'phoneme segmentation (such as blending, recognition and initial and final phonemes)'.²⁴

A number of standardized phonological assessments are available and recommended for use in an assessment for dyslexia. One such assessment available in the UK is named Phonological Assessment Battery (PHAB). This consists of five measures: 'Alliteration test', 'rhyming test', 'naming speed test', 'fluency test', 'spoonerism test'. This technique is very suitable for assessing dyslexia difficulties. There is enough evidence that dyslexic children have difficulty with rhyme and alliteration and some researchers have indicated that naming speed is in itself a significant feature of dyslexia difficulties.²⁵

The following are some informal inventories widely used to make qualitative evaluation of the reader's word recognition and comprehension abilities may help teachers prepare individualized instructional programs. They are listed in Jena:²⁶

Gates-McKillop Reading Diagnostic Test (1962) : is one of the earliest individual administered tests of reading, designed for children in the age group of 2-6 years. Two parallel forms of this test are available. The sub tests are: Oral Reading (with error analysis), Flash Presentation, Untimed Presentation of Words, Flash Presentation of Presentation, Knowledge of Word Parts, Recognition of Visual Forms Representing Sounds and Auditory Blending. It has some supplementary tests also, such as Spelling, Oral Vocabulary, Syllabication and Auditory Discrimination. This is one of the most complete tests of reading in English Language. Later revision of this test is called Gate-McKillop-Horowitz Reading Diagnostic Test.²⁷ This is meant for grades 1-6 and includes Oral Reading(Omissions, additions, repetitions, directional errors,

²³ M. Clay, *The Early Detection of Reading Difficulties: A Diagnostic Survey with Recovery Procedures*, Auckland, Heinemann Educational, 1985.

²⁴ S.P.K. Jena, *op. cit.*

²⁵ A. Fawcett and R. Nicolson, *op. cit.*

²⁶ S.P.K. Jena, *op. cit.*

²⁷ Gates, McKillop & Horowitz, 1981.

wrong beginning, wrong middle, wrong ending, wrong in several parts and accent errors); Reading Sentences; Words (flash and un-timed); Word Attack (syllabication, recognizing, and blending common word parts, reading words, giving letter sounds, naming capital letters); Recognizing the Visual Form of Vowels; Auditory Tests (auditory discrimination); written expression (spelling and informal writing sample).

Durrell Analysis of Reading Difficulty

Durrell and Catterson (1980) developed a test of reading called Durrell Analysis of Reading Difficulty. This test is used for children from non-reading level to sixth grade. It contains oral reading passages accompanied by comprehension questions and also paragraphs for silent reading and listening comprehension. It consists of sub-tests like Listening, Vocabulary, Sounds in Isolation, Spelling, Visual Memory of Words, Identifying Sounds in Words and Pre Reading Phonic Abilities and generally trained professionals administer it.²⁸

Certain things should be kept in mind, while carrying out an identification and assessment program: teachers should have a thorough understanding of dyslexia which will help them in observing the general characteristics exhibited by a dyslexic child on a regular basis, so that the non-availability of a test will not prevent such a child from being recognized. An appropriate teaching programme should be devised on the basis of the findings of the assessment programs.

Teaching Approaches: A bridge between Theory and Practice

Once a proper and adequate assessment is done and conclusions drawn, the innovative teaching methods and strategies should be devised according to the abilities and capabilities of dyslexic children with the purpose of improving attainments in literacy. 'There are two major approaches 'medical – neurological perspective' and the 'educational behavioural perspective' to deal with a variety of symptoms exhibited by children with learning disabilities. The major objective of treatment of children with LD is to facilitate development of academic skills of such children, one of the major pedagogical debates since the beginning of the twentieth century has centered on the efficacy of various teaching methods.²⁹ In determining the most appropriate approaches for children with dyslexia a number of factors, such as the learning context and the learner's strength and weaknesses should be taken into account. Variation of opinions exist regarding the appropriate skills essential for accurate and fluent reading. Some of the important factors include: word attack skills (such as letter recognition, segmentation, blending, phoneme awareness, analogy strategies and grapheme-phoneme correspondence) and 'word recognition skills. To quote Reid,

²⁸ *Ibid.*

²⁹ P. Padakannaya, "Early Reading Acquisition", in Karanth P. & Rozario J. (Eds), *Learning Disabilities in India*, New Delhi, Sage, 2003, pp. 62-76.

[r]egardless of the various deficits and the available provisions for dyslexic children, they are provided with the opportunity which helps them to have an access to the full curriculum. This will present a great deal of problem but the challenge can be met through careful planning, utilization of the skills of the teachers and making use of the strategies available.³⁰

Analysis of reading programs adopted by various researchers and professionals have revealed that, traditionally, two types of major approaches have focussed on teaching to read:

‘The Code Emphasis Programme (CEP) – focus on ‘letter’ sound’ regulatory, which enables the reader to read unknown words by blending the words together (e.g. Cat, mat, bat – Better, letter, setter) and the ‘Meaning Emphasis Programme (MEP), also known as the whole language programme focus on comprehension. It begins with words that appear frequently and which are familiar to the learner and easy to learn’.³¹

Among the many essential components of a teaching programme such as, ‘emphasis on listening skills’, ‘comprehension building’, ‘opportunities of oral work/discussion’ - phonological awareness is considered quintessential for the acquisition of reading skills among the dyslexic students. This point was even highlighted in the Report presented by Sir Jim Rose to the secretary of State for Children, Schools and Families June 2007 – ‘Identifying and Teaching Children and Young People with Dyslexia and Literacy Difficulties. The Report suggested that there is well-established evidence showing that intervention programs which systematically prioritize phonological skills for reading and writing are effective for teaching reading to children with dyslexia.

According to the researchers and practitioners, teaching programs and strategies are of various types and labelled as ‘*Individualized Programs*’, where individual attention is given to learners and they are taught on a one to one teaching basis. The programme is highly structured and sequential and it also incorporates the principle of ‘multisensory and over-learning’ which is considered quite necessary for children with dyslexia. ‘*Curriculum Approaches*’ are support materials that can be utilized by teachers to complement teaching programs within the curriculum in order to help the child develop competencies to facilitate access to the full range of curriculum activities. Some of the curriculum approaches are phonological approaches, counselling approaches and extending the creativity and thinking skills of learners with dyslexia. As the term indicates, in the ‘*Whole School Approach*’ the responsibility of teaching the learning disabled children does not reside exclusively with the class teacher/ trained specialists but it should be a joint venture.³² For this purpose the school needs to be fully equipped with facilities in terms of the teaching materials and training of the staffs so that it is able to effectively cater to the needs of the children with specific learning difficulties and in addition to this the school authorities should hire a specialist in this field who

³⁰ S.P.K. Jena, *op. cit.*

³¹ G. Reid, *op. cit.*

³² G. Reid, *op. cit.*

can aid the class teacher and other staffs of the school in their mission. This approach focuses on consultancy, whole-school screening and monitoring of children's progress. few of the methods are discussed below:

Orton-Gillingham Method

This is a highly structured, phonetically oriented approach) which is based on the theoretical work of Orton in 1937. In this method each letter sound is taught by using multi-sensory approach. Drill and exposure to letter is the main feature of the first step in introduction of this method. It incorporates the total language experience and focuses on letter sounds, the blending of these sounds into syllables and words, reading, spelling rules and syllabication. Orton-Gillingham lessons are success oriented with the goal of student becoming a 'self - correcting', independent learner. The programme is suited to 'one to one teaching' but the inclusion of the key principles makes it usable and effective within the classroom curriculum.³³

Developmental Approach

'The core of this reading programme is to introduce sequential set of reading text, supplementary materials, teaching aids, workbooks and achievement tests. The teaching steps being arranged in order of difficulty. As the approach is highly sequential and comprehension-oriented, thus it is easy for the learner to learn as the reading skills are systematic and developed. 'Basic reading lessons are used for pre - primary level to eighth grade level and even proves useful for the multi culturally disadvantaged group'.³⁴

Reading Discovery

'It is an early reading and writing intervention programme developed by Marie Clay, for children who after one year at school lag significantly behind their peers in reading and writing.³⁵ The programme centres on the individual child's strengths and weaknesses as assessed by the actual reading programme. It is not therefore, structured around a set of principles and practices to which the child has to be accommodated, but rather the programme adopts it to the child's specific requirements and needs. The components of the programme includes an analysis of the child's decoding strategies, the encouragement of fluent reading through the provision of opportunities to link sounds and letters, the reading of familiar texts and introduction of new books. The programme aims to boost the reading attainments of the selected children over a relatively short period (around 12 to 20 weeks), with specifically trained teachers carrying out the programme, seeing children on an individual basis for 30 minutes every day.'³⁶

³³ S.P.K. Jena, *op. cit.*

³⁴ *Ibid.*

³⁵ M. Clay, *op. cit.*

³⁶ G. Reid, *op. cit.*

Paired Reading

“Paired Reading is a well-established and specific structured technique which can be successfully utilized with the dyslexic children. It involves the adult (tutor) and the child (tutee) reading about at the same time together with the tutor modulating his/her speed to match that of the child, while giving a good model of competent reading and by rectifying his mistake by just telling the child the correct word to say it”.³⁷

Paired Thinking

Thinking skills should be embedded into the teaching of reading because reading is a vehicle that can achieve deep processing. The method called ‘Paired Thinking’ is essentially a framework for pairs working together. Some difference in reading ability is needed in each pair. It is a very interactive, flexible and socially inclusive method/approach. It integrates thinking skills with reading skills and promotes paired reading into higher-order reading skills and beyond’.³⁸

It is important to obtain a comprehensive assessment in order to help in the selection of approaches. No approach will prove successful for all children with dyslexia, so it is deemed necessary to use a combination of approaches to yield better and effective results. Hence, there is a need for a balanced approach to intervention strategies. Providing structure and direction to the intervention is one of the key issues for making a treatment effective.

Conclusion

The prevalence of LD is quite alarmingly high in every part of the world. ‘According to a United Nation’s estimate, about 40 million people in the world are learning disabled’ expected to have reached to 60 million. In fact, there is no large-scale study yet; hence, we do not have a clear idea about the incidence and prevalence of learning disabilities.³⁹ The absence of a systematic survey of children with poor scholastic performance poses a lot of problem. Whenever, the survey on the disabled population of India is being conducted the learning disabled population are not taken into consideration. The need of the hour is the timely and the comprehensive exploration of learning disability.

Many children with LD have excellent skills in other areas of their functioning which gets side lined and defocused while focussing on academic problems. Over emphasis and focus on academic skills could be a burdensome exercise for children which may have a detrimental effect on the progress of treatment too. Focussing on the ability of the individual is a critical factor in the training, treatment and rehabilitation. One comprehensive multi-layer-testing of an individual child may not be sufficient for

³⁷ *Ibid.*

³⁸ *Ibid.*

³⁹ P. Mittler, R. Brouillette and D. Harris (Eds), *World Yearbook of Education 1993: Special Needs Education*, London, Kogan Page, 1993. P. Karanth and J. Rozario, *op. cit.*

diagnosis of LD. The child may require ecologically valid curriculum-based assessment. It exerts tremendous pressure on the school teacher, hence needs wider trans-disciplinary consultation like that of a clinical psychologist, special educator, ophthalmologist, otolaryngologist or a paediatrician.⁴⁰ Henceforth, treatments often do have multiple outcomes, such as re-adjustment of family relationship, teacher-child relationship as well as peer-child relationship. Each of them should be conceptualized as a system.

⁴⁰ S.P.K. Jena, *op. cit.*