DESCRIPTIVE ANALYSIS OF THE SEQUENTIAL PROGRESSION OF ENGLISH READING SKILLS AMONG INDIAN CHILDREN

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DEDICATED

TO

Mummy   ana   Daddy

Bnaiya   ana   Vicky

<u>CERTIFICATE</u>

This is to certify that this dissertation entitled "DESCRIPTIVE ANALYSIS OF THE SEQUENTIAL PROGRESSION OF ENGLISH READING SKILLS AMONG INDIAN CHILDREN" is the bonafide work in part fulfillment for the degree of MASTER OF SCIENCE (SPEECH AND HEARING), of the student with Register No. M 9310.

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DECLARATION

     *I hereby declare that this dissertation entitled **"DESCRIPTIVE ANALYSIS OF THE SEQUENTIAL PROGRESSION OF ENGLISH READING SKILLS AMONG INDIAN CHILDR** is the result of my ovn study under the guidance of **Dr. PRATIBHA KARANTH,** Professor and Head of Department of Speech Pathology, All India Institute of Speech and Hearing, Mysore, and has not been submitted earlier at any University for any other diploma or degree.*

MYSORE   *(REG NO. M 9310)*

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"A friend is a person
who sings with you at
the top of the mountain
and walks quietly
beside you in the valley"

Maharaj ji, for being with me always.

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INTRODUCTION

INTRODUCTION

The ability to read is more important today than at any other time in history. For centuries, when reading was not essential to an agarian livelihood, this ability meant primarily an enhanced social and economic status in society for a few people. However with the rise of Vernacular languages, the invention of printing press, and urbanization and industrialization, the ability to read gradually became an imperative need. As the modern world developed its scientific discoveries and communicative innovations, its intellectual controversies and multiplying literary output, and its demand for popular education, produced strong pressures for more people to read more printed material than ever before.

Certainly ours is the most rapidly changing era in history with modern technology continually shrinking the world into a smaller globe. The pace of this veritable explosion of knowledge is breathtaking. Most of us like to read for relaxation and for the satisfaction of being well read. "Keeping up" with the demands of accumulated knowledge taxes our ability to interpret written materials more than almost any of our other abilities. A truly vast amount of reading is now required, not just to be well read but to maintain one's proficiency in one's work and to try to solve perplexing problems of modern living.

In this day of emphasis upon universal education, the critical importance of the ability to read well and with comprehension, becomes clearer when we realize that during the later school years almost 90% of students studies depend directly upon reading ability. The students who fail to develop a highly skilled reading ability end up with serious handicap in their future as productive citizens of the world. The more obvious disadvantage of being a poor reader include failure in school, the prospect of less rewarding job, lower earning's, less social status, and fewer of the many things commonly associated with happiness and success in our society. Such an individual is, robbed of the richness and fullness of life that is to be gained through reading literature, poetry, history and philosophy.

The process of reading involves the capacity to perceive, to recognize symbols and to integrate them into meaningful sequence. It also involves some capacity for abstract reasoning. Any person who has some dysfunction or developmental lag in reading, regardless of his endowment of general intelligence is considered reading disabled. Dyslexia is a disorder in children who fail to attain reading, writing and spelling skills that is commensurate with their intellectual abilities (Critchley 1970).

Reading ability and disability are topics of tremendous importance today. Yet the problem of reading disability goes unrecognized for what it really is, by many specialists in education. Unfortunately, quite a few children who have reading disability are considered to be mental retarders who can't learn

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or recalcitrants who will not. Even today in the midst of our considerable knowledge about language disorders - many "dyslexic" children are treated as they were over a century age.

In spite of the high incidence of specific reading disability, both laymen and those in professional fields - such as medicine, education, social work and psychology - have a blind spot in recognizing this condition in children. Many parents who have dyslexic children realize that something is wrong with their child, but often they are unaware of the existence of developmental dyslexia. The lack of information on assessment and intervention of the dyslexic child has been a continuing and crucial source of anxiety to parents and teachers.

Therefore in the present age of increasing interest in reading disability, thorough and comprehensive evaluation of various areas of reading skills is imperative. As children with learning disability may also show lag in specific developmental tasks in any one or several, or all of the six areas of psychological functions: sensory motor abilities, language perception, thought processes, emotions and social behaviours, it is of enormous value before setting up remedial program to conduct a through complementary evaluation which can pinpoint the kind and degree of specific disabilities and strengths in each of these developmental areas. A detailed evaluation of child's physical and psychological make up depends upon a battery of psychological tests, supplemented by observation of the child, a physical examination, an evaluation of vision and hearing.

interview with the child and parents and information gathered from other sources. Numerous tests and diagnostic batteries have been developed which provide valuable information for intervention; in the West, but is yet to be developed and/or normalized in India.

Parents and educators are continually intrigued by the frequent drop outs from the school. It's difficult for them to understand the reason for the poor performance of their children who otherwise seem intelligent enough. Failure to learn to read is one of the chief unsolved problem of today's school because reading is a tool, the mastery of which is essential to the learning of every other subject. This necessiates the development of reading tests suitable for India population. These tests will help us not only to evaluate children's strength and weakness, in learning to read but also serve as a good basis for intervention.

REVIEW

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REVIEW

Reading is defined as a process of decoding printed symbols into words and then extracting meaning from it. But the process of reading is more than a simple, almost mechanical decoding of print to sound. It is the recognition of printed or written symbols which serve as stimuli to the recall of meanings built up through the reader's past experience. The new meanings are derived through manipulations of concepts already in readers possession. In short, the reading process involves both the acquisition of meaning intended by the writer and the reader's own contribution in the form of interpretation, evaluation and reflection of these meanings.

To detect those children who have failed to make satisfactory progress in reading, it is necessary to have in mind some norms of reading growth. In general, normal growth in reading tends to be fairly continuous and developmental in nature. At each stage, the abilities essential to success at the next level are acquired. The process of learning to read is a series of stages of skill acquisition that build incrementally.

In an initial pre-reading stage from birth through Kindergarten, children learn to speak and understand language and acquire a fund of knowledge about the world. Their knowledge and language skills are critical as they learn to utilize contextual cues in reading. During this period, children also learn that

print is an important medium of communication, they begin to learn purpose of reading and writing. Reading disabled children generally do not have noticeable difficulty with most tasks of pre-reading stage. The important exception is failure to acquire phonemic awareness which can be identified by asking the students to give the initial sound in a spoken word or to identify spoken words with same or different sounds in the initial, medial and final position.

Grades I and II are characterized as decoding stage. This is when students learn to use letter cues. As noted earlier most reading disabled children do not successfully complete this stage. Difficulty with decoding can be identified by asking students to read phonetically regular words or nonsense words in isolation or by asking students to read text and analyzing the type of error they make.

A first task of decoding stage is to learn that reading involves use of code. Words are not written in arbitrary ways but according to an alphabetic principle by which letters have a regular and predictable relationship with sounds. Children come to understand that the alphabetic principle simplifies the reading process and that it is crucial that they attend to all of the letters to read accurately. The reader must also know the specific correspondence between letters and letter patterns and sounds. Acquiring this knowledge is the primary task of the decoding stage. It is an especially difficulty task in English

because letters and letter combinations may represent more than one sound.

For students who successfully negotiate the decoding stage, a next stage is "Ungluing from print" (Grade II and III). Here students gain from fluency in reading and learn to coordinate use of letter and context cues. Rather than laboriously, decoding letter by letter, decoding becomes more automatic and requires less conscious attention. Students appear to recognize many words or word parts. Decoding is integrated with other word attack strategies such as using contexts to assist word recognition. Skills and strategies are practiced in coordinated and flexible fashion.

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When this progress is continued with out serious interruption, the child eventually becomes a fairly mature reader. The reading problem occurs when one or more factors in child himself or his environment or both prevent him from reading his learning capacity. Therefore knowledge of exactly what the reading disabled children are doing at different stages of the reading process might yield some insight into the planning of appropriate assessment and remedial programs.

A child has a reading disability when there is significant discrepancy between his reading level and his intellectual potential as measured by standardized test. It is a disorder of children, who despite conventional classroom experience fail to attain the language skills of reading writing and spelling

commensurate with their intellectual abilities. Thomson (1984) provided a comprehensive definition:

Developmental Dyslexia is a severe difficulty with the written form of language independent of intellectual cultural, emotional causation. It is characterized by the individual's reading, writing and spelling attainments being well below the level expected based on intelligence and chronological age. The difficulty is a cognitive one, affecting those language skills associated with the written form, particularly usual to verbal coding, short term memory, order perception and sequencing.

The presence of reading disability cases in our schools is a serious problem at all level of academic ladder. Many a times parents and teachers come with the complaint of poor reading and writing habits, reduced attention and other behavioral problems, for which they are unable to find any solution. Especially in Indian society where public awareness is minimal, the instances of reading disabled children remain in oblivion. As a consequence the disabled child goes through an emotional trauma which even his parents fail to understand. One must take a step towards a better society, where all human beings are equal and have a right to education. This can only be achieved by better diagnostic instruments which can identify reading disabled as efficiently as possible. Diagnosis is a fundamental element in a reading program without it a program has no direction - accurate instructional decision can't be made and appropriate pedagogical techniques or materials can't be selected. As pumfrey phrases

it, "the heart of diagnosis is the interpretation of series of observation coupled with ability to relate interpretation to a plan for remedial teaching. For these reasons we must closely examine the diagnosis process.

A comprehensive reading battery must include reading assessment tool along with assessment procedures for reading related factors such as visual abilities, auditory abilities and intellectual abilities. An ideal reading instrument should also include a supplement of reading readiness test.

As the role of vision is unequivocal during the process of reading, it becomes essential to rule out any visual defect which might hamper the reading ability of an individual. It is freely accepted that any disorder of vision might influence the reading progress. Therefore a thorough examination of vision including visual acuity, visual function at near or far objects, accomodation, convergence, monocular, binocular vision should be undertaken. An informal inventory of visual discrimination are also available which evaluate part-whole matching, visual memory, figure-ground discrimination, form discrimination, noting missing parts, directional confusions, letter and word discrimination etc.

Auditory perceptual deficits are also seen frequently in the reading disabled children. Reading specialists have explored and paid lot of attention to auditory abilities of poor reader in the beginning reading research. Several tests have been developed

which specifically assess auditory acuity, discrimination, auditory synthesis, auditory span and other minor auditory abilities to reading success. One such test is described below:

Lindamood Auditory Conceptualization test:

Boston: Teaching sources

It includes measures of discrimination of speech sounds, number, and order of sounds in sequence of syllabic and non-syllabic patterns. Child uses coloured blocks to show distinction of same and difaferent sounds in answering.

Some specialist stress on intellectual assessment as a part of the reading battery, although there has been no conclusive relationship between the reading ability and the intellectual status of an individual. This is done usually to permit comparison of the mental level with that of reading.

The primary purpose in assessing the intelligence of each case of reading disability is usually to permit comparison of the mental level with that in reading. Wescher Intelligence scale for children is one test among others which can be used to measure intellectual capacity of the children.

Weschler Intelligence Scale for Children (WISC):

It consists of eleven tests of items of increasing difficulty. Five verbal test of information, comprehension arithmetic, similarities, vocabulary and digit span. The performance items composed of picture completion, block design,

object assembly, coding, picture arrangement. The scores on each test are summed and translated into I.Q.

Every normal infant is born with the capacity to learn language. Yet in the beginning years he explore and interacts with environment to develop the fundamental skills, for acquisition of reading and writing later. As the time for entering school and formal learning, approaches, the abilities to discriminate fine differences in auditory and visual stimuli becomes crucial for reading and writing process. The reading readiness tests were developed, with this theoretical background. They assess the pre-requisite skills essential for each child to acquire reading. Some of the pre-requisite reading skills included in these tests are auditory - visual discrimination, vocabulary, ability to follow directions, attention and left-right orientation etc. These tests help in reasoning out why children fail to learn to read. It helps in predicting the success in learning to read and thus discriminate poor readers from better readers. One of the reading readiness test which is available in Indian language (Kannada) is described below:

Reading Readiness test:

This was developed by Devaki Rani in 1978 as part of her dissertation project. This can be administered on children from 3 years to 6 1/2 years. The skills tested are Vocabulary, Auditory discrimination, Visual discrimination, ability to follow direction and pay attention, left to right orientation.

Often reading disability is detected after the child starts going to school. Therefore most of the screening tests developed were teacher oriented. These were developed with the aim to screen out children at risk of developing reading disability easily and quickly, so that the test administration on the whole school population doesn't become cumbersome. These include perceptual motor coordination skills of auditory, visual and kinesthetic nature as well as identification and recognition of alphabets among other skills.

1) Slingerland Screening Test (1969, 1970, 1974):

This test was designed to identify children with potential language disabilities that may be attributed to perceptual motor difficulties or to communication problems. There are four separate levels of SST available for use with children in different grades. Form A is used for grade I and the first half of grade 2, Form B, the second half of grade II and first half of Grade III. From C, IId half of grade III and grade IV, and Form D - grade V and VI.

Each form is compressed of eight parallel subtests:

      two subtests involve copying tasks

      two word matching

  - two writing from orally presented material

      writing from visual memory

      visual recognition and circling.

The child's **performance on** these subtests is designed to pinpoint for the diagnostician the focus of child's language difficulty either deficient input channel (auditory/visual) or problems of kinesthetic nature.

The test purports to provide information for teachers in making instructional decisions about selection of teaching methods and materials for specific children.

2) **Kindergarten Reading Screening Battery:**

It consists of psychometric and behavioral indices, administered in following order:

(i) Reading subtests of wide range achievement test (WRAT) which measures the ability to identify letters of the alphabet and sight word recognition skills.

(ii) The teacher's checklist which evaluates expressive language, concentration and attention skills, perceptual motor coordination skills and control of behaviour.

(iii)The Slossen Intelligence Test (SIT), which assesses general cogniture development, concept formation, language and motor coordination development.

(iv) The meeting street school screening test (MSSST) which is used to obtain additional information on critical fine motor coordination skills, visuo-motor integrative activities and the level of language development.

Once the initial screening is over and the child recognized as at risk of being reading disabled, the thorough assessment and analysis of reading difficulties posed by the child becomes imperative. The diagnostic reading tests provides an inexhaustible range of skills to tap the various aspects of reading process. Most of them are standardized and provide grade equivalents, yet criterion referenced informal assessment tools are not infrequent or insignificant. In general these include, phonic mastery skills, auditory blending, word recognition, word analysis, initial consonant substitution, auditory discrimination, syntax test, silent/oral reading and reading comprehension. They not only provide overall measure of reading ability but also assess the language potential of an individual. This comprehensive analysis is also crucial for therapeutic management and decisive for special instruction placement of reading disabled.

Some of the diagnostic test have been elucidated below:

Durrell analysis of reading difficulty

This battery of tests was first offered in 1937 and revised in 1955. It now consists of an oral, a silent, and a listening comprehension test; lists of testing word recognition and word analysis; and a number of brief supplementary tests on letters, letter sounds, visual memory, spelling, and handwriting. Checklist of difficulties detected in the major tests are offered, as well as for indicating the probable instructional

needs of pupil as revealed by the entire battery. Several of the tests are normed only for the primary grades, while others may be used during the first six grades.

3) Diagnostic screening test for developmental dyslexia:

This was developed by Elena Border (1971). It consists of Reading test comprising 10 tests of 20 phonetic and non-phonetic words each graded from pre-primer through high school.

Words read immediately on presentation are in the child's sight vocabulary and are recorded in a "flash" column. Words that require longer presentation call on the child's ability to analyze word phonetically ie., word analysis - synthesis skills. Successes and failures on longer presentations are recorded in a untimed column. A Comparison of words in "flash" and "untimed" column indicates whether child is reading through both-whole-word gestalt and phonetic analysis or predominantly through one or the other.

A supplementary test complementary to the reading test follows. Border found that dyslexic children can spell correctly no more than 50% of the words they can read in sight, as distinct from normal readers who can write 70%, or more words correctly. Border delineated three distinct types of dyslexics on the basis of reading spelling performance:

a) Dysphonetic - primary deficit in symbol-sound integration but no gross deficit in gestalt function.

b) Dyseidetic - deficit in the ability to perceive letters and whole words as configurations or visual gestalt but no gross deficit in analytic function.

C) Mixed Alexia

Most of the teachers believe that learning word analysis skills is absolutely necessary for practically all children. It has been found that   poor spellers are significantly inferior in giving letter for letter sounds, in blending letters to form syllables and words. Thus evaluation of these skills is emphasized as they are basic to reading. They include, identification of sounds of letters, choosing one of three rhyming words beginning with a given sound, matching words in a series that have same beginning or ending consonant sounds, spelling words at dictation, consonant, blends and diagraphs, selecting words which begin with same sounds as pictured object. Rosewell Chall auditory blending test is one of the word analysis skill tests.

Rosewell-Chall Auditory blending test:

This device by Roswell and Chall is administered individually to pupil of the first four grades. It consists of three subtests of ten items in which phonic elements of words are

pronounced separately for the subject who is expected to blend them into words. One group consists of a consonant plus a vowel or vowel diagraph, or diphthong, another an initial consonant, or diagraph plus the rest of the word and the third of words composed of three separate phonic elements. The ability to blend sounds into words is highly significant for reading.

During the last decade the focus of attention in reading research has shifted towards metaphonological abilities. These metaphonological skills are known to bring about phonological awareness whose role in learning to read and write in an alphabetic code is becoming widely recognized. Many researchers have indicated that different tasks used to operationalize the concept of phonological awareness may require different degrees or levels of metaphonological skills. As a consequence two alternative accounts of phonological awareness came into view. According to hypothesis 1 phonological awareness development follows the sequence ID -> 2D -> 3D -> nD. Under hypothesis two, the sequence is ID -> nD -> 3D -> 2D. In both the cases the transition to the nD (phonemes) level occurs after the beginning of alphabetic instruction.

The metaphonological skills which involve syllable analysis and synthesis, phoneme analysis synthesis can operate at different levels of hierarchy.

```
1D                              Syllables
2D              Onset                        Rime
3D              Initial              Vowel        Terminal
                Consonant              ¦          Consonant
nD      Phoneme      Phoneme    Phoneme    Phoneme    Phoneme
```
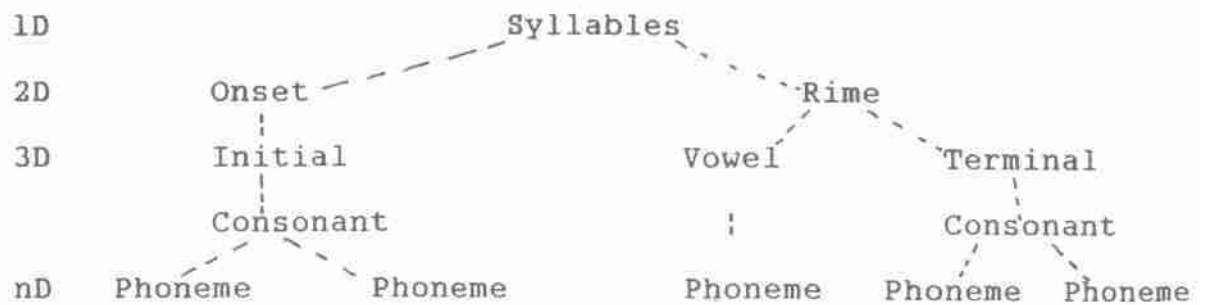
Hierarchical model of Internal structure of syllable

The various metaphonological skills or phonological awareness abilities which are known to facilitate reading are as follows:

1)   Segmentation of sentences into words: This requires the subject to read each word of a sentence with a pause in between the words.

2)   Syllable deletion: The child is asked to read the word with its initial syllable or part of word deleted.

3)   Syllable synthesis: The child is asked to guess the word which the tester says sound by sound.

4)   Syllable segmentation: Here object drawings are used with 2 - 3 syllable word names. The subject is told to say the name of the drawing bit by bit or sound by sound.

5)   Phoneme deletion: The child is asked to say the word by deleting initial very little bit or phoneme.

6)   Phoneme synthesis: Here examiner says the word phoneme and the subject is asked to tell the word, said by examiner in bits.

7) Phoneme Segmentation: The subject is asked to say a word phoneme by phoneme.

The study of phonological awareness, especially phonemic awareness has not reached its term yet. But the crucial role that phonemic awareness plays in learning of alphabetic literacy is unequivocal. Further phonological processing of beginning reader and speller, which depend so heavily on the capacity to represent phonemes consciously, to blend phonemes and to analyze speech into phonemes, contributes to build skilled reader and speller.

Badian, Nathlie, Me Anulty, Gloria, Duffy, Frank and Heildetise (1990) evaluated predicture battery of neuropsychological, paracademic, electrophysiologic measures in an effort to specify the best precursor of dyslexia in kindergarten.   Three of the variables (mere found to be best predicture discriminators of dyslexia from normal renders:

1) giving the sound associated with each letter.

2) rapid naming of numbers.

3) demonstration on a diagram of the hands which fingers have been just touched.

4) electrophysiologic finding suggests a large left-hemisphere difference, mainly parietal and frontal between dyslexia and normal readers.

John, Rattan, Kirk and Gurmal (1991) compared short term memory tests as predictors of reading achievement of learning disability and educable mentally retarded students. The results revealed that test predictors of reading for the learning disabled students was a sentence memory task and for educable mentally retarded letter sequence task.

Carver (1991) used letter naming speed to diagnose reading disability. In order to study if letter naming speed is an accurate measure of cognitive speed - a group of II through 10th grades were administered computerized test results revealed that cognitive speed and cognitive power are two independent factors that influence reading disabilities. In addition to traditionally used cognitive power. The diagnosis should also include a letter naming speed to measure cognitive speech.

A new computer assisted test for antomatization of reading (COTAL) is developed by University of Netherlands. Amerstadam (1992). COTAL aides in assessment of automatization of reading isolated words in diagnosing children with reading disability. COTAL fulfills the variance criterion for diagnostic use and indicates relevant difference between poor and normal readers. Reading disabled children were better in auditory visual matching and showed better "word-class effect". Normal children on the other hand are better oral readers with unlimited exposure time and were more affected by the reduction of exposure time effect.

Recently a new inventory of silent reading has been

developed; the keef inventory of silent reading (1993) is a new method of informally evaluating the Reading skills of the students by identifying patterns of miscues-that students make while reading. Teachers, tutors and researchers may use the KISR as a diagnostic instrument to easily test either groups or individual's on their reading strengths and weaknesses. The inventory is based on a synopsis of Tom Sawyer with progressively more different passages designed for reading levels from grade one to eight Students are asked to read Tom Sawyer passage silently and then fill in answers to selected blanks.

A new measure for differentiating learning disabled from normally achieving students was proposed by Eisen (1989). Eisen tried to identify the possible hidden strengths of children with disability. The measure was not based on cognitive deficit but on a possible asset. In addition negative correlation between verbal and non-verbal test shed new light on possible link between verbal deficit and excessively creative style. The test material consist of assorted geometric slopes and seven letters M-I-R-A-C-L-E. The subjects were asked to make pictures and then describe what they have made. Analysis was based on originality, remoteness and fluency.

Need for the study:

In a multilingual country like India its very essential to develop tests in all languages. With the availability of variety of such tool, the speech and language pathologist can obtain the complete profile of reading disabled, to make or confirm

diagnosis so that directives for reading intervention can be determined early.

English has the status of second language for most of the Urban Indian population and therefore tests in English too will be required. However, one can't use the tests developed in the West without any adaptation. As of now we don't have any standard tool available to assess reading in school going Indian children.

As reading is an individualized process and varies with language dialect and instruction, an urgent need has been felt to obtain normative data on English reading tests for Indian population. Most of the Indian children start to learn English only in school and usually have no exposure to English at home. Therefore the age of acquisition of various reading skills may not be in par with the children whose mother tongue is English. As a consequence the need is felt to trace the progression of sequential acquisition of English reading skills in Indian children whose mother tongue is not English. The present study is aimed at the descriptive analysis of sequential progression of English reading skills in Indian children.

The "Early Reading skill" test proposed by Rae and Petter (1973) was chosen as it provides an assessment of wide range of reading materials ranging from initial perceptual discrimination skills to the more complex structural analysis of words. It also constitutes metaphonological skills as a part of phonics and decoding process assesment. In short almost all the essential

spheres of reading have been included in this test. The authors had designed the test as an aid to teachers for an educational assessment of reading disabled. It is an informal test gives information on immediate learning objectives. It provides specific information on each child in relation to explicit criterion, therefore acts as a profiling tool mainly.

The aim of the present study is to determine the developmental progression of English reading skill in Indian school going children. The test will be administered to a random sample from class I to class VIII to obtain information concerning overall functioning in relation to broad skill area, such as the reading level of the child. This informal test in conjunction with the standardized equivalents will assist better in making the teacher's curriculum choices more comprehensive and meaningful.

METHODOLOGY

METHODOLOGY

The aim of the present study is to evaluate **the** sequential progression of English reading skills in Indian children.

The subjects selected were forty normal school going children ranging from first to eighth standard. Five children were chosen from each class. They didn't show any sign of physical or sensory impairments. Their speech and language level and intelligence was appropriate for their age, as reported by a teacher. They were sampled using systematic sampling technique, where every eighth child in the class roll was taken as a subject.

Description of Test Material:

The test used to study reading skill was "Early Reading Skill - Informal Reading Diagnosis" proposed by Rae and Patter (1973). This was designed primarily to provide teachers with diagnostic instruments in major skill areas of reading. The test materials are simple and provide adequate information to recognize specific pupil need.

As the test consists of wide variety of reading items ranging from early reading skills to the complex reading abilities, it was considered appropriate for the study. The test begins with simple alphabet identification and recall test and proceeds to structural analysis as well as metaphological skill analysis, thereby covering a wide range of reading skill area.

Moreover this is the only test available at our institute which is used for the diagnosis of reading disability in English.

I. Perceptual discrimination skills:

The ability to discriminate fine differences in auditory and visual stimuli plays a vital role in reading and writing process. These perceptual discriminative skills are acquired in early childhood, before the beginning of formal learning. The authors have also associated these abilities with Piaget's sensory motor - period, where concepts are build and expanded based on the child's interaction with his world. During this period the child listens; looks, touches and tastes the objects in his environment and steadily learns to refine and extend his perceptual abilities.

As the discrimination skills are an important pre-requisite for reading and writing learning, the authors have included auditory and visual discrimination test which are described below.

1) Auditory discrimination Test:

Auditory discrimination, the ability to differentiate sounds is considered one of the most important factors in the acquisition of spoken language. In initial experience with any language the listener becomes sensitive to almost imperceptible differences in sounds. Hearing the subtle differences between "big" and "bug" or "stop" and "top" is essential to both the effectiveness of communication and the ability to use phonics as

a reading device.

The test contains 30 word pair, 21 of the pair are dissimilar. 7 varying in the beginning, 7 in the ending and 7 in the medial sounds. The other 9 are identical pairs, to ensure that the child is not responding by rote.

Instruction:

I will be saying two words at a time. Tell me same if you think that the two words I say are same. Tell me "not same/different", if the two words I say are not the same.

2. Visual Discrimination test:

Good visual discrimination is essential in the reading process. The test begins with items that are dramatically different from one another. There are both letters and geometric shapes (corresponding to the words and non-syllables of the test).

All parts of the visual discrimination test consist of matching to sample items. In each problem, a figure, letter or letter group is given first and a series of items appears to its right. Variables include size, shape, internal and external parts, rotation and static and kinetic reversals.

The test is administered in two parts; Level I and II. Level I consist of geometric shapes and individual letter. While Level II consist of words and non-sense syllables. There are 17 items each in both the levels.

Instruction:

You have to match the shape, letter or words drawn/written on left side with its counter-part on the right.

II. **Assessment of Phonics and Decoding Process:**

A substantial body of research suggests that emphasis on the association of sounds and symbols is a most productive way of teach beginning reading skills. Therefore recognition of letter-sound relationships are fundamental to the understanding of English in print.

The term 'phoneme' represent the significant speech sounds in language and "grapheme" is used to denote the written symbol associated with a particular speech sound. The mastery and internalization of these relationships represents a significant step in the development of the child's reading skills.

The analysis of words is necessarily a part of higher - order reading process since it adds concept recognition to the task. Both separately and in the reading context.

The term morpheme refers to the smallest unit of meaning in language. An individual word such as 'toy' is one unit of meaning but the word 'toys' is two because the 's' adds the meaning of plural. Thus affixes, compounds and root words can be studied as another aspect of the decoding process.

The child's ability to pronounce a particular word is enhanced by the ability to understand word structure. This requires higher level processing involving relatively complex structure of thought that includes recognizing letters and words as such, translating those letters into sounds - either individual sounds or syllables - blending the sounds into a word unit that matches an appropriate oral language pattern and recognizing that pattern as having meaning within the overall context of what is being read.

When reading impairment occurs, the teacher needs to discover what the gaps are to find the missing steps, it is useful to have tests that will give specific information such as letter names, phoneme - grapheme correspondence, letter sounds, blending, syllabication and structural analysis.

1) Alphabet Recognitions and Generation:

The first part of this test requires the child to circle the letter, the tester names. The child is given sheet with rows of letters. When the tester says one of the letters, the child merely circles it. This test can be administered to a group as no oral response is required. Part A is identification of capitals, Part B is identification of lower-case letters.

In the second test the child is asked to recall orally a particular letter in each row from a field of letters. Again, Part A is recall of capital letters and Part B of lower case letters. Because, the response is oral, this test must be given

individually.

There are 26 English letter in each part of the test.

2) **Phoneme-Grapheme Correspondence Tests:**

This test is designed to test the child's ability to write the correct letter from a word clue. This test does not necessarily require a knowledge of spelling, but rather an understanding of the letters related to particular sounds in words:

This is administered in two parts: Part I and II.

Phoneme-grapheme correspondence I:

a) Beginning consonant: It consist of 18 words and the child is asked to identify the initial consonant sound of the words.

The child is instructed to write the letter at the beginning of the word said by the tester.

b) Ending consonant: In   this   part identification of single consonants at the end of words are tested. It consist of list of 15 words.

c) Consonant Blends: This part deals with identification of blends when two or more consonants appear together.

The child is instructed to write two letter that form a blend sound at the beginning of the word said by the tester. It consist of test 20 blends.

d) Vowels: This part tests a student's ability to recognize vowel sounds; both long and short single vowel sounds that appear in the middle of a word in the consonant-vowel-configuration.

The child is instructed to circle the vowel sound that is in the middle of the, word said. It consist of list of 10 words each, for long and short vowel.

The letter-sound correspondence test described so far requires that the children use a recall rather than an identification response. They were designed for children with more advanced skill and require that the children write the letter or letter that they are the correct answers. However the authors have also suggested formats for less advanced students, which are included in Part II.

Phoneme - Grapheme Correspondence II:

a) Beginning Consonants:

This tests the identification of initial consonant of a word, when a target consonant is provided before starting the test.

The child is instructed to put ( ) mark in the box beside the number of the word on the answer sheet, if the word said by the tester begins with the sound of the target consonant.

Sample : b.   1. bat   2. cat   3. big   4. beautiful

b.   1. ✓   2. ✗   3. ✓   4. ✓

It consists of list of 30 words, testing 6 consonants at the initial position.

b) Ending Consonants:

This tests the identification of ending consonant.

The target consonant is written or the answer sheet and the examiner says list of words. The child is instructed to put ( ) in the box beside the number of word if the word said, ends with the sound of target consonant.

Sample : t.   1. get   2. come 3. fat   4. forget

t.   1. ✓   2. ✗   3. ✓   4.   ✓

It consist of list of 30 words, testing 6 ending consonants,

c) **Vowel sounds:**

This tests the identification of medial vowels.

The examiner says three words, out of which two have the same middle sound. The child is asked to tell the two words which have the same middle sound. Later examiner gives two more words and asks the child to point out to the word that has the same middle sound as the first two words.

Sample :   examiner says three words.
              "bet, mess, bill"

Which words have the same middle sound ?
              "bet and mess"

Which one has the same middle sound as bet **and** mess ?

"red"

This test consist of 10 middle vowels.

3) **Blending Test:**

Blending tests helps to determine the child's ability to listen to certain sounds and combine them with other sounds to form a new word. This is often a difficult task, particularly for the older children, who are having reading problems. Hence the task is of critical importance in the development of independent word attack skills.

There are two levels to the Blending test. The first level uses picture clues in a rebus style and is meant for less mature children. The second level requires more reading skill but uses the identification level for answers.

Instructions:

Level I:

"You have a page with twelve boxes in it. Each box has a word puzzle made up of picture and some letters. I'm going to say a word and you will find the puzzle that fits the word."

Level **II:**

"In each row on this paper there are three words. Notice that the words are slightly different either in the way they are divided or the way they are spelled or both. I'm going to say

one of the three words and you are going to circle the one you think I am saying.

4) Syllabication Test:

The use of Syllables to "sound" words either for reading or spelling is a fairly sophisticated skill that is based **on** auditory discrimination and blending- When moderately good reader attack a new word, they almost begin by sounding the syllables. Testing for syllabication, then, can provide information concerning a reader's use of this strategy and also show areas where direct teaching would be suitable.

Instruction:

"Read each word below and divide it into syllable by drawing a line between each syllable.

Sample : "Undelivered". It must be divided into four syllables like this " Un/de/liv/ered ".

5) **Structural Analysis of words:**

This tests the child's knowledge of both root words and affixes as an aid to pronunciation and analysis of meaning.

Affixes carry meaning even though they can't function independently e.g. the "ly" on the end of "quickly" adds the meaning of "like" or "in that manner". These are termed bound morphemes. The words which carry meaning by themselves are unbound. Inflectional endings are the first aspect of structural

analysis developed since the children become familiar with plurals, past tense and comparison through their regular oral usage. The recognition of irregular plurals and tenses develop more slowly.

The awareness of root words as aides to meaning comes much later and often needs to be directly taught. Once the root has been identified and labelled, the child learns to use roots and affixes together to see how each contribute to the word's meaning.

Therefore structural analysis of words is also tested in different levels.

1)   The first level of structural analysis test deals with the earliest set of regular and irregular inflectional endings within   context and is suitable for children with some reading skill.

Instructions:

"Here are some sentences in which a word is missing. Three choices are given in the bracket, out of which you have to choose the correct one.

Sample : The boy was_____the horse.
          (ride, riding, rided).

2)   The Second level deals with a series of affixes and requires identification of words according to the meaning of the affix.

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Instruction:

Circle the word/s in each row that indicate:

1) more than one (plural)

2) past

3) more or less than

4) not

5) again

6) against

7) with

8) before

3)   The third level deals with the child's ability to identify roots within words. The test has row of four words each. Three words have common root. The fourth word looks as if the root could be the same, but the meaning and/or pronunciation identify it as being different from others. The child must cross out the word that does not belong to the group.

Instruction:

"Underline the root words in each row and put an X on the word that doesn't have the root in it".

Sample: <u>recount   countless   uncounted</u>

III. Assessment of Oral Reading:

Oral reading is a combination of the decoding of words and

the attachment of meaning to those words. It can, therefore, be accepted as one evidence that reading is, in fact, taking place. However the oral pronounciation of the words should not be considered as the complete reading act but rather as one of many ways this act may be observed. Oral reading allows us directly to observe the children applying their acquired reading skills and in this manner, it can be utilized as a valuable diagnostic tool.

To test this, four passages were chosen as reading material which differed in terms of complexity. The passages were taken from Indian books considering the probable difference between English level of Indian children and children in west. The child is made to read the passage till he reaches the level at which he isn't able to read. At the end of each passage, four questions are asked concerning the passage, which also vary from simple to complex (requiring inferential skill).

As the complete profile of informal reading diagnosis is very lengthy and time consuming, only the items from reading skill assessment and perceptual discrimination skills were used for the study, which tap the major portions of reading skills. The receptive and generative language skill, assessment of silent reading and reading; function and fun were not administered.

Subjects:

The test was administered on the students of Kendriya Vidyalaya No.1, Ambala Cantt. This school follows NCERT syllabus and uses English as a medium of instruction. The total number of

subjects were forty, **who** were representative of eight classes (that is from class first to eighth). There were five subjects each from all the eight classes.

All of them belonged to middle class socio-economic background. They were bilinguals and multilinguals with no exposure to English at home. English was taught in the language class and wasn't used as a communication mode. Their mother tongue was either Punjabi or Hindi.

Method of **administration:**

The subjects were tested individually in a quiet room. Initially the tester conversed with the child and made him/her comfortable during testing. Each subject was given reasonable amount of time to respond. If required, stimulus word or instructions were repeated again. When the correct response was obtained, verbal reinforcement like good or you have done well etc. were give to maintain motivation level.

Scoring:

A common scoring system was used for most of the subtests. A score of 1 was given for each item answered correctly. Therefore the maximum score for each subtest varied according to the number of items in it.

The method of scoring for Identification of medial vowels was a little different. Here score of one was given if the subject answered both the Questions correctly. If only one

question was answered, then half a point was given.

The maximum scores for each test are given below:

I. Perceptual Discrimination Test:

a) Visual discrimination: Level I   Maximum score : 17

Level II   Maximum score : 17

b) Auditory discrimination :   Maximum score : 30.

II. Phonic and Decoding assessment:

 1) Identification and Generation of Alphabet.

   a) Identification of upper case   : Maximum score : 26
   b) Identification of lower case   : Maximum score : 26
   c) Recall of lower case   : Maximum score : 26
   d) Recall of upper case   : Maximum score : 26

 2) Phoneme grapheme correspondence:

   Part 1 : 1) Beginning consonant   : Maximum score : 18
            2) Ending consonant   : Maximum score : 15
            3) Blends   : Maximum score : 20
            4) Long and short vowels : Maximum score : 10 each

   Part II : 1) Identification of beginning consonant :
             Maximum score : 30

             2) Identification of ending consonant :
             Maximum score : 30

3) Identification of medial vowels :

Maximum score : 10.

3) Blending : Level I : Maximum score : 12

Level II : Maximum score : 8

4) Syllabication : Maximum score is 12.

5) Structural Analysis:

Level I   : Maximum score : 10

Level II : Maximum score : 27

Level III : Maximum score : 10

III. Oral Reading   : Maximum score : 16.

The data thus obtained is presented in the next chapter along with an analysis and discussion of the same.

RESULTS & DISCUSSION

RESULTS AND DISCUSSION

The present study is aimed to determine the progression of reading skills in Indian children.

The "Early Reading Skill - Informal Reading Diagnosis" test was administered on forty school going children from class first to eighth separately.   Then mean and standard deviation were deduced for each task.

The mean score were then converted into percentage score. These percentage scores were used to graphically represent percentage performance of each class across different sub tests.

Qualitature analysis of the data was also done to evaluate the pattern of errors exhibited in each task at each level.

Table 1: Performance of the eight classes on the test

	MAX		I	II	III	IV	V	VI	VII	VIII
Visual Discrimination I	17	Mean S.D.	13.6 .55	13.6 .89	14.0 1.71	16.0 1.22	15.8 1.10	15.6 .55	16.6 .55	16.6 .55
Visual Discrimination II	17	Mean S.D.	10.2 1.10	12.6 2.20	13.4 1.95	14.0 1.00	14.0 1.00	15.6 .89	15.8 .84	16.8 .45
Auditory Discrimination	30	Mean S.D.	22. .84	226.2 1.79	25.8 1.10	26.2 1.48	29.6 .55	27.4 1.14	30.0 0	30.0 0
Auditory Identification upper case	26	Mean S.D.	24.8 .45	25.8 .45	25.8 .45	26.0 0	26.0 0	26.0 0	26.0 0	26.0 0

	MAX		I	II	III	IV	V	VI	VII	VIII
Auditory Identification lower case	26	Mean	20.4	25.0	25.2	25.6	26.0	26.0	26.0	26.0
		S.D.	1.67	.71	.45	.89	0	0	0	0
Auditory recall upper case	26	Mean	24.8	25.6	25.6	25.6	26.0	26.0	26.0	26.0
		S.D.	.84	.55	.55	0.89	0	0	0	0
Auditory recall lower case	26	Mean	22.0	25.0	25.2	25.6	25.6	25.8	25.8	26.0
		S.D.	1.22	.71	.45	.89	.89	.45	.45	0
Beginning consonant	18	Mean	9.0	14.2	15.0	15.8	16.6	16.6	16.8	16.8
		S.D.	1.58	.84	1.22	.84	.55	.55	.45	.45
Ending consonant	15	Mean	7.0	12.8	11.6	13.4	13.4	13.8	13.6	14.0
		S.D.	.71	.84	1.14	.55	.89	.45	.89	1.0
Blends	20	Mean	8.4	17.8	18.0	19.0	19.4	20.0	19.8	20.0
		S.D.	1.52	.84	1.41	1.00	.89	0	.45	0
Long vowel	10	Mean	1.6	5.8	6.8	8.4	8.8	8.2	8.2	9.6
		S.D.	5.50	1.36	1.64	.55	.84	.84	.84	.58
Short vowel	10	Mean	4.0	5.8	7.8	8.4	9.4	8.6	9.6	9.6
		S.D.	.71	1.48	1.30	.55	.89	1.67	.55	.89
Identification of beginning consonant	30	Mean	28.2	29.2	30.0	30.0	29.6	30.0	30.0	30.0
		S.D.	.45	.45	0	0	.55	0	0	0
Identification of ending consonant	30	Mean	23.0	27.2	27.2	27.4	28.2	29.4	29.0	29.6
		S.D.	1.00	1.62	.84	1.67	2.17	.89	.71	.55
Identification medial vowel	10	Mean	0	0	0	0	4.6	5.9	7.4	8.0
		S.D.	0	0	0	0	1.08	.96	1.52	1.06
Structural analysis I	10	Mean	0	2.6	4.0	3.8	4.4	4.6	5.4	8.8
		S.D.	0	.55	1.00	.84	.55	1.95	1.95	1.34
Structural analysis II	27	Mean	0	2.8	4.4	6.4	7.4	8.0	14.8	21.4
		S.D.	0	.84	1.14	3.04	2.51	2.35	2.71	1.52
Structural analysis III	10	Mean	0	0	0	0	2.6	5.8	6.8	7.6
		S.D.	0	0	0	0	.89	.84	1.10	1.52

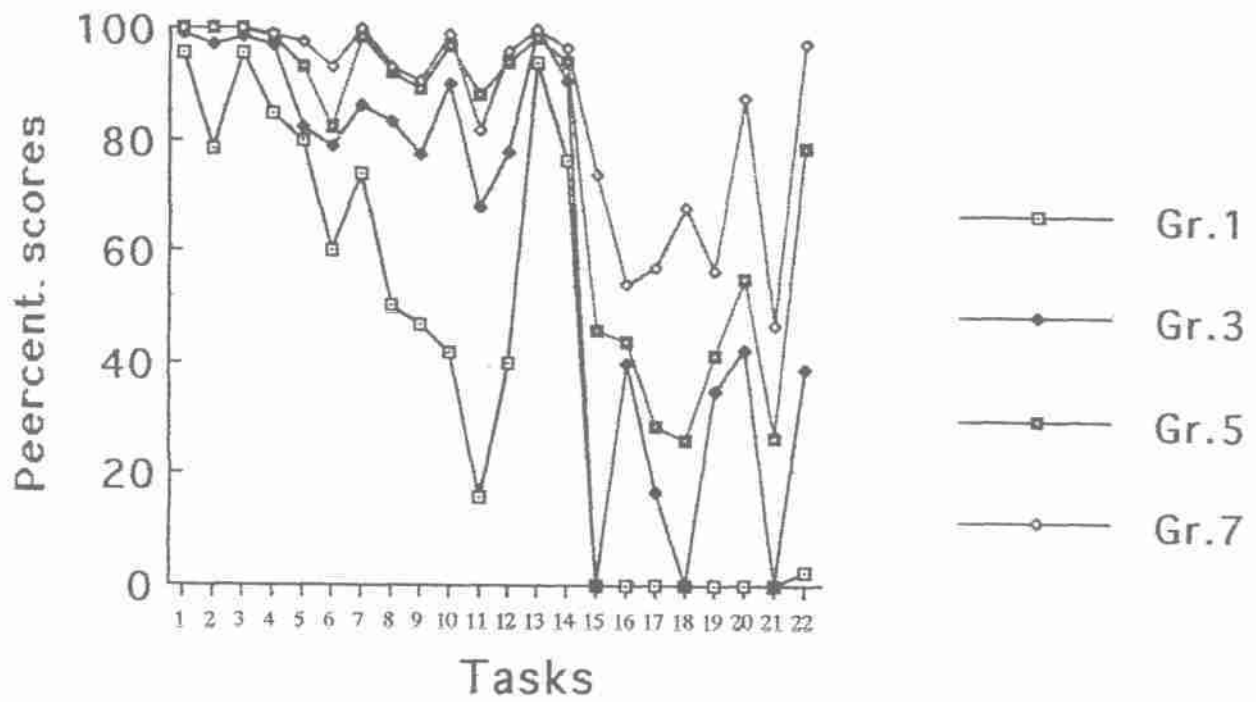|	MAX		I	II	III	IV	Y	VI	VII	VIII
Blending I	12	Mean	0	2.8	4.2	4.8	5.0	6.8	6.8	7.8
		S.D.	0	.84	.84	1.10	1.00	.45	.84	.45
Blending II	8	Mean	0	2.0	3.4	4.6	4.4	4.8	7.0	6.6
		S.D.	0	.71	.89	.89	.55	1.10	.71	.89
Syllabication	12	Mean	0	0	' 0	1.8	3.2	5.2	5.6	5.6
		S.D.	0	0	0	1.3	.84	.84	.55	.89
Oral reading	16	Mean	0.4	3.6	6.2	9.6	12.6	14.8	15.6	16.0
		S.D.	.55	.55	1.79	1.67	1.67	1.79	.89	0

The mean scores of eight groups across the reading tasks provide us with valuable information which can be used for comparing children suspected of reading disability. The scores show that performance on each task varies with class and follows a normal developmental sequance. Acquisition of reading skills in English by the Indian children are probably not on par with the children from west who have English as their mother tongue. Therefore its essential to compare the performance of Indian children with Indian norms. The mean scores obtained here can be used to evaluate the performance of a child in comparison with his peers. However one should bear in mind that application of these scores are relevant to children whose mother tongue is not English and have had no significant exposure to English before entering the school.

As it was not possible to represent all the eight groups together in a single graph without much overlapping of the scores, two graphs were made with four classes in each to show the comparison between the classes for all of the reading tasks. In each graph alternate classes were taken to show the developmental sequence appropriately.

Graph 1.1 (performance of class I, III, V and VII across 22 tasks) and 1.2 (performance of class II, IV, VI and VIII across 22 tasks) show the sequence of progression of reading skills. It is evident that earlier tasks like perceptual discrimination (5,6 and 7), alphabet test (1, 2, 3, 4), identification of beginning and ending consonants (8,9) were attempted by all of the classes, whereas tasks like syllabication (21), identification of medial vowel (11), identification of root words (18) do not emerge until after class third and fourth.

The overall performance of higher classes (seventh and eighth) was better than the rest, although in complex tasks like structural analysis, blending, syllabication and medical vowel recognition hundred percent performance wasn't obtained even by the 8th class children.

GRAPH 1.1 : Performance of the classes I, III, V and VII on the test.
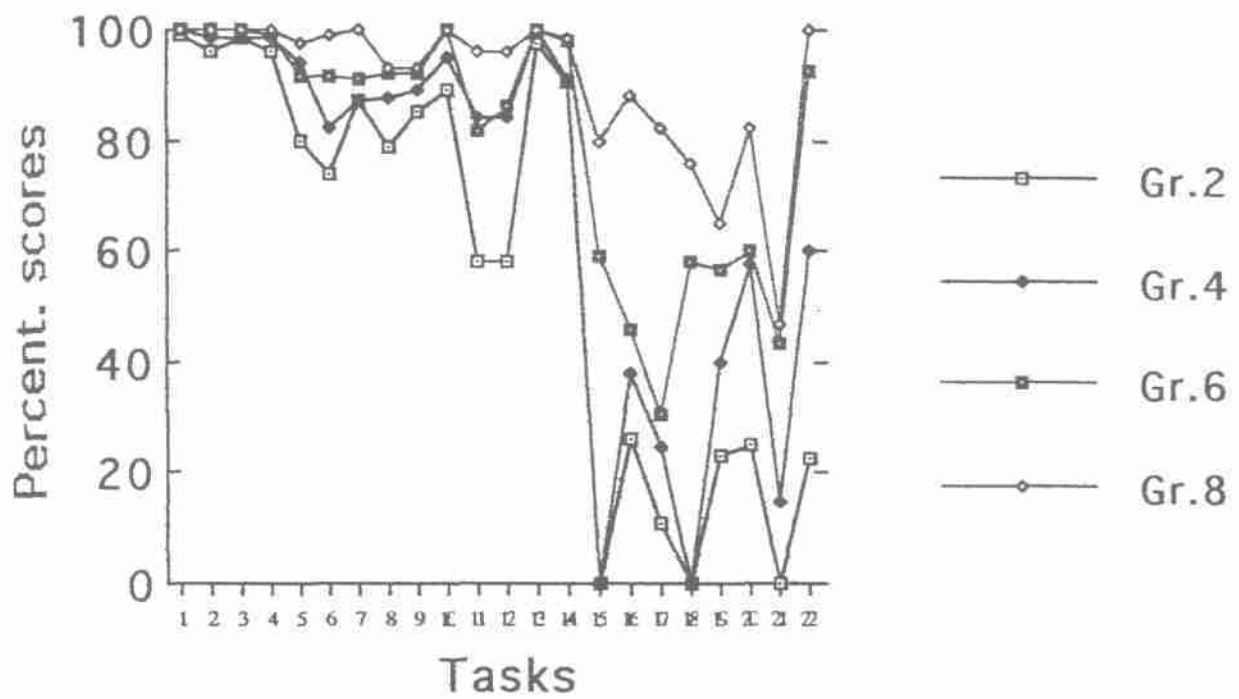
GRAPH 1·2 : Performances of the classes II, IV, VI and VIII on the test.

Table 2: Performance on perceptual discrimination tasks across eight groups

|		I	II	III	IV	V	VI	VII	VIII	MAXIMUM SCORES
Visual Discrimination I	Mean S.D.	13.6 .55	13.6 .89	14.0 1.71	16.0 1.22	15.8 1.10	15.6 .55	16.6 .55	16.6 .55	17
Visual Discrimination II	Mean S.D.	10.2 1.10	12.6 2.20	13.4 1.95	14.0 1.00	14.0 1.00	15.6 .89	15.8 .84	16.8 .45	17
Auditory Discrimination	Mean S.D.	22.2 .84	26.2 1.79	25.8 1.10	26.2 1.48	29.6 .55	27.4 1.14	30.00	30.00	30

As seen in the Table 2, the perceptual discrimination scores increased gradually from group I to VIII. In visual discrimination the minimum scores obtained by group I are 13.6 and 10.2 (for form A and B respectively), reaching the maximum score of 16.6 and 16.8 (for form A and B respectively) in group VIII. A consistent increase in scores is obtained for auditory discrimination also, where the minimum score is 22.2 and the maximum 30, which was obtained by the subjects of group VII onwards.

The qualitative analysis of visual discrimination test showed the following errors:

1) The error of size which constituted c/C and j/J confusions are seen across groups.

2) Orientation and visually similar letter confusion error were obtained in classes below 7th standard. However the frequency of occurrence of these errors is more in class first and second (orientation error; 8/B, 9/P, Ɔ/C and visually similar confusions n/m) .

3) The discrimination of shapes was relatively better in all the classes, although subjects below sixth class presented scattered errors in three types of shape pattern which are:
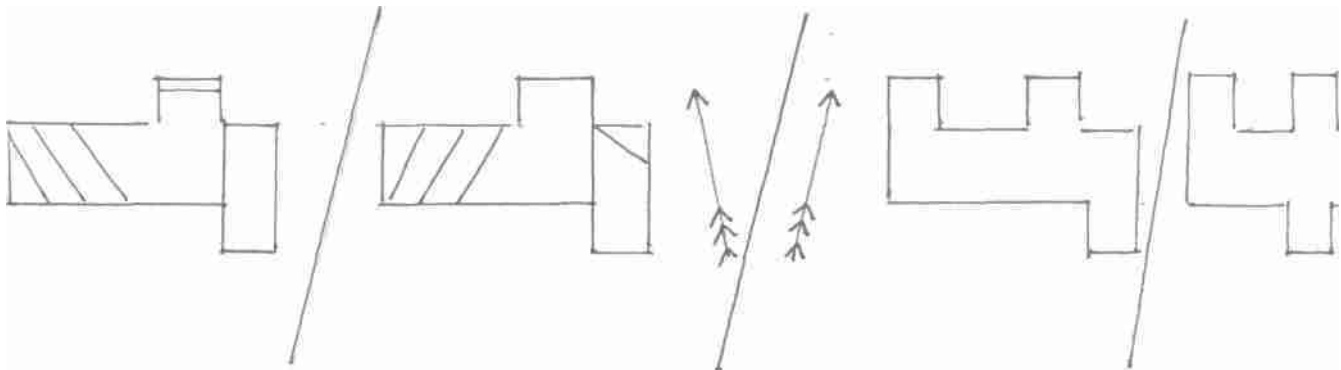
4) Errors of visual similarity was commonly seen (Sod/Sob, tobay/today, drwiltz/brwiltz, noisten/moisten), although a few subjects also showed recurring feature omission example: dentaly/dentally.

5) Error of order was presented by all the subjects example: Conutrified / Countrified.

6) The variation in scores across classes reflects the frequency of occurance rather than the quality or errors.

On the other hand, in auditory discrimination task, two types of error pattern were found:

1) difficulty with final consonant distinctive minimal pair; Pat - Pad, Mean - Meal, rod - rot.

2) Difficulty with medial vowel distinctive minimal pair; jet - jut, seal - sail, pet - pat, fare - fear, heat - hit.

One subject from class fourth and sixth each, showed difficulty in recognizing similar words; forgot - forgot, from - from.

Figure 2.0 represents performance on perceptual discrimination tasks. As seen in the bar diagram there is a gradual increase in the performance level of each subtest. In class I the performance on visual discrimination A is the best, followed by auditory discrimination and the visual discrimination B. On the other hand by eighth class the auditory discrimination is 100%, followed by visual discrimination B and then visual discrimination A.
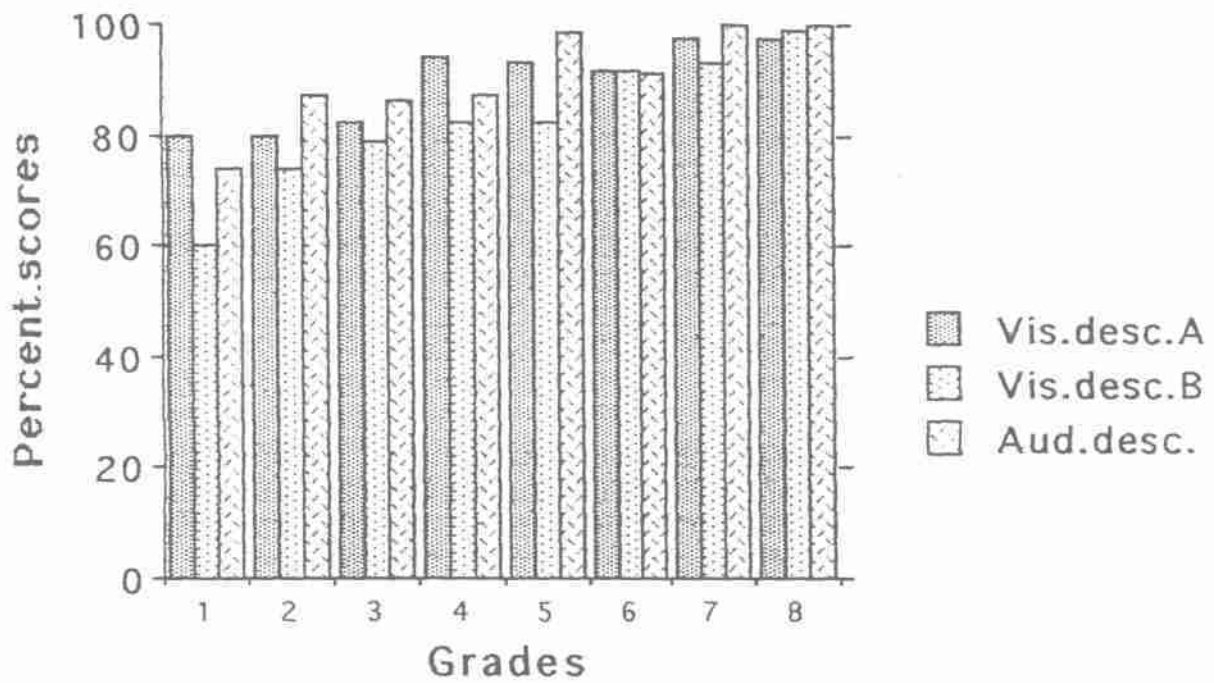
GRAPH 2: Performance of the eight classes on the Perceptual discrimination tests.

Table 3: Performance in Alphabet Generation and Recall   Test

		I	II	III	IV	V	VI	VII	VIII	MAXIMUM SCORES
Auditory Identification upper case	Mean S.D.	24.8 .45	25.8 .45	25.8 .45	26.0 0	26.0 0	26.0 0	26.0 0	26.0 0	26
Auditory Identification lower case	Mean S.D.	20.4 1.67	25.0 .71	25.2 .45	25.6 .89	26.0 0	26.0 0	26.0 0	26.0 0	26
Auditory recall upper case	Mean S.D.	24.8 .84	25.6 .55	25.6 .55	25.6 0.89	26.0 0	26.0 0	26.0 0	26.0 0	26
Auditory recall lower case	Mean S.D.	22.0 1.22	25.0 .71	25.2 .45	25.6 .89	25.6 .89	25.8 .45	25.8 .45	26.0 0	26

As seen in Table 3, the scores obtained in alphabet test are good across the classes. Beginning with the minimum scores of 24.8 and 20.4 in class I (for auditory identification of upper and lower case respectively), the maximum score of 26 was obtained in class IV and V for upper and lower case letters respectively.

Similarly for auditory recall test class I presented minimum scores of 24.8 and 22.0 and the maximum score of 26 was reached by class V and VIII for upper and lower case letters respectively.

The error analysis of alphabet test showed following results:

1. Most of the children had difficulty in auditory identification of capital 'D'. Subjects from class first had difficutly in auditory identification of T, M and D.

2. Subjects from first four classes showed b/d and i/1 confusions in auditory identification of lower case. Maximum number of errors were shown by group first which include visual similarity confusion (b/d, p/q/g) and other errors like v, t, a and y.

3. Auditory recall (upper case) of letter '1' was common across classes. Substitution of I by L was seen. In addition subjects of class first had difficulty in recall of visually similar letter E and F.

4. In auditory recall of lower case, common error obtained were i/1 and e/g. However subjects of class first showed difficulty in recalling letters; d, n, f, r and b.

The figure 3 depicts the performance of eight classes on the alphabet test. The overall performance on this task is good and the hundred percent score is obtained by class fourth. In lower classes the auditory identification and recall of lower case letters was difficult compared to the upper case letters.
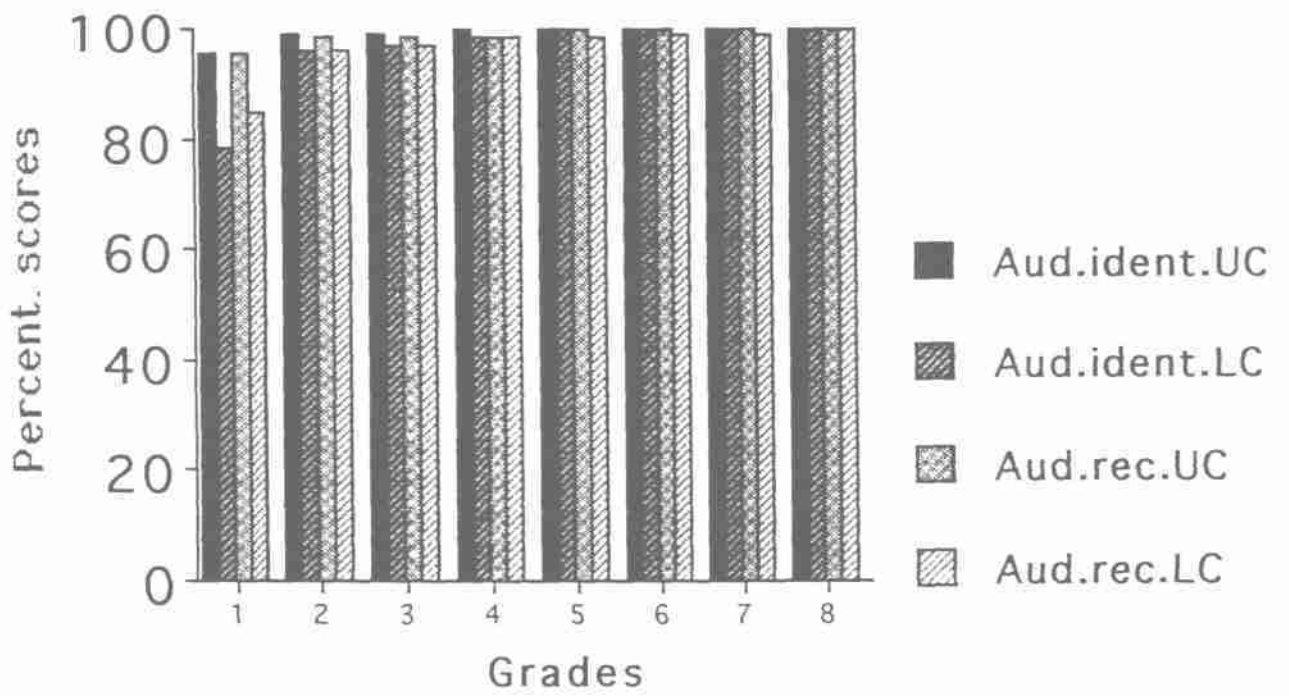
GRAPH 3 : Performance of the eight classes on the alphabet generation and Recall test.

		I	II	III	IV	V	VI	VII	VIII	MAXIMUM SCORES
Beginning consonant	Mean iS.D.	9.0 1.58	14.2 .84	15.0 1.22	15.8 .84	16.6 .55	16.6 .55	16.8 .45	16.8 .45	18
Ending consonant	Mean S.D.	7.0 .71	12.8 .84	11.6 1.14	13.4 .55	13.4 .89	13.8 .45	13.6 .89	14.0 1.0	15
Blends	Mean 'S.D.	8.4 1.52	17.8 .84	18.0 1.41	19.0 1.00	19.4 .89	20.0 0	19.8 .45	20.0 0	20
Long vowel	•Mean S.D.	1.6 5.50	5.8 1.30	6.8 1.64	8.4 .55	8.8 .84	8.2 .84	8.2 .84	9.6 .58	10
Short vowel	Mean •S.D.	4.0 .71	5.8 1.48	7.8 1.30	8.4 .55	9.4 .89	8.6 1.67	9.6 .55	9.6 .89	10

In phoneme grapheme correspondence test - I wide range of scores between class first and eight were obtained. A gradual increase in scores was seen in all the tasks. Beginning with minimum scores of 9 and 7 in class first for beginning and ending consonants respectively, the maximum scores of 16.8 and 14.0 are obtained by class VIII for beginning end ending consonants. In both of these tasks 100% scores are not obtained even at eighth class. In Blends, there was sudden increase in scores from 8.4 to 17-8 between class first and second, after which the scores progressed steadily, reached plateau at class fourth, followed by **a** dip in scores at seventh class and ceiling of scores again at eighth class. Identification of vowels also progressed steadily, with minimum scores of 1.6 and 4 obtained at class first for long and short vowels respectively and maximum

score of 9.6 at class eighth for both long and short vowels. However a maximum score of 10 wasn't reached by class eighth for both long and short vowels.

The common errors seen in phoneme grapheme test I are summarized below.

1) Confusion of w/v as in the word wine was seen in all the classes (especially classes sixth, seventh and eighth displayed only this error).

The subjects from classes below sixth class also showed errors like J/Z as in the word zoo and C/K as in the word Kit. This indicates that substitution of sound alike letters is predominant.

In addition class first subjects presented another pattern of error where upon initial consonant is substituted by the following letter.

    Example :   M/H   (HAM)

                 O/P   (POUND)

                 O/G   (GONE)

                 0/Z   (ZOO)

2) In the recall of ending consonants, substitution of S/Z (Yazz) and e/y (thirty) was shown by all the classes but errors like h/m (ham), e/1 (pastel), u/w (new), e/r (door), e/f (muff) k/g (rig) were not infrequent.

One of the subject from class first showed orientation error in which writing the ending consonants example:

ʞ/K, ꓘ/L, Ƨ/s, ꓕ/t.

3) Blends of S and C (Sw, sl, Sh, Cr and cl) presented difficulty to the subjects across all the classes. The subjects substituted k/c for blends of C.

   Example : kl/cl, kr/cr.

   Maximum number of errors were obtained from class first; kr/gr, kl/cl, kr/cr, tz/tr, kl/gl and overall difficulty with 'blends of 'S' .

4) In long vowels most of the subjects had difficulty in grapheme correspondence for vowels : (i) in the word heat, (o) in the coax, (ai) in the word dine, (u) in the word fume and (u) in cute.

   A few subjects showed difficulty in grapheme correspondence for vowel (e) as in the word safe.

   In general sound-symbol correspondence for vowel :au: and :ai: was good as in the words hot and rice.

5) In sound symbol correspondence of short vowel, the difficulty in vowel :i: and io: was common across classes.

   :i: - as in kit where e/i substitution was seen,
   :o: - as in watch where o/a substitution was seen.

The difficulty in correspondence vowel /ə/ was seen in classes below fifth. Example: a/u (cut), a/u (bug).

Errors in vowel (æ) was presented only by subjects from class first as in words sat and pack.

Figure 4 depicts the performance on phoneme grapheme correspondence I. The performance on all the tasks increases gradually from less than 50% scores in first class to more than
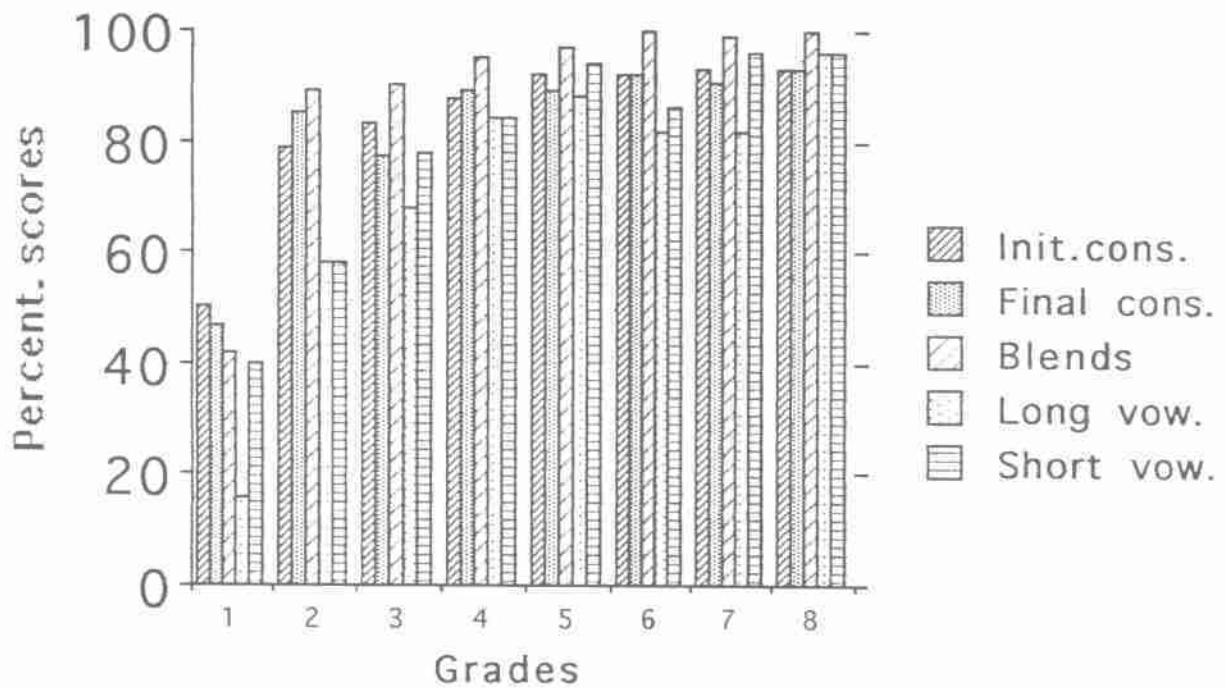
GRAPH 4 : Performance of the eight classes on the phoneme - grapheme correspondence I.

90% scores in eighth. The subtests involving consonants scored better compared to the vowels. The identification of long vowel was difficult compared to short vowel across the classes. The performance on blends subtest was poor compared to initial and final consonant subtest in the first class but in the later classes scores on blends were better than the other subtests.

Table 5: Performance on Phoneme Grapheme correspondence - II

		I	II	III	IV	V	VI	VII	VIII	MAXIMUM SCORES
Identification of beginning consonant	Mean S.D.	28 .2 .45	29.2 •45	30 0 0	30.0 0	29 .6 .55	30.0 0	30.0 0	30.0 0	30
Identification of ending consonant	Mean S.D.	23 .0 1.00	27.2 1.62	27 2 «84	27.4 1.67	28 .2 2.17	29 .4 »89	29 .0 .71.	29 .6 .55	30
Identification medial vowel	Mean S.D.	0 0	0 0	0 0	0 0	4.6 .08	5.9 96	7.4 1.52	8.0 1.06	10

As seen in the Table 5, there is a variation in the progression of scores of consonants and vowel identification. In the identification of beginning and ending consonants, the scores begins with the minimum of 28.2 and 23 in class first and reach the maximum of 30 and 29.6 in class third and eighth for beginning and ending consonant respectively. Identification of beginning consonants reach maximum score at an early stage, that is class third, whereas maximum scores for ending consonants was not obtained even at eighth class. On the other hand, for identification of medial vowels, the minimum scores of 4.6 was

not obtained until class fifth and the maximum score obtained by class eighth was 8.

The following pattern of errors were seen for the above tasks:

1) Most of subjects had difficulty in identification of beginning consonant !w! as in the word wear.

2) Erroneous recognition of ending consonant due to silent e' at the end of the word; example; rose, white, late, care.

3) Difficulty in identification of final consonants which were almost silent.

Example: bear, clever.

4) erroneous identification of ending consonant in words which begin with the target letter example.

S : Sat (   )

5) Subjects from class second and fifth had difficulty in identification of medial vowels (a, e, i, o, u) almost fifty percent of the time, while class seventh and eighth showed errors in vowel !a! and !i! mainly. Two types of errors were seen in medial vowel identification.

i) difficulty in distinguishing words which differ in terms of long and short middle vowels example: couldn't differentiate call from cod, mop.

ii) difficulty in distinguishing words whose middle sound is different but are written similarly example : couldn't differ mule, yule from but, couldn't differ grind from cinder.

Figure 5 shows the performance of subjects on phoneme grapheme correspondence II. Its clearly seen that , (the performance on identification of initial and final consonant was good across all the classes with only class I scoring below 80% whereas positive scores for medial vowels weren't obtained until class fifth. The identification of medial vowels increased gradually but the 100% scores couldn't be obtained even at class eighth.

Table 6: Performance on Structural Analysis

		I	II	III	IV	V	VI	VII	VIII	MAXIMUM SCORES
Level I	Mean	0	2.6	4 0	3.8	4.4	4.6	5.4	8.8	10
	S.D.	0	_55	1 .00	.84	.55	1.95	1.95	1.34	
Level II	{Mean	0	2.8	4 .4	6.4	7.4	8.0	14 .8	21.4	27
	S.D.	0	_84	1 14	3.04	2.51	2.35	2.71	1.52	
Level III	Mean	0	0	0	0	2.6	5.8	6.8	7.6	10
	S.D.	0	0	0	0	.89	84	: 1.10	1.52	

As seen from the Table 6, this is one of the most difficulty tasks which could not be successfully attempted until after class first for level I and II and class fourth for level III. Beginning from the minimum score of 2.6 and 2.8 in class second for Level I and II respectively, the maximum scores of 8.8 and
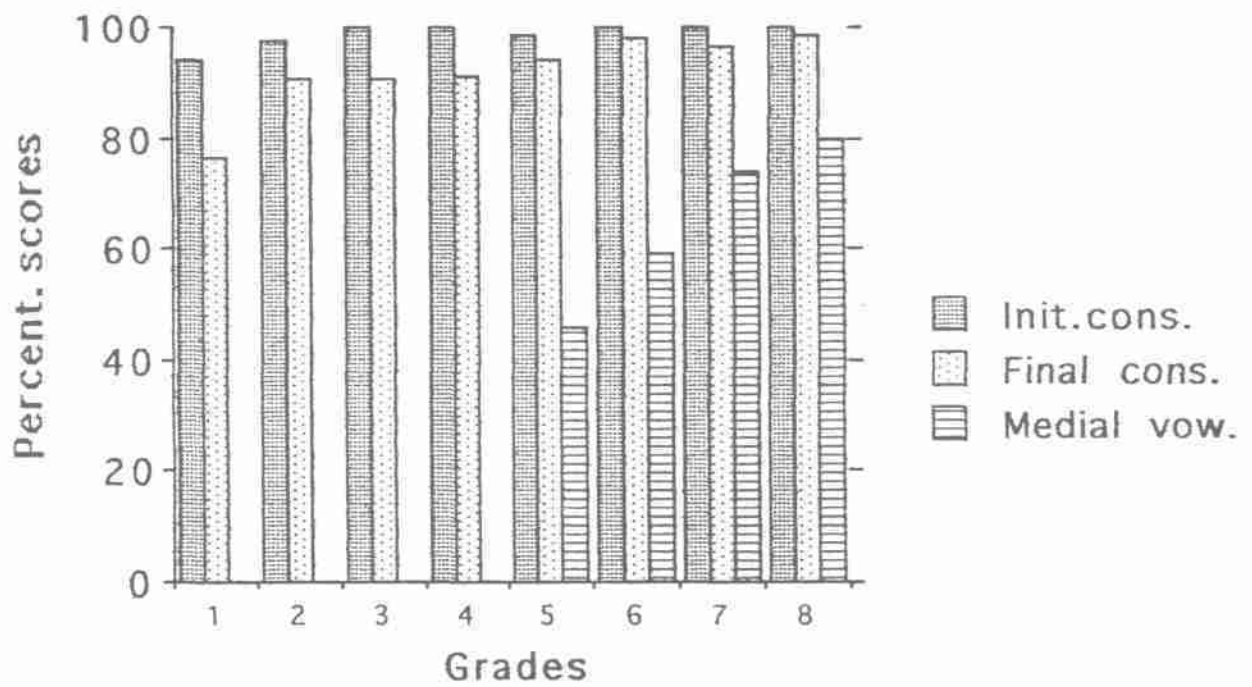
GRAPH 5: Performance of the eight classes on the phoneme - grapheme correspondence - II

21.4 were obtained by eighth class. The minimum score of 2.6 for Level III couldn't be obtained until fifth standard and the score obtained at eighth standard was 7.6. In all three levels of structural analysis, hundred percentage scores couldn't be reached.

The qualitative analysis of the errors showed the following pattern.

1) Level I:

The subjects from first class couldn't perform the task, their comprehension of sentences was also poor. Even at the level of second class, the scores were poor and the subjects filled only coming, go, runs in the appropriate sentences.

From class third to sixth, most of the subjects presented difficulty in the choice of

    1) past tense marker as jumped, flew
    2} comparatives : as in biggest, taller
    3) plurals : such as children.

By eighth class, performance was better with errors made only in unfamiliar past marker (flew) and plurality marker (children).

2) Level II:

The emergence of affixes for plurality and tense marker were the first to appear and they were stabilized by seventh standard. The kind of error seen could be analyzed in following terms.

a) In plurality markers, substitution by possessives was seen:

example : baby's / babies

             ruler's / rulers

b) In tense marker more errors were in unfamiliar / irregular words like "flew" and functional tense marker like "were".

The comparatives were not identified by the subjects until class third and the stabilization of comparatives was not seen even by eighth class. The subjects made two types of error.

1) Inability to identify abstract comparatives

    example : Happier.

2) Generalization of markers of comparatives to non-comparative words.

    example : recognition of "painter" as comparative.

The response for negative markers was obtained only after third class and "un" and "dis" were identified first by the subjects. Identification of 'II* and 'Im' as negative marker was obtained only by the older subjects. However by eighth class, all the subjects could identify the negative markers.

Identification of affixes for again (re-) was obtained first from the subjects of sixth class but wasn't stabilized by eighth class.

The marks for against (anti-) before (pre-) and with (co-) were also identified first by subjects from seventh class and

weren't stabilized by eighth class

3} Level III:

This is one of the most difficult tasks and couldn't be administered on subjects from first to fourth class. The younger subjects couldn't perform the test even when the instructions were given with examples.

Most of the subjects had difficulty in identification of root and non-root word, for the following words:

1) **Listed Unlisted relisted**   **Listen**
            |
 ||
           v   v
    root words   non root word

2) **parental, parents**   **transparent**
           ||
           ||
           v   v
    root words   non root word

Identification of non root words like painter, ready and kindling from other root words was easier for most of the subjects.

The performance on structural analysis test is represented in figure 6. (Tit follows a gradual upward progression for all the subtests. All of the subjects except class first scored maximum in the part A followed by Part B and then Part C. The subjects from class first couldn't perform any of these tasks as the **structural** analysis skills require certain amount of exposure to language. Positive scores for Part C were obtained only from class fifth onwards.

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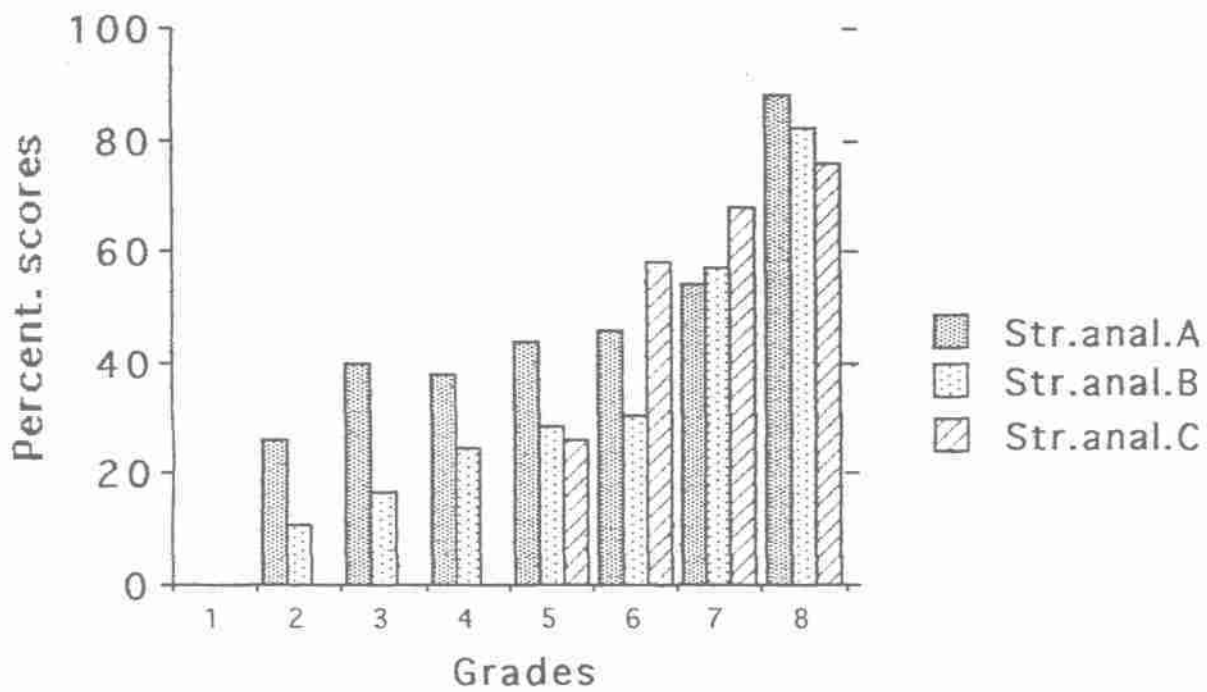
GRAPH 6 :   Performance of the eight classes on t
Structural Analysis test.

Table 7 : Performance on Blending and Syllabication

		I	II	III	IV	V	VI	VII	VIII	MAXIMUM
Blending Level I	Mean S.D.	0 0	2.8 .84	4.2 .84	4.8 1.10	5.0 1.00	6.8 .45	6.8 .84	7.8 .45	12
Blending Level II	Mean S.D.	0 0	2.0 .71	3.4 .89	4.6 .89	4.4 .55	4.8 1.10	7.0 .71	6.6 .89	8
Syllabication	Mean iS.D.	0 0	0 0	0 0	1.8 1.3	3.2 .84	5.2 .84	5.6 .55	5.6 .89	12

As seen from the Table 7, the younger subjects have performed poorly in all the three metaphonological tasks. The scores for Blending test couldn't be obtained until class second, where the subjects obtained the minimum score of 2.8 and 2.0 for level I and II respectively. The performance score of eldest subjects were 7.8 and 6.6 for level I and II respectively.

The syllabication test was found to be even more difficult than blending and the subjects couldn't attempt these successfully until class fourth. Beginning with the minimum score of 1.8 at class fourth, the subjects reached the maximum of 5.6 by eighth class. In none of the tasks, the subjects could obtain hundred percent performance score.

The error analysis of metaphonological skills showed the following results:

1) Most of the subjects had difficulty in blending picture and letters to form words like battle, slid, swarm and road.

The subjects from second standard could blend stop potter and slipper easily.

2) None of the subjects could blend trisyllabic word except from class eighth.   These words were

$$Directions = di + rec + tions$$
$$Silently = si + lent + ly$$

3) The common error seen across classes were on the blending of two words, which are

$$Pitcher = Pic + ture\ was\ substituted\ for\ Pi + tcher$$
$$Nitrate = night + rate\ was\ substituted\ for\ ni + rate$$

4) Blending of the words strite (str + ite) and stringent (strin + gent) was the most easiest.

5) Syllabication of the three bisyllabic words; whole + some, round + ed and float + ing was easiest and the subjects from second class could divide them into syllables.

However syllabication of words innocent (inno + cent) and battle (bat + tle) was not done until class sixth.

6) Syllabication of trisyllabic words could be done only by subjects of class eighth.

example: Unshrinkable = Un + shrink + able

The performance on blending and syllabication is represented in figure 7. Similar to the structural analysis, the subjects
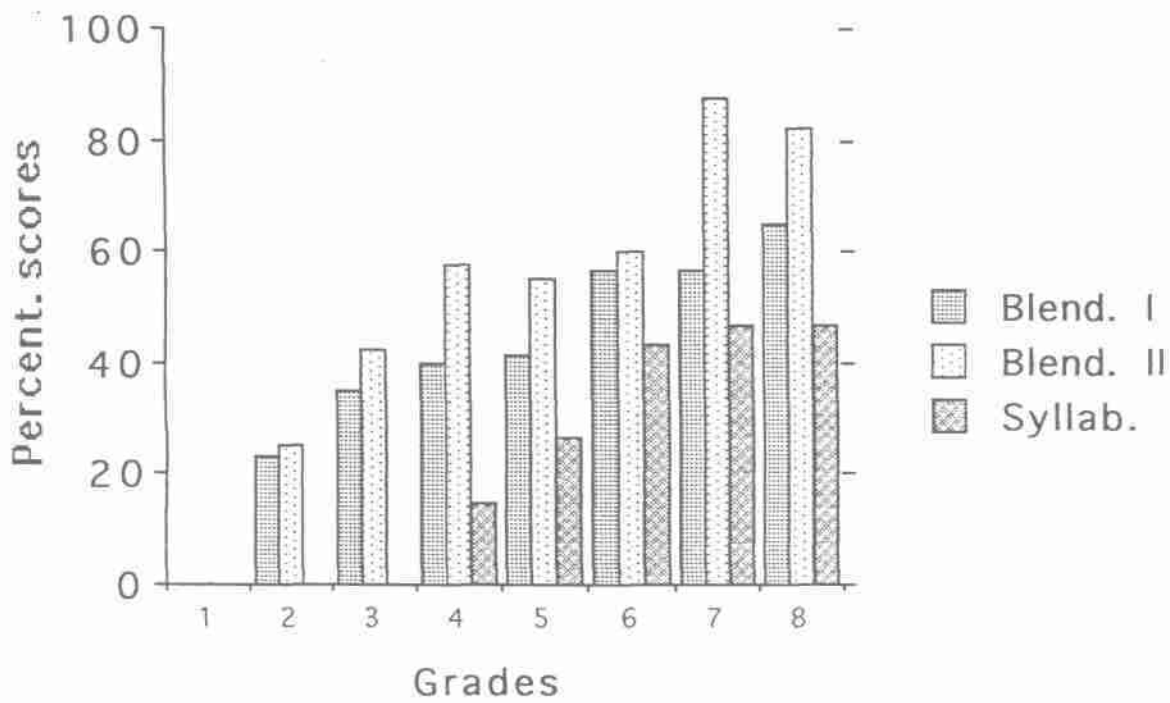
GRAPH 7 : Performance of the eight classes on Blending and Syllabication test.

from class one couldn't attempt any of the tasks. All the subjects scored better in blending II compared to blending I. The syllabication task followed a progressive course, beginning at class four.

Table 8: Performance on Oral Reading

	MAX		I	II	III	IV	V	VI	VII	VIII
Oral reading	16	Mean S.D.	0.4 .55	3.6 .55	6.2 1.79	9.6 1.67	12.6 1.67	14.8 1.79	15.6 .89	16.0 0

The scores for oral reading increased gradually from the minimum score of .4 in class first to the ceiling of scores in class eighth with the maximum score of 16.

The subjects from first and second classes could read only first level passage. However there was considerable difference between the two. The subjects from first class read letter by letter, and they weren't fluent. They couldn't join letters to form words except very simple words like sun, is, are, yes, no, nine, etc. Reading comprehension was found to be poor. Only two subjects attempted to answer the questions after a lot of prompting.

On the other hand, subjects of class II read passage I with some amount of fluency. They read by putting stress on each word and were unaware of punctuation marker as simple as full stop. Mis pronunciation were also plenty like

Forks/Frocks

Bhaksar/Bhaskar

Finds/Friends

Reading/Riding

Bangles, daddy and Subhas etc were distorted.

Two of the subjects exhibited tendency to skip I.

Inspite of oral reading shortcomings, comprehension was found to be fairly good as they could answer atleast three questions. But again answers were given by pointing to the line concerning the answer.

Children from III standard could read and answer the questions from passage one with least resistance. However passage two reading was interspersed with lots of mispronunciation on words like Subhas, Let's, clothes, mummy, bangles, beautiful, bought etc. They couldn't answer all the question from second passage except two of them.

Children from IV standard could answer all the questions from second passage and atleast 2 from third passage inspite of numbers of errors in oral reading.

By V standard children could read and answer all the questions from third passage. A few could also answer atleast one question from fourth passage. As seen in earlier classes answers were given by reading the lines concerning them without making an effort to formulate them. Oral reading was

predominated with mispronunciation of words like crane, pond, beak, nearby, agreed, wicked, thought, etc.

The subjects from VI and VII standard performed almost at an equal level except may be the comprehension was better for VII class students as they could answer more questions correctly. Both the classes exhibited fairly good oral reading, other than mispronunciation of multisyllabic and difficult new words like propellers, rudder, designed. Orville, glider, advanced, wright, etc.

The grammatical formulation of an answer first appeared at VII standard.

Oral reading of the oldest subjects was fairly fluent. But they exhibited tendency to falter at multisyllabic and new words like propellers, rudder, Orville etc. Almost all of them answered by proper grammatical formulation. But they showed inability to expand on or elaborate the answer beyond what's given in the passage e.g. when asked "How is modern day flight?" They answered by referring to single line:

The modern day flight is comfortable.

The performance on oral reading task is represented in figure 8. It's clearly visible from the bar diagram that the reading followed a gradual upward course with the increase in educational level.

The analysis of the above tables indicated that reading skills follows a predictable developmental sequence. Certain

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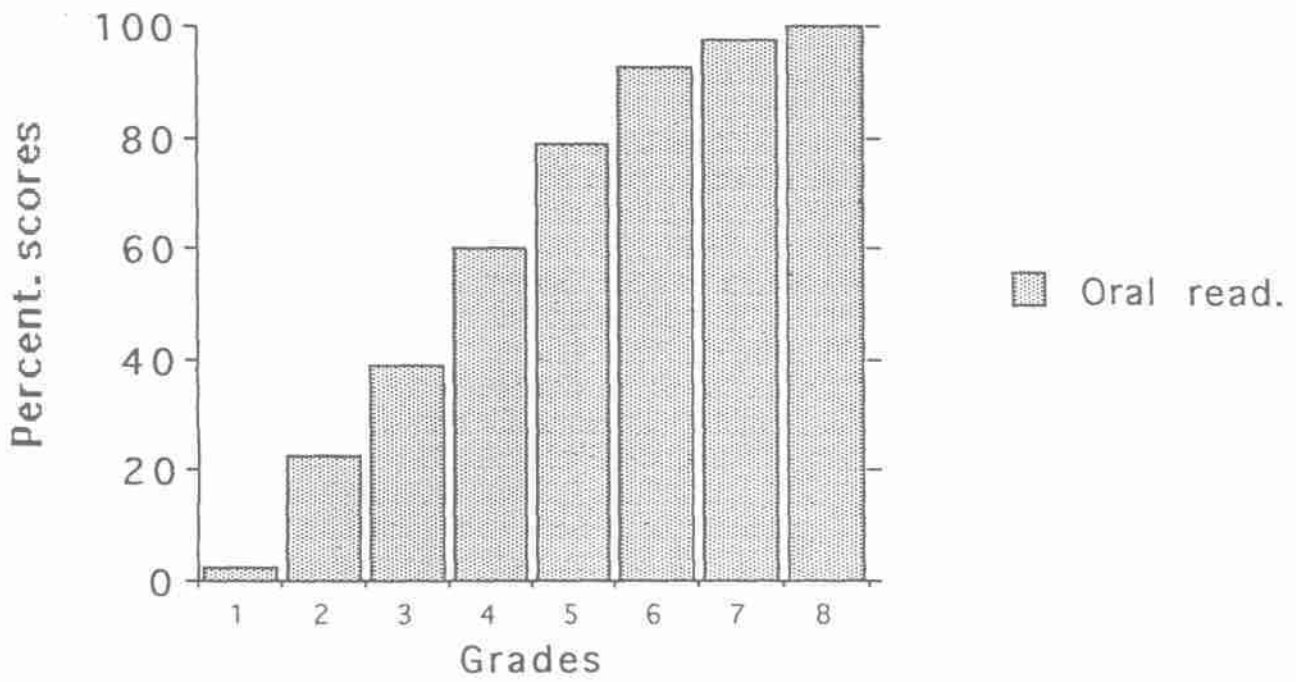
GRAPH 8 : Performance of the eight classes on the Oral reading.

abilities are acquired in the early school years, which include alphabet generation and recall, perceptual discrimination and identification of beginning and ending consonants. On the other hand there are a few skills which could not be achieved until the end of primary school years. These skills are identification of root/non-root words, medial vowels and syllabication which started appearing only from class fourth and fifth onwards. However there were few tasks in which gradual but consistent progress was seen from class first to eight") these skills were: phoneme-grapheme correspondence of beginning and ending consonants, blends, long and short vowels and oral reading. The pattern of progression for structural analysis and blending, Level I and II was such that the subjects didn't start performing until the second class.

The data obtained is in consonance with normal development of reading skills. The subjects of the study showed an early acquisition of perceptual discrimination skills; alphabet generation and recall and identification of beginning and ending consonants. These are the most plausible results as in the initial experience with any language the learner becomes sensitive to the perceptual discriminative skills and alphabet system of the language. The visual and auditory discrimination skills are pre-requisites to the reading and usually are acquired in pre-school years by native speaker of English. However in the present study perceptual discriminative skills were acquired during early school years as the subjects were exposed to English only at school. The instruction of English begins with alphabet

teaching. The exposure to alphabet system in the early school years resulted in early acquisition of alphabet generation and recall skills and identification of beginning and ending consonant. Naming of the letters of the alphabet is also an important part of the process towards the learned association of particular letter (grapheme) with a given sound (Phoneme). The appearance of the phonic skills begins along with the alphabet abilities but proceed into the secondary school years. Phoneme-grapheme correspondence of beginning and ending consonants, blends, long and short vowels, followed the similar pattern of progression, these skills emerged in first standard but were not fully stabilized even at eighth standard except blends which were fully acquired by eighth class.

The structural analysis of words (which include inflectional parts) and blending (level I and II) abilities were not attempted until class second. This type of pattern was seen as these tasks require certain amount of exposure to the language. These skills function as independent word attack strategies and for their operation requires certain amount of exposure to language. Therefore the subjects from first standard couldn't perform these tasks, as they had no exposure to English before the beginning of instruction at class first.

The most difficult to acquire skills were identification of root/non-root words/ medical vowels and syllabication. These skills did not emerge until a certain amount of vocabulary was developed. By the end of early school years that is fourth and

fifth class, the children have enough exposure to language and vocabulary. Therefore they can identify root words, medial vowels and can operationalize sophisticated word attack strategies for reading rapidly expanding vocabulary.

Oral reading and comprehension progressed steadily from class first onwards. The simultaneous acquisition of phonics and decoding skills aids the upward progression of oral reading abilities. Therefore oral reading and comprehension improved across classes.

Thus the sequential progression of English reading skills is similar to but possibly later that of the native speaker of English. The subjects taken for the study were representative of Indian population who learn english only at school with no exposure at home. For most of the bilingual population of India, the formal instruction in English doesn't start until the beginning of school. This may be the reason for the delay observed in acquisition of all the reading skills which could otherwise be acquired early by the children whose mother tongue is English.

Any diagnostic tool is labelled successful only if it acts as a blue print for management. The results obtained by using "Informal Reading Diagnosis" also has its implications for the management and treatment of reading disabled. The mean scores can not only help identifying a reading disabled child but also in locating the area of reading difficulty and assist in making decisions about the overall plan of action. The information

about the sequential acquisition of reading skills can play a decisive role in selecting the goals for the management of

reading disabled according to their educational level. The reading skills which are acquired earlier and easily like perceptual discrimination and alphabet identification/recall can from the baseline from which the therapist can proceed to more complex tasks in sequential steps of acquisition.

SUMMARY AND CONCLUSION

SUMMARY AND CONCLUSION

This investigation is aimed to determine the sequential progression of English reading skill in Indian children.

Forty normal school going children studying in the class range of first to eighth were investigated. All of the subjects were Hindi speaking with their mother tongue as the same or Punjabi. They had no exposure to English at home and had starting learning English only in school.

The "Informal reading diagnosis" proposed by Rae and Potter (1973) was administered as it covers the major skill area of reading. It consists of a variety of reading skill tasks ranging from early acquired perceptual discrimination abilities to the more difficult structural analysis skills.

The data thus obtained was computed for each class separately. The analysis was done by deducing mean and standard deviation for each task, across the classes first to eighth. The mean percentage score were calculated for each task which were then used to graphically represent the performance of each class across different reading skills. The qualitative error analysis was also done to determine the pattern of errors exhibited at each class and task.

The results indicated that acquisition of reading skills followed the normal developmental pattern. The sequential

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progression of reading skills was in consonance with acquisition of reading by native speaker of English. However a lag was observed in all of the skills. This is attributed to the fact that the English reading instruction and exposure to the language begin, only in the school, for these children. The perceptual discrimination abilities and alphabet identification and recall skills which are usually acquired in pre-school years or by beginning of school, were acquired in early school years by these children. Similarly phoneme grapheme correspondence of beginning and ending consonants, long and short vowels and oral reading skills followed a slow but steady progression and extended into the secondary school level, that is eighth standard. Identification of root words, medial vowels and syllabication didn't emerge until fourth and fifth class as these skills require certain amount of vocabulary and experience of the language.

Therefore we should be cautious while administering western based reading tests on an Indian population. The difference in the developmental milestones of English reading skills between Indian and English speaking population should be considered crucial because it posists the danger of placing a normal Indian child into the reading disabled category. While evaluating any children, its imperative to collect the background information about the mother tongue, exposure to language and medium of instruction at school.

This normative data could be used for evaluating Indian

children who are exposed to English only at school and belong to a middle socio-economic background.

As the time available for the study was very short only five subjects were tested from each class. Further study can be done using more number of subjects to find out the percentile ranks for each class in all the tasks. This would help to grade the performance of a child.

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APPENDIX

#					
9.	(figure)	(figure)	(figure)	(figure)	(figure)
10.	N	V	M	A	N
11.	B	B	D	B	C
12.	J	J	ſ	J	⌐
13.	W	W	M	V	A
14.	F	b	B	D	P
15.	c	d	c	C	ɔ
16.	m	n	h	m	n

VISUAL DISCRIMINATION TEST: LEVEL 11

Name

A.	bp	bq	pd	bd	bp
B.	mnn	mnm	nmm	mnn	nnm
1.	gh	gn	ph	bh	gh
2.	sob	sbo	bos	sod	sob
3.	not	ton	not	hot	toh
4.	bad	bab	bad	bob	dad
5.	pot	got	pot	top	tog
6.	pen	gen	pon	nep	pen
7.	awb	baw	amb	awb	awb
8.	still	still	still	still	ztill
9.	today	tobay	tadoy	dayto	today
10.	brwiltz	drwiltz	brwildz	brwiltz	brwlitz
11.	moisten	noisten	moistem	moisten	miosten
12.	running	runing	runninq	running	running
13.	dentally	dentaly	dentally	bentally	dentaly
14.	beautiful	beuatiful	deautiful	becutiful	beautiful
15.	discriminate	disoriminate	discriminate	discrininate	biscriminate
16.	rutherford	rufordther	rudrofther	rutherford	rutherford
17.	countrified	conutrified	countrified	counfiedtri	countritrified

Auditory Discrimination

1.	Pat – Pad	16.	got – hot
2.	Sun – Sum	17.	big – bit
3.	Cat – hat	18.	Some – Some
4.	but – but	19.	Sum – dumb
5.	meal – mean	20.	come – come
6.	pet – pat	21.	jet – jut
7.	rod – rot	22.	chair – share
8.	dig – dug	23.	Seal – sail
9.	Sat – Sat	24.	forgot – forgot
10.	jug – rug	25.	heat – hit
11.	cut – cat	26.	jim – tim
12.	good – good	27.	feel – feel
13.	ben – bed	28.	bat – bat
14.	fare – tear	29.	read – real
15.	more – more	30.	from – from

ALPHABET TEST: IDENTIFICATION LEVEL
PART A: UPPER CASE

Name_____Grade

1.	A	D	C	R	B	C	P
2.	!_'	M	N	E	M .	Q	C
3.	I	T	F	Z	R	B	N
4.	S	G	F	Z	A	L	X
5.	V	Z	T	K	F	L	W
6.	C	N	0	S	P	Q	B
7.	X	V	R	J	N	W	K
8.	C	N	I	M	E	S	F
9.	K	B	H	E	L	F	Z
10.	I	L	J	B	N	K	R
11.	M	W	P	B	Z	N '	U
12.	N	VV	T	Z	M	L	V
13.	A	B	D	S	G	Z	D
14.	I	P	Q	N	B	G	D
15.	D	K	Q	R	P	3	G
16.	W	X	Z	V	Y	L	W
17.	C	R	H	U	D	Q	0
18.	0	D	N	M	G	R	Q
19.	Y	V	A	W	M	N	X
20.	H	T	I	E.	L	B	D
21.	M	N	V	W	H	E .	F
22.	V	N	M	U	R	Q	C
23.	V	U	Z	G	B	W	V
24.	R	G	F	M	N	D	H
25.	L	R	A	E	i	H	T
26.	Q	L	B	F	P	V	X

Grade .

1.	q	l	b	f	P	v
2.	t	r	a	e	i	h
3.	r	g	f	m	n	d
4.	v	u	z	g	e	w
5.	v	n	m	u	r	q
o.	m	n	v	w	h	e
7.	h	t	i	f	l	b
8.	y	v	u	w	m	n
Q.	0	d	n	m	g	r
10.	c	r	h	u	d	g
11.	w	x	z	v	y	3
12.	d	k	q	r	p	b
13.	l	P	q	n	b	g
14.	a	b	d	s	g	z
15.	n	w	t	z	m	t
16.	m	w	P	b	z	n
17.	i	l	j	b	n	k
18.	k	b	h	e	l	f
19.	c	n	i	m	e	s
20.	x	v	r	j	n	w
21.	c	n	0	s	P	q
22.	v	z	t	k	f	l
23.	s	g	f	z	a	l
24.	i	t	f	z	r	b
25.	l	m	n	e	u	q
26.	a	d	c	r	b	c

PART A : UPPER CASE

1.	A	R	V	N
2.	W	T	C	P
3.	F	L	T	K
4.	W	M	N	D
5.	P	D	B	C
6.	R	P	Q	O
7.	Q	S	C	G
8.	I	X	L	M
9.	S	T	U	V
10.	V	W	A	X
11.	M	A	F	B
12.	P	B	C	D
13.	G	T	H	D
14.	D	P	Q	J
15.	Y	R	N	W
16.	L	M	Z	U
17.	T	S	C	P
18.	V	L	X	K
19.	X	Z	Y	D
20.	B	D	C	E
21.	N	E	H	M
22.	G	C	D	U
23.	R	T	P	F
24.	H	E	X	L
25.	V	U	W	M
26.	K	Y	E	Z

PART B : LOWER CASE

1	k	y	e	z
2	v	u	w	m
3	h	e	x	l
4	r	t	b	f
5	q	c	d	u
6	n	e	h	m
7	b	d	c	e
8	x	z	y	d
9	v	l	x	k
10.	t	s	c	p
11.	l	m	z	u
12.	y	r	n	w
13.	d	p	q	f
14.	g	t	h	d
15	p	b	c	d
16	m	a	f	b
17	v	w	a	x
18	s	t	u	v
19	i	x	l	m
20	q	s	c	g
21	r	p	q	o
22	p	d	b	c
23	w	m	n	d
24	f	l	t	k
25	w	t	c	p
26	a	r	v	n

PHONEME - GRAPHEME CORRESPONDENCE I

PART A : BEGINNING CONSONANTS

1. dog   4. pound   7. Sat   10. run   13. win   16. yellow

2. ham   5. band   8. vine   11. note   14. tall   17. jump

3. lamb   6. man   9. kit   12. fat   15. gone   18. zoo

PART B : ENDING CONSONANTS

1. nick   4. drop   7. ham   10. end   13. yazz

2. rig   5. barb   8. careless   11. new   14. muff

3. pastel   6 door   9. Set   12. men   15. thirty

PART C : BLENDS

1. blast   5. frog   9. trinket   13. slice   17. Swarm

2. brown   6. grass   10 closet   14. glance   18. sky

3. drop   7. plaster   11. Crack   15. Spice   19. sharp

4. fly   8 stare   12. price   16. smart   20. thin

PART D : VOWELS :- LONG VOWELS

1. safe   3. fume   5. rice   7. cute   9. coax

2. dine   4. Cope   6. cope   8. heat   10. hot

PART D : VOWELS : SHORT VOWELS

1. kit   3. pack   5. watch   7. Sick   9. bug

2. cut   4 fist   6. cob   8. stop   10. sat

PHONEME - GRAPHEME CORRESPONDENCE II

PART A : BEGINNING CONSONANTS

1. r	rattle	rumble	race	where	table
2. t	terrible	parable	tame	careful	tall
3. f	pancake	fan	done	yellow	five
4. m	fat	elephant	mouse	near	mean
5. w	water	winter	mind	nobody	wear
6. s	top	sun	sit	caught	ear

PART B. : ENDING CONSONANTS

1. s	light	useless	sold	cats	rose
2. d	rained	door	rub	had	friend
3. k	crank	king	back	kite	skirt
4. t	hat	tag	white	tree	late
5. r	rat	care	clever	road	bear
6. l	small	long	call	lie	nine

1.   bale   pack   safe

answer : bull , _make_

2.   cup   run   seem

answer : feel , _but_

3.   mutton   mule   yule

answer : _cute_ , but

4.   Grind   fin   like

answer : cinder, _finder_

5.   call   mop   cod

answer : _hot_ , roll

6.   Sole   mind   tote

answer : _hole_ , run

7.   site   '   set   fresh

answer: mint , _mend_

8.   gap   sat   pearl

answer : girl , _map_

9.   yes   bit   sit

answer : help , _mill_

10. feel   peak   nice

answer : _seek_ , find

STRUCTURAL ANALYStS TEST: LEVEL !

Name_____Grade

Sampte

    A. The_____were crying.
           baby   babies   babied

 1. The boy was_____the horse.
      ride   rided   riding

 2. !see many_____
      toys   toying   toy

 3. My balloon is the_____
      big   biggs   biggest

 4. The dog_____over the gate.
      jump   jumped   jumping

 5. He_____very fast.
      run   running   runs

 6. Joe is_____than Dick.
      tallest   ta!!er   taits

 7. He is_____home.
      come   corned   coming

 8. They wit! not_____together.
      goes   go   going

 9. The_____are coming soon.
      child   childs   children

10. The bird_____over the house.
      ftew   fiyed   Hying

STRUCTURAL ANALYSE TEST: LEVEL!!

Name_____Grade

1. Circte the word or words in each row that indicate more than one (plural).

   a. baby   babies   baby's   babied
   b. ones   cried   criers   crying
   c. thoughtlessness   rethought   thoughts   thoughtfut
   d. ruler's   ruling   rulers   unruled

2. Circte the word or words in each row that show past.

   a. jumped   run   walks   walked
   b. stopped   flew   is   eating
   c. were   come   listing   brusher

   Circle the word or words in each row that have a part (affix) meaning "more" or "less than."

   a. bigger   tali   fewer   high
   b. painter   smaller   manly   mixed
   c. paying   happier   frozen   reviews

4. Circle the words with the affix that means "not."

   a. happiness   unhaopy   happily   happening
   b. disoriented   reoriented   orienting   orienter
   c. uninterested   interesting   disinterested   reinterest
   d. illegal   legality   leger   legalistic
   e. practical   impractical   practically   practice

5. Circle the words with the affix that means "again."

   a. entering   reenter   unentered
   b. non-negotiable   negotiate   renegotiable

6. Circle the words with the affix that means "against."

   a. freezing   antifreeze   frozen
   b. antisocial   sociability   society

7. Circle the words with the affix that means "with."

   a. educated   coeducate   uneducated
   b. cooperate   operating   inoperable

8. Circle the words with the affix that means "before."

   a. paying   payable   prepaid
   b. viewed   preview   review

Name_____   Grade _____

Underline the root word in each of the following words if the root word is present. Put an X on the word that does not have the root in it. Look at the sample. Notice that recount, count- less, and uncounted have the same root and that country does not
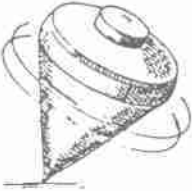
Sampte:
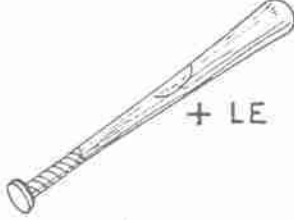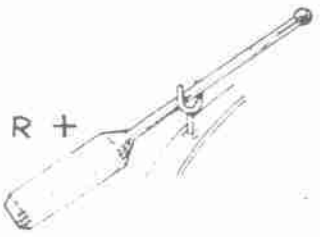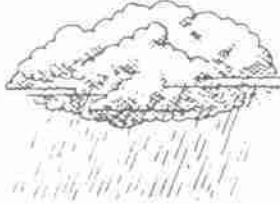
   recount   countless   uncounted

Now work the probtems be!ow in the same way:

1. unmarked   remark   marking   markproof

2. listen   unlisted   listing   relisted

3. alone   [oner   lonely   abalone

4. parental   parentless   transparent   parents

5. refasten   fasten   fastest   unfasten

6. eating   heater   eats   uneaten

7. kindly   unkindly   kindling   kindness

8. fanned   famous   famously   famine

9. painful   painless   painstaking   painter

10. reader   reread   ready   reading

Name _____ Grade _____

+ LE	+ TER	DE + BUY COKE
S +	SW +	R +
R + —T	T +	S +
S +	S + + ER	+ ICK

BLENDING TEST: LEVEL !!

Name –_____   Grade

1. str + ite   str + ide   str + eed

2. strin +- gent   string + ent   stri+dent

3. pit +fuit   pic +ture   pit + cher

4. ni + trate   night + rate   ni + rat

5. de +code   decc+ ode   de +cod

6. dir + ecttions   di + recttons   di +rec+tions

7. sit rent + ly   si + tente -+ ly   sit +entl +y

8. ban +dan ra   band + anda   ban +da + na

SYLLABiCATiON TEST

Name_____   Grade

Read each word betow and divide it into syllabies by drawing
a line between each syllable. For example, "undelivered"
must be divided into four syllables like this: un/de/liv/ered. Di-
vide each word beiow in the same way.

1. d e v e l o p   7. unshrinkable

2. wholesome   8. recharged

3. speedometer   9. innocent

4. rounded   10. battle

5. lighter   11. interpret

6. floating   12. unsuspecting

Today is Monday. It is half past nine. The Sun is shining in the sky. Raju and Bhaskar are going to schooL They are friends. Are they carrying bags ? Yes, they are. Are they riding bicycles? No, they areht riding bicyctes. They are walking.

Then we went to a shop. Daddy said to us, Usha and Subhas, I gave you three rupees each yesterday. This morning I gave you five rupees each. Let's buy some clothes (and toys" I liked a green frock and bought it. Subhas bought a shirt and a toy train. Mummy was looking at the bangtes in the next shop. Daddy said to Mummy, "Those bangtes are beautiful. Have them" Mummy tried them on her hands and bought them.

Once there was a big pond in a forest. A large number of fish, frogs and crabs lived in it. One year it did not ' rain, it was very hot. The water in the pond, was drying up.

There lived a wicked crane near the pond. It was fond of eating fish, tt thought of a plan. it went to the pond and said to the fish, 'Dear friends, I am very sorry for you. i heard that there will be no rains this year there is not much water in this pond If it does not rain the water in this pond will soon dry up. Then all of you will die"

AH the fish, frogs and crabs said in one voice, Please tell us, how can we save our-selves?"

The clever crane said, There is a big take with a tot of water nearby, tf you want, I can carry all of you, one by one in my beak and teave you in the take" All the fish agreed.

The crane took the fish, one by one in its beak and flew away it took them to a rock nearby and ate them. Every-day it came to th.2 pond, lock one fish at a time to the rock

In 1902 the Wright brothers built their third and most advanced glider which had a rudder. Then they designed special petrol engine with propellers. At last, after a great deal of hard work their flying machine was ready for its flight. On December 17th, 1903, Orville, flew for 12 seconds covering about 36 meters. Later Wilbur flew for 59 seconds covering nearly 260 metres. The Wright brothers were the first men ever to fly in a petrol driven flying machine. The modern aeroplane is a beautiful sight. One can travel from one end of the world. to the other in a few hours. And for most people air travel is very enjoyable. Aeroplanes are very comfortably furnished. It is wonderful to climb high above thei'"clouds. They look like masses of cotton. When there are no clouds we can see the land, far below.

Oral Reading Paragraphs

Level I

1. What day is today?
2. Where are Raju and Bhaskar going?
3. Are they carrying bags?
4. What are they doing?

Level II

1. What was the colour of the frock?
2. Who was looking at the bangles?
3. Where are Usha and Subhas going?
4. What did Subhas buy?

Level III

1. Who lived in the pond?
2. Why did the water in the pond dry up?
3. What did the crane tell the fish?
4. Where did the crane carry the fish?

Level IV

1. Who were Wright brothers?
2. Who flew for a longer distance than Wright brothers?
3. How did they design their glider?
4. How is the modern air flight?