READING A LITTLE INTO READING: THE ACQUISITION AND PROGRESSION OF READING SKILLS IN ENGLISH SPEAKING INDIAN CHILDREN.

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A dissertation submitted in part fulfillment of the final year M.Sc. (Speech & Hearing) to the University of Mysore.

All India Institute of Speech and Hearing Mysore - 570 006. May 1936.

DEDICATED TO:

ABY

YOU ARE THE BEST THERE IS I COULDN' T ASK FOR MORE

CERTIFICATE

This is to certify that this dissertation entitled : "Reading a little into reading : The acquisition and progression of reading skills in English speaking Indian children" is the bonafide work in part fulfilment of the degree of Master of Science (Speech and Hearing) of the student with Register Number M-9407.

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DECLARATION

I hereby declare that this dissertation entitled : "Reading a little into reading : The acquisition and progression of reading skills in English speaking Indian children" is the result of my own study under the guidance of Dr. Prathibha Karanth, Professor and Head, Department of Speech Pathology, Ail India Institute of Speech and Hearing, Mysore and has not been submitted earlier at any University for any other Diploma or Degree.

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INTRODUCTION

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Problems enough this, for a lifes work, to learn how we read!. A wonderful process, by which our thoughts and thought-wanderings to the finest shades of detail, the play of our inmost feelings and desires and will, the subtle image of very innermost that we are, are reflected from us to another soul who reads us through our book ...

And so to completely analyze what we do when we read would almost be the acme of a psychologists achievements, for it would be to describe very many of the most intricate workings of the human mind, as well as to unravel the tangled story of the most remarkable specific performance that civilization has learnt in all history.

- Edmund Burke Huey

(1908)

The challenge of a book

I give you nothing if you cannot understand; there is much that I would give to you.

But which you alone must choose to take. What you do with what you take No one can predict.

(Verna Dieckman Anderson).

The solution most frequently proposed for solving world problems is education Education cannot proceed without reading. Hence the horizon of reading is being lifted far above its established bounds. The door to an exciting new epoch in the history of reading seems to be not only ajar but swinging wide open.

The ability to read is of paramount importance today. Technology offers promising aid. Reading instruction is being beamed to adult illiterates and to children in schools by radio, television and satellite. Computers are being used widely to administer programmed instruction.

Reading is a subtle and complex act. It involves, more or less simultaneously, the following : sensation of light rays on the retina of the eye reaching the brain, perception of separate words and phrases, functioning of the eye muscles with exact immediate memory for what has just been read, remote controls, memories based on the readers experience, interest in the content read and organization of the material so that finally it can be used in some way. These various features operate more or less concurrently; but they can be analyzed into atleast four successive stages : sensation, perception, comprehension and utilization.

Of all the things that children have to learn when they get to school, reading and writing are the most basic, the most central and the most essential. Practically everything else that they do will be permeated by these two skills. Hardly a lesson

can be understood, hardly a project finished unless the children can read the books in front of them and write about what they have done. They must read and write or their time at school will be largely wasted.

It is hard to overestimate the sheer pervasiveness of these skills. It is not just that they are needed in every school subject. They may also have a profound effect on the way children think about things and on their acquaintance with their own language.

We do not yet know all the consequences of learning to read and write, but they must be profound. Examine what anyone knows about the world or what he has learned to do, or even the way he thinkB about what happened to him, and you are bound to be impressed by the role the written word has played in all these things.

If reading can have such powerful results so too, but in the opposite direction, does failing to learn to read. It is unfortunate, but such failures do happen and always with the same devastating consequences. We have in our schools a large number children who find the task of learning to read a fearsome of business. Some manage it only with the greatest difficulty, others not at all. Many of these children have fallen behind on front. They have usually been slow in learning to speak. every Their knowledge of their world is woefully incomplete and their scores in intelligence tests are distinctly low. It is not at all surprising that children as generally handicapped as this fall

behind in reading, compared to others of the same age. Their plight is a serious one and they certainly need and deserve to be helped to learn to read in any way that is possible. But their problem with reading was always to be expected.

At the same time there are other children whose difficulties are a great deal more surprising. They also have apalling problems when they try to learn to read and write, but they are intelligent, quick and alert. They have all the advantages of help and encouragement from their parents. They receive devoted and skilled attention from their teachers Yet their difficulties persist. Week by week these unfortunate children fall further and further behind their school fellows. Faced with written instructions, questions on texts of any sort, their disadvantage is strikingly obvious both to themselves and increasingly to others as well. Usually their predicament is even more serious and certainly much harder to hide whenever they have to write.

Therefore in the present age of increasing interest in reading disability, thorough and comprehensive evaluation of various areas of reading skills is imperative.

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 necessitates the development of reading tests suitable for Indian 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 OF LITERATURE

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Reading is a genuinely problematic undertaking for both beginning and fluent readers. Both must use print to reduce uncertainty and to construct meaning. However, the fluent reader journeys through a landscape of print that is well charted; he possesses refined strategies to anticipate and cope with problems that arise along the way. The beginning reader on the other hand, journeys terrain that is much less familiar; the pitfalls of to her, and coping strategies need print are unknown to be developed enroute. The strategies that the beginning reader brings to her task and those that she learns while reading determine both the rate and extent of her progress toward fluency.

At present there are two views of reading acquisition which address the question of how beginning readers become competent readers. The first contends that fluency comes to those who mechanics of print, who master the learn to analyze its constituent parts, and mediate them phonologically. The alternative view holds that excessive analysis and mediation are impediments. It encourages a more holistic approach which emphasizes the readers search for meaning.

Lately, some writers have asserted that this debate over "bottom up" and "top down" processing is fatuous. Samuels (1976) contends that the two positions differ principally with respect to focus, emphasis and sequence. He perceives no basic

disagreement over the corpus of skills needed to attain fluency. Lesgold and Perfetti (1978) argue that the two models because they can be derived from a single, interactive conception of the reading process, can coexist. Kamil (1978) concurs, calling the processing controversy a "non issue" because the two perspectives are not mutually exclusive.

Wanner (1973) recasts the issue so as to focus attention on the debate over meaning and comprehension by asking whether we understand language from the "outside-in" or from the "inside-out". By stating the issue in this way he demonstrates thiB is no trivial disagreement about unit size, that but a struggle deeply rooted in contrary assumptions about language learning and human experience. Extrapolate the issue to reading acquisition and one confronts the question : Does meaning accrue to the beginning reader as she comes to learn appropriate responses to the visual clues inherent in print, or does the meaning that the reader brings to print play an instrumental role in learning how print works? Clearly proponents of "bottom up" processing subscribe to the former point of view, while those who posit a "top down" interpretation subscribe to the latter.

The assertion that learning to read is learning to bridge the gap between print and speech constitutes a denial of context because it totally neglects the role of contextualized experience

the ability to use what is known to cope with problematic situations.

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There is no simple correspondence between the sounds of language (at the surface structure level) and their meaning (deep or underlying structure). Extracting the meaning of an utterance getting from surface structure to deep structure - involves complex syntactic and semantic divisions, in other words the listener uses knowledge of his language and of the world (Smith, 1973).

Learning from a text is a process in which learners mobilize their resources to interact with a text according to their changing purposes and the demands of the task. As a result of their interactions, they construct meaning for the text and new knowledge for themselves that they can store in long term memory and retrieve for further cognitive processing or for encoding into oral or written responses.

Specifications of levels of reading ability is necessary to clarify issues. For example, relationships between intelligence (IQ) and reading ability can be clearly discerned by first separating reading into two overlapping components : (1) reading acquisition or learning how to read, and (2) ability to learn from text. Reading acquisition involves learning a finite Bet of rules for identifying printed words and learning to integrate use of these with reasoning processes, linguistic abilities and prior knowledge. Ability to learn from text includes use of reading acquisition processes plus such nonfinite factors as vocabulary and general knowledge.

То 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 for success at the level are required- The process of learning to read is next an hierarchy of series of stages of skill acquisition.

The Reading Process Rae and Potter, (1973) :

Research shows that the infant has highly developed perceptions from the time of birth. Within a few days, a baby is able to distinguish the mothers voice from other voices and from less meaningful sounds. Thus the receptive faculty, the ability to distinguish and understand what is heard, develops before oral language skill.

Reception and expression of the oral language are the childs first and for several years, only means of communication; they are considered most critical in the development of reading skills. The variety and frequency of exposure to oral language together with the development of auditory discrimination skills and the opportunity to use expressive language, is the main consideration in the development of language process.

When the child enters school and turns to the task of reading, the visual discrimination task becomes of key importance. This skill must already be highly developed before letter recognition and the ability to identify the relatively

small differences between one letter and another will be possible.

In addition, the social and emotional development of the child will prove vital to all school experiences.

These prerequisite skills flow into and influence the acquisition of the beginning reading skills.

The child of average intelligence is expected to learn to read even if he has only reasonably good teaching. Learning to read, for many children seems not to require much effort. They appear to attain this ability almost incidentally. They quickly make associations between the printed symbol, the auditory symbol and meaning.

WHAT IS READING ?

Writing is the process of presenting speech in a more permanent visual form and therefore reading can be looked upon as the reverse of this process, namely turning the collection of symbols seen upon a piece of paper into "talk", or in the case of Bilent reading into an image of Bpeech sounds. This in English means gaining the ability to read from left to right and from top to bottom of the page, the recognition of letter symbols and their grouping into words.

R. Morris (1963) talks about what he calls 'responsible' reading, in that the reader is called upon to make an active mental response to the content of the passage read. The reader is

called upon, not only to understand the message of the author, but to reflect upon it, assess its value by comparison with previously learned concepts and finally to reach out in imagination to new realms as a result of the stimulus of the texts. It is suggested that if our children learn to use their reading in this way they will not be in danger of losing their individuality under the pressures of modern mass media nor will the progress of mankind as a whole be stunted.

Morris reviews teaching methods with the purpose of analysing, which will be most helpful to gain a growth of 'responsive' reading for our children.

Reading can be defined or viewed in a number of different ways - primarily as a processes of getting meaning from print, as a decoding activity, or as a psycholinguistic operation. From these different views come different approaches or "methods" of beginning reading instruction. No matter how one defines reading, the act itself involves the readers sensations, perceptions, cognition and language. Learning to read involves mastering a constellation of skills along with the development of attitudes and values related to reading. The processes, skills and affective dimensions of reading are essentially the same for children with special needs as they are for normal children.

Reading : Different Approaches

A number of different approaches to beginning reading are used in schools. We know them by name : the look - say method

(sometimes referred to as "the basal approach"), the phonics approach, linguistic programs, the language experience approach, reformed alphabets and other programs intended to get each child cff on the right foot in learning to read.

Aukerman (1971) has reviewed some of the approaches.

Look Say : The "look-say" or sight method is basically a meaning oriented approach, that is comprehension is the major emphasis from the beginning. The words selected for beginning reading are those sure to have meaning to the children - words like come, go, look, mother, laugh etc. Reading in "meaningful" context is stressed from the beginning. Whole words are learned by sight. Each word is repeated over and over again - as many as ten or more times in two or three pages - so that through repeated exposure, children will learn to recognize the words on sight.

This method requires a high degree of visual retention. Context clues are important to help the child get meaning from the print. With the stress on meaning, comprehension questions demanding the use of the higher mental processes are an important part of beginning reading instruction.

Language Experience :

This is another meaning-oriented approach. In this method, the children dictate stories that are then transcribed on experience charts. Thus, the childrens own experiences and language become the vehicles in their learning to read. The language experience and the look-say method have a lot in common.

Meaning is the starting point, major emphasis and expected end product of reading. A high degree of visual retention is required in remembering the written forms of the words the children have dictated : Context and configuration clues are stressed.

However these two approaches differ greatly in the nature of the reading material itself. Instead of choosing words selected by the publisher to be spoken by familiar characters (Dick, Jane), children learn to read words that they've used in recounting their own experiences. The content and language are unique to each childs experience and cultural background.

Phonics Approaches :

In this approach, the conscious concentrated teaching of letter sound relationships is the starting point and major emphasis in beginning reading instruction. The primary focus is decoding printed words rather than on memorizing words as on а whole. The approach may be synthetic, that is, children learn the of individual letters and letter combinations, "sound" then synthesize these sound elements into words, or the approach may be analytic; that is, starting from a core of familiar sight words, children learn to analyze these words into their component phonetic elements. Whatever the orientation however, the major instructional focus is on helping children link letters to their equivalent sound features in learning to decode written language. Rules become important in "sounding out" words. Materials are constructed to contain the basic sound elements to be learned. Comprehension is expected to result once the written language is pronounced.

Linguistics :

A closely related decoding approach to beginning reading is the linguistic method. It is similar to phonics in that both stress the decoding of sound - symbol relationships as the road to mastery in beginning reading. Linguistics programs typically control sounds and symbols in beginning reading materials. While a phonics program may introduce a sound element (the "long o" sound, for example) together with its variant spellings (as in go, note, goat, toe and blow, for instance) linguistics programs also control the spellings that represent these sounds. Thus, children learn one written representation of a certain sound before variant spellings of the same sound are introduced. The basic beginning reading vocabulary is restricted to phonetically regular words - words in which letters consistently represent the same sound. Common irregular words (like the, is, was, etc.) are learned by sight in order to allow for meaningful sentences in beginning reading materials. Phonics programs are largely deductive in their approach; that is children learn rules in order to figure out the sound or pronunciation of the word. The linguistic approach is more inductive.

Visual-Motor method :

Choose about three words with which the child is unfamiliar (about 5 to 8 letters in length) such as friend, airplane, pilot. Present each word separately. Print the word clearly on a card. Say, "This word is "friend". Take a good look at it. What

is the word? Now close your eyes can you see it with your eyea closed? Look again. What is the word?" Remove the word and ask him to write it. Have him compare his word with that on the card. If incorrect repeat above procedure.

Kinesthetic Method :

A short period of orientation is suggested. Tell the child that you are going to teach him to read by means of an entirely new method. Describe the method and ask him to suggest a word he would like to learn.

Write the word with a crayon on paper in large size letters. The child traces the word with his index finger saying the word as he traces it. He repeats this many times in order to write the word without looking. If he has difficulty writing the word he should be encouraged to trace it over.

Understanding that a word functions as the basic building block of printed as well as oral communication is a major beginning step in the reading process.

Stages in the acquisition of Reading :

Naming the letters of the alphabet is the learned association of a particular letter (grapheme) with a given sound (phoneme).

For the development of reading patterns, ordering skills or the skills of directionality are required.

Acquisition of phonic skills, the relationships between specific sounds and specific symbols, must be mastered. In languages in which there is only one sound for each letter, this step is relatively easy. But in languages like English the association of various different sounds with a particular letter and various different letters with a particular sound makes mastery of the sound-symbol relationship more difficult. English has over two thousand spellings for its approximately fortyfour sounds.

Further the student must also be able to blend these sounds together into a recognizable word. Additional aids to independent word attack include the ability to divide words into syllables and the use of structural word analysis to distinguish prefixes, suffixes and root meanings.

Simultaneous with the acquisition of phonic skills is the assignment of meaning to words encountered in print. Much of the initial meaning of these words is drawn from the childrens background experiences in their environment.

Comprehension skills develop and mature as the child encounters words in print that appear in a new context. The child learns that words have multiple meanings and that some words have implied or connotative meaning according to the culture.

As sentences combine into paragraphs and paragraphs into stories, the meanings of words and ideas become more complicated. Both literal and interpretive skills become increasingly important.

Chall, J.S., (1978) described the acquisition of reading skills in terms of various stages.

Stage 0. Prereading stage - Preschool to kindergarten :

From birth until the beginning of formal education most children living in a literate culture with an alphabetic writing system accumulate a fund of knowledge. They also develop visual, visual motor and auditory perceptual skills needed for tasks in beginning reading.

They can discriminate and name most of the letters of the alphabet. They realize the importance of print, and can make associations with written form.

Extensive research on reading readiness and on early prediction and prevention of reading failure (Chall, 1967; deHirsh and Jansky, 1966; Durkin, 1966; 1974-1975; Crates and Bond, 1936; Jansky and deHirsh, 1972) has demonstrated that the various abilities, knowledge and skills acquired during the prereading stage are substantially related to success with reading at stage 1.

Stage 1 : Initial Reading or Decoding Stage - Grades 1-2 :

The essential aspect of this stage is learning the arbitrary set of letters and associating these with the corresponding parts of spoken words. Depending on whether the prevailing methodology for beginning reading instruction is a sight or phonic approach,

this stage is called a "guessing and memory game" or "barking at print".

Stage 2 : Confirmation, fluency, ungluing from Print-Grades
2-3 :

This is a consolidation of what was learned in stage 1 through reading what is familiar and already known. Fluency is gained by reading familiar stories. Here, reading is not for learning or for gaining new information but for confirming what is already known to the reader. The reader can concentrate on the printed words and using the basic decoding skills and insights acquired in stage 1, match it to her knowledge and language.

Stage 3 : Reading for learning the New - From one viewpoint
Grades 4-8 :

Here, readers begin to read for knowledge. Reading now begins to compete with other means of knowing. At the beginning of this stage, learning from print is less efficient than learning from listening and watching. However efficiency of reading increases and may equal and begin to surpass that of the other means of gaining new information; particularly listening. These readers also need to learn a process - how to find information in a paragraph, chapter or book and how to go about efficiently finding what one is looking for.

Stage 4 : Multiple Viewpoints - High School :

This stage involves dealing with more than one point of view. This is essentially an ability to deal with layers of facts and concepts added on to those acquired earlier. These later viewpoints can be acquired because the simpler view points were earlier. This stage is acquired acquired through formal education. Practice is acquired in learning ever more difficult in learning how to acquire new concepts and new concepts and points of view through reading.

Stage 5 : A world view - College, Ages 18 and above :

By the time this stage is reached, one has learned to read as much or as little of a book as one needs for ones purpose. To reach this stage is to be able to use selectively the printed material in those areas of knowledge central to ones concern.

The division of reading development into a sequence of stages is useful for instruction, research, evaluation and for However Chall concedes that communication purposes. reading development is continuous. She recognizes that reading development results from an interaction between the learners biologically determined capabilities and environmental challenges Appropriate instruction and demands for more and stimulation. rapid processing, accurate responses, higher level inferences and more critical and constructive reactions must increase at each successive stage for the reader to advance from one stage to the next.

With regard to the poor reading performance of children with reading or learning disabilities, it is notable that the basic characteristics of such children is the significant discrepancy between their reading achievement and their mental ability. They do not generally have problems in understanding or producing language. At the risk of oversimplifying the complexity of their problems, one may say that generally their ability to derive meaning from print lags significantly behind their ability to understand by other means. Their difficulty is usually not with understanding ideas and language. If they have difficulty with language, it is with its phonological aspects - sound discrimination, segmentation, blending and sequencing.

Children with reading or learning disabilities have great difficulty with stage 1 or the decoding stage and stage 2 or the fluency stage. Indeed, the more severe the reading or learning difficulty, the more there seems to be a problem with decoding and fluency. Further, compared to children of their chronological and mental age, the transition from stage 1 to stage 2 is more difficult and takes longer for these children. It takes a long time before they are comfortable with even the simplest book. They almost seem glued to the print or they guesB wildly.

An overlong stay in stage 1 is also serious for a child when the rest of the class moves into stage 3 and she cannot cope with stage 3 reading. Some provision needs to be made for the pupils continued conceptual and informational development, which in most schools comes primarily from written materials. If this is not

provided while the pupil is learning to read on a lower level, deficiencies in cognitive development may ensue, although the original problem was with decoding rather than with the meaning in components of reading.

Children from a low socioeconomic status (SES) may have poor reading performance. Stage 1 presents the least relative difficulty to these children. These children may be less ready to read at age 6. However with good instruction this can be overcome because what needs to be learned at this stage is specific, finite and when learned, self generative.

The gap for low SES children begins to widen at about Btage 2. This stage requires much reading and daring and ease about ones performance.

Stage 3 also needs great care. The literary and "bookish' language of text books, encyclopedias, and other informational books creates another hurdle. It would seem therefore that concepts, vocabulary, and strategies necessary for reading such books need to be taught Although it may be possible for children with rich and varied literary experiences to move more smoothly from stage 2 to stage 3 - from the fluent reading of simple childrens books to the reading of textbooks for the acquisition of new information - it is less likely that children with more limited literary experiences can do the same without help.

For the less advantaged children to compete favourably with their more privileged peers, they must be helped to proceed through the stages. For success with stages 3, 4 and 5, they must

be helped to systematically improve their knowledge of words, facts and ideas. Since the cpportunities for such learning may not be provided by most lower SES homes, it is essential that the school provide them during the reading stages when they are most needed.

Children with special learning disabilities exhibit a disorder in one or more of the basic psychological processes involved in understanding or using spoken or written language. These may be manifested in disorders of listening, thinking, talking, reading, writing, spelling or arithmetic. They include conditions which have been referred to as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, developmental aphasia, etc. They do not include learning problems which are due primarily to visual, hearing or motor handicaps or mental retardation, emotional disturbance, or environmental disadvantage (National Advisory Committee on Handicapped Children).

A child has a reading disability when there is significant discrepancy between his reading level and his intellectual potential as measured by a 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.

Developmental dyslexia?

Dyslexia is a difference in brain formation which is present at birth and occurs in 15% of the general population. It results

in an impairment in the ability to learn, retain and express information.

Recognition and manipulation of symbols, especially letters and numbers in sequence, present the most universal problem. One is dyslexic, although of average or superior intelligence, who may find difficulty in following directions, keeping track of possessions, finding the way without getting lost and being aware of time. Memory and retention of newly learned information is often affected. Some dyslexics have difficulty with coordination, confusion of right and left and impaired depth perception. The resulting tension contributes to a lower performance level in Reading writing and math when taught school tasks. in а traditional method, can be difficult if not impossible for the dyslexic to master.

Dyslexia continues throughout life. Without early diagnosis, special remediation and the teaching of coping skills, it can result in a severe loss of self esteem, limited friendships and failure in school and career pursuits. - (Orton Dyslexia Society, California)

Tests which are specifically designed to measure readiness for beginning reading instruction are popular. They are typically group administered and yield both an overall score and subtest scores.

Frequently, subtests are included which measure visual perception, auditory abilities, motor control, knowledge of the alphabet and vocabulary development.

An example of a test for reading readiness is as follows :

Thompson (1984) provided a comprehensive definition :

Developmental dyslexia is a severe difficulty with the written form of language independent of intellectual, cultural and emotional causation. It is characterized by the individuals reading, writing and spelling attainment 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 visual to verbal coding, short term memory, auditory perception and sequencing.

The presence of reading disability cases in our schools is a serious problem at all levels of academic ladder. Many a time parents and teachers come with the complaint of poor reading and writing habits, reduced attention and other behavioural problems, for which they are unable to find any solution. Especially in the Indian society where public awareness is minimal, the instances of reading disabled children remain in oblivion. As a consequence the child goes through an emotional trauma which even his parents to understand- Therefore one must take a step towards a fail better society where ail have a right to education. This can only achieved through use of diagnostic instruments which be can identify reading disabled as efficiently as possible. Diagnosis is a fundamental element in a remedial reading programme. Without it, a programme has no direction - accurate instructional

decision can't be made and appropriate pedagogical techniques or materials can't be selected.

The heart of diagnosis is the interpretation of a series of observations coupled with the ability to relate interpretation to a plan for remedial teaching (Pumfrey, 1971).

READING READINESS :

The term readiness for any kind of learning refers to the stage firstly, when the child can learn easily and without emotional strain and secondly, when the child can learn profitably because efforts at teaching give gratifying results. The child can arrive at readiness through having completed the prior learning on which the new learning will be based.

Readiness is a general term or concept which can be applied to a pupils preparedness to undertake any particular learning task, it must be applicable to various stages of learning to read from the beginning right upto the most sophisticated forms of reading which may not be fully learned until the individual reaches adulthood-

There are many abilities, skills, influences and interests which may develop through maturation or learning and thereby contribute in some measure to the stages of beginning to learn to read.

The grouping of influences on reading readiness is obviously on arbitrary one, but there are certain factors which are

generally recognized and discussed in literature. They are :

- * Physiological factors : including general maturity and growth; cerebral dominance and laterality; neurological consideration; vision; learning; condition and functioning of the speech organs.
- * Environmental factors, including linguistic background of the home and social experiences of different kinds.
- * Emotional, motivational and personality factors including emotional stability and desire to learn to read.
- * Intellectual factors, including general mental ability, the perceptual abilities of visual and auditory discrimination and special reasoning and thinking abilities involved in solving problems in learning to read.

The higher the correlation between the readiness factor and subsequent reading achievement, the more important and said to be the contribution of that readiness factor.

Evaluation of Reading Readiness :

The Metropolitan Reading Readiness Test (1964) has two parallel forms, A and B. It contains six subtests

- * Word meaning
- * Listening
- * Matching
- * Alphabet

- * Numbers
- * Copying

It has a supplementary test called "Draw a man".

Raw scores for the test are converted to percentile, ranks, stamina scores or letter ratings.

General scores could be used as guides for selecting children who might need special help and instruction in order to succeed in learning to read. In addition, teachers show a substantial amount of interest in using subtest scores of reading readiness tests in order to diagnostically determine areas of relative strength and weakness.

This test was revised in 1976. The test was divided into two levels. Level 1 is for use in the beginning and middle of kindergarten. Level 2 is for end of kindergarten and beginning of 1st grade level testing. There are two parallel alternate forms of both levels 1 and 2. A new subtest of rhyming is added to level 1. The word meaning and listening skills are combined into one.

Different tests are combined together to yield "Skill" scores in the different areas.

Level 2 includes a visual matching and listening subtest and a copying test. New subtests include

- * Beginning consonants
- * Sound letter correspondence.
- * Finding patterns

This edition of the test yields percentile ranks, stamine scores and performance ratings.

The evaluation of reading involves considerably more than the collection of scores on reading tests. Evaluation means arriving at judgements about the degree to which the objectives of the reading program are being achieved. Evaluation can make use of data from many sources : standardized test scores, observation of pupil performance during reading lessons, workbook exercises, evidence of reading interests derived from discussion periods or written compositions, reports on independent reading, success in using subject matter text books, and so on.

The term diagnosis is used when a difficulty is discovered and explored. Diagnosis means a careful study of the condition to determine its nature and find out about factors that may be contributing to it, with the aim of correcting or remedying the difficulty.

Information regarding the learners reading ability may be obtained from informal and standardized measures, both of which should be employed to obtain the best possible estimate of reading ability (Farr, 1969)

Standardized or Norm referenced Tests:

The material in a standardized test is selected after careful analysis of the kind of reading that a pupil in the grades for which the test is intended may be called upon to do.

Every standardized test is accompanied by a manual of directions which tells in detail exactly how the test should be given and scored. It is essential to follow these directions closely. If this is not done, the norms will not be applicable because they are based on performance under standard conditions. Standardized tests have a high degree of reliability and validity. They also have norms.

Criterion Referenced Teats :

These tests have gained increased attention in recent years. A criterion referenced test indicates whether or not the test taken has mastered a specific skill, rather than how well his performance compares with that of others. Criterion referenced tests can be tailor made to assess mastery of specific objectives and can therefore be useful in individualizing instruction.

Norm-referenced tests can be used to compare performances to provide a basis for judging how much pupils have gained in achievement and whether they are achieving at a level expected on the basis of measured scholastic aptitude. Criterion-referenced tests are best when the teacher wants to know if a pupil has acquired a particular skill or knowledge.

Some programs that employ criterion-referenced measurement are :

- Individually Prescribed Instruction
- Individual Achievement Monitoring System
- Precision Teaching (Prager & Mann (1973)).

Commercially prepared criterion referenced tests available include :

- Criterion reading (Random House)

- Prescriptive Reading Inventory (McGraw-Hill)

- Wisconsin Tests of Reading Skill Development (Interspective Scoring Systems).

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

Though reading failures can obviously occur at any level where there is an inability of a reader to cope with reading demands, most serious, long standing, pervasive reading problems seem to appear during the initial phases of reading instruction; during grades one through to three It is less common to hear of readers who are successful in the primary grades but who fail thereafter. When failure does occur in the primary grades, some teachers and specialists contend that the failure occurred at that point because the child was exposed to reading materials that are not highly controlled in terms of vocabulary and skills. However it seems that "success" that such a child experienced in the primary grades was a very hollow one and that the reading failure would have become evident if the student had been encouraged to read widely beyond a limited set of artificial

materials designed to introduce a narrow set of reading skills. The sudden appearance of a reading problem when the child is asked to deal with a wide variety of reading materials is an excellent illustration of failure to develop the necessary readiness for the functional reading demands that will befall children. A reading problem did not suddenly emerge. It was building during the primary grades through restricted, artificial reading instruction.

Assessment of Factors related to Reading :

VISION :

At a superficial level, reading is a visual act, and therefore the visual efficiency of children with reading problems is often the first area that is suspect, particularly by parents. It becomes essential to rule out any visual defect which might hamper the reading ability of an individual. Any disorder of vision might influence reading progress. Vision should be examined for :

- * Visual acuity
- * Farsightedness
- * Myopia
- * Astigmatism
- * Refractive errors
- * Fusion aphorias
- * Stereopsis
- * Accommodation convergence
- * Monocular binocular vision

An informal diagnosis of visual discrimination behaviours are also available. They test

- * Part whole matching
- * Visual memory for designs
- * Figure ground discrimination
- * Form discrimination
- * Noting missing parts
- * Directional confusion
- * Letter and word discrimination

AUDITORY PERCEPTION :

In its most general terms auditory discrimination involves being able to distinctly perceive similarities and differences among sounds. In its relationship to reading, the ability to perceive differences among speech sounds is of vital importance-Phonics involves the association of particular sounds with particular letters.

A widely used measure in this area is the Wepman Auditory Discrimination Test. It has two forms each of which consists of 40 pairs of words. Some pairs consist of two identical words (boy, boy); others of two similar sounding words (vow, thou). The examiner pronounces each pair of words and the child must indicate whether the examiner said the same word twice or two different words.

Intelligence :

The primary purpose in assessing the intelligence of each caee of reading disability is usually to permit comparison of level with that in reading. Weschler Intelligence the mental Scale for Children is one test among others which can be used to intellectual capacity of measure the children. (Weschier Intelligence Scale for Children - Revised form WISC-R (1974). This test has been used with learning disabled children in 3 ways.

- * Intellectual assessment
- * Diagnosis
- * Educational planning.

The test is used with children between the age of 6-16 years, 11 months. There are 12 subtests, six of which are verbal and six are performance tests.

Verbal subtests are :

- * Information
- * Similarities
- * Arithmetic
- * Vocabulary
- * Comprehension
- * Digit Span.

Performance subtests are

- * Picture completion
- * Block design

- * Object assembly
- * Coding
- * Picture arrangement
- * Mazes

The scores on each test are summed and translated into IQ.

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 of screening children at risk of developing reading disability easily and quickly, so that the test administration on the whole school population does not 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.

Reading Tests :

Slingeriand Screening Test [SSTJ (1969, 1970, 1974) :

This test was designed to identify children with potential language difficulties 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 - used for grade I and first half of grade II Form B - used for second half of grade II and first half of grade III.

Form C - used for second half of grade III and grade IV. Form D - used for grades V and VI.

Each form is comprised of 8 parallel subtests.

- Two subtests involve copying
- Two, word matching
- Two, writing from orally presented materials
- Writing from visual memory and
- Visual recognition and circling.

The childs performance on these subtests is designed to pinpoint for the diagnostician the focus of the childs learning difficulty : either the deficient input channel (auditory or visual) or problems of a kinesthetic nature. The tests purport to provide information for teachers in making instructional decisions about the selection of teaching methods and materials for specific children.

Kindergarten Reading Screening Battery =

It consists of psychometric and behavioural indices administered in the 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 teachers checklist which evaluates e*pressive language, concentration and attention skills, perceptual motor coordination skills and control of behaviour.

- (iii) The Slossen Intelligence Test (SIT), which assesses general cognitive 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.

On completion of the initial screening, the child is identified as at risk of being reading disabled. A thorough assessment and analysis of reading difficulties becomes imperative.

There are three categories of tests that can be utilized in the reading area - general assessment, specific inventories and individual skills tests. The general assessment asks certain broad questions about the child but it does not tell the evaluator the nature of the childs problem. The specific inventory allows the evaluation to pursue hunches as to what the childs particular problem might be. This inventory may narrow the problem down to one or two areas of specific difficulty. A skill test pursues indepth exploration of the area of difficulty. This is useful for remediation in terms of what concepts the child has to be taught and at which level of difficulty the problem lies. The skills include, phonic mastery skills, auditory blending, word recognition, word analysis, initial consonant substitution, auditory discrimination, syntax test, silent/oral reading and reading comprehension.

Some of the diagnostic tests are given below : Group tests of Decoding Skills :

The Stanford Diagnostic Reading Test :

This test has two forms at each of the two levels - Level I (grades 2.5 to .5) and Level II (Grades 4.5 to 8.5). The addition to comprehension and vocabulary subtests at both levels (a rate subtest in included in Level II), there are subtests of syllabification phonics and blending. Stanine and percentile scores are reported for each of the subtests and guidelines for interpreting the subtests are presented.

The McCullough Word Analysis Test :

Designed for use in intermediate grades, these tests primarily measure ponic and visual analysis skills. Remedial work is suggested for skills in which the subtest score is one standard deviation below the mean for a given subtest. Most of its 7 subtests have good content validity but low reliability.

The Silent Reading Diagnostic Tests :

The 1970 edition of these tests have 8 subjects designed to sample visual analysis, phonics and blending skills. Intended for use in grades 2 through 6, it provides a graphic profile chart which depicts strengths and weaknesses in various word-recognition skills and patterns.

The Doren Diagnostic Reading Test of Word Recognition :

Designed for use in the primary grades and above, the 1973 edition contains 12 subtests, each having from 20 to 90 items. It primarily measures phonic skills that are sampled in various ways. Scoring is based on the number of wrong items; subtests on which more than 7 errors are made (no indication is given as to the derivation of the cutoff score) indicate skills which need remedial teaching.

The other tests of decoding skills include the Cooper-Mcguire Diagnostic word analysis, the Iowa tests of Basic Skills and the Fountain Valley System.

Diagnostic Oral Reading Test Batteries :

The Dureli Analysis of Reading Difficulty:

Issued in 1937 and revised in 1955 this is the first diagnostic battery to organise the passages to be read by the pupil in a durable spiral bound booklet. In addition to the manual and pupil booklet there is a record booklet for the examiner, which contains several check lists, norms for the tests and room for supplementary information in addition to record forms.

Word recognition is tested with several lists, ranging in difficulty from first to sixth grade. These are printed on long narrow cords and exposed for approximately half a second.

There are four sets of eight reading passages each, ranging in difficulty from first to sixth grade. One set is for oral reading which is timed and scored on the basis of rate with no There are four to seven comprehension scoring for errors. questions after every passage. A grade level is assigned for each passage and the median of these is the grade score oral reading. A second set of passages is used for timed silent reading after which the pupil is asked to retell the story; grade norms are given for rate and for number of ideas recalled. A third set of passages is marked supplementary and can be used as on alternate form for other oral or silent reading. The fourth set is to be read to the pupil and his answers to comprehension questions form the basis of a listening comprehension grade Bcore.

There are numerous supplementary tests. These include naming, matching and writing alphabets, visual memory of words; learning sounds in words; learning to hear sounds in words; sounds of consonant letters, spelling and handwriting.

The Spache Diagnostic Reading Scales :

Revised in 1972 these have two main parts, word recognition and connected reading, supplemented by tests of phonic skills. Test materials includes a manual, a reusable booklet for the pupil and a record booklet for the examiner.

The examiner has a choice of three word lists one of first and second grade difficulty, the next ranging from second to fifth grade and the highest from third to sixth grade.

There are eleven reading passages, ranging in difficulty from primer to eight reader level, in each of two parallel scales. Each passage is followed by comprehension questions. The passages are evaluated as in an informal reading inventory rather than scored like a standardised test. The instructional level is defined as the highest reader level at which the pupil can meet the criteria when reading orally. Independent reading level is judged on the basis of silent comprehension of the silent reading passages.

Word Recognition

Tests that Accompany Reading Programs

Most tests that accompany reading programs at primary levels contain subtests of word recognition. They sample the words introduced at a particular reader level in that progress. Word recognition is measured in group mastery or achievement tests by having the child match the picture with the word.

Standardised Word Recognition Tests :

Many of the primary-grade levels standardized silent reading achievement tests contain subtests of word recognition. The reading part of the Wide Range Achievement Test (WRAT) is an example. This test of 128 words contains a large number of difficult words and contains grade norms from kindergarten to college-graduate level. It is not a satisfactory measure of learners general level of reading ability as it does not measure comprehension.

Other standardized word recognition tests with fairly broad ranges of norms are the subtests of the Gates-Mckillop, Darrell and Spache diagnostic tests. The Peabody Individual Achievement Test (PIAT) and the Slosson Oral Reading Test (SORT).

Tests of Decoding Skills :

The Woodcock Reading Mastery Tests

This consists of five normal individually administered tests for use from kindergarten through high school. In addition to tests of letter Identification, Word Identification, Word Comprehension and Passage Comprehension, which is a modified close test there is a Word Attack Test. The latter uses fifty nonsense words to measure the subjects ability to decode monosyllabic and polysyllabic words.

The Rosewell-chall Diagnostic Reading Test is a quick convenient test for analysing a childs word attack skills. It contains short tests of knowledge of letter and phonogram sounds, solving one syllable words, short and long vowels and syllabication. Total time is usually around five minutes. Another brief test is the Phonics Criterion Test which samples ninety-nine phoneme-grapheme correspondences.

The Durell Analysis of Reading Difficulty as has been discussed earlier, has a battery of tests that was first offered in 1937 and revised in 1955. It now consists of an oral, a silent and a listening comprehension test; tests 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.

Diagnostic Screening Test for Developmental dyslexia :

This was developed by Border (1971, 1973). It begins with a Reading test consisting of 10 tests of 20 phonetic and non phonetic words, each graded from preprimer through high school. Words read immediately on presentation are in the childs sight vocabulary and are recorded in a "flash" column. Words that require word analysis - synthesis skills are recorded in an "untimed" column. A comparison of the "flash" and "untimed" columns indicate whether a child is reading through both whole word gestalts and phonetic analysis or predominantly through one or the other.

A spelling test follows where he is asked to write 10 words from each column, the words from "flash" column being lower than his level and those from "untimed" column being higher than his level.

Border delineated three distinct types of dyslexics on the basis of reading spelling performance.

a) Dysphonetic :

Primary deficit in symbol - Bound 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 groBS deficit in analytic function.

c) Mixed Aiexia :

Most of the teachers believe that learning word analysis skills is absolutely necessary for practically all children. Ιt 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 the three rhyming words beginning with a given sound, matching words in a series that have same beginning or ending 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.

Roseweil Chall Auditory Blending Test :

This device is administered individualiy to pupils 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 in 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.

All of the skills in the reading process can be tested by appropriate tests. The choosing of tests is only the first step in the process, however. The testing procedures themselves, the way the children are grouped for testing and the way the results are analyzed and interpreted all have an impact on the usefulness of the assessment process.

Reading in India :

The destiny of India is now being shaped in her classrooms. In a world based on science and technology it is education that determines the level of prosperity, welfare and security of our people (Report of Education Commission, India).

The need for teaching every citizen to read and write is paramount in India, for a secular democracy like hers cannot long survive with the majority of her people being unable to read the

ballot form. Nor can India achieve her gigantic program of economic and social development if this is so.

The biggest challenge in India is teaching reading to her huge and growing population. All the students need reading skills. Although growth in the number of school growing children is phenomenal there is a great deal of student dropout and retention in the lower primary stage.

Another great challenge in India is the language situation. There are about 15 major languages and 1,625 mother tongues (1961 census survey). Many of these dialects are spoken by very few people and most of them are not in written form.

Schools in India are committed to a three language formula: Mother tongue or the regional language, the national language (Hindi) and English. It is possible that one can be taught, these languages, but there are several individual handicaps which Indian Educators have neglected to accommodate.

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. The need is felt to trace the progression of sequential requisition of English reading skills in Indian children who have had early exposure to English.

A study waB carried out (Loomba, M. 1995) to analyse the acquisition and progression of reading skills in Indian children who came from a non English speaking background and norms were

obtained.

However it was found necessary to obtain norms for Indian children from an English speaking background since the performance of these children is considerably different from their peers who do not have early exposure to English. METHODOLOGY

METHODOLOGY

The aim of the present study is to evaluate the sequential progression of English reading skills in Indian children coming from an English speaking background.

The subjects selected were forty normal school going children ranging from first to eight standard. Five children were chosen from each class. These children did not 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 sixth 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 Potter (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 a 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 metaphonological skill analysis, thereby covering a wide range of reading skill area.

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 built and expanded based on the childs 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 tests which are described below.

1. Visual discrimination test :

Good visual discrimination is essential in the reading process. The test begins with the 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 consists of geometric shapes and individual letters, while Level II consists of words and non sense syllables. There are 16 items in level I and 17 items in level II.

Instruction :

You have to match the shape, letter or words draw/written on the left side with one of the items on the right.

2. Auditory discrimination test :

Auditory discrimination, the ability to differentiate sounds is considered one of the most important factors in the acquisition of language. In initial experience with any language the listener becomes sensitive to almost imperceptible differences in sounds. Hearing the subtle difference 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 pairs, 21 of the pairs are dissimilar with 7 varying in the beginning. 7 is 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 same.

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 teaching beginning reading skills. Therefore recognition of letter sound relationships are fundamental to the understanding of English in Print.

The term phoneme' represents 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 childs reading skills.

The analysis of words is necessarily a part of higher order reading process since it adds concept recognition to the track. 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 childs 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 Recognition and Generation :

The first part of this test requires the child to circle the letter, the tester names. The child is given sheets 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 letters in each part of the test.

2) Phoneme - Grapheme Correspondence Tests:

This test is designed to test the childs 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 consists 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 letters 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 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. x 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 on the answer sheet and the examiner says a list of words. The child is instructed to put () in the box beside the number of the 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. _x 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 the 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) Biending 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 pictures 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 readers attack a new word, they almost always 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 syllables 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.

 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 skills.

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.

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 : recount countless uncounted country

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 Ida Scudder School, Vellore. This school follows ICSE 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.

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

3) Blends

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 I : 1) Beginning consonant Maximum score : 18
2) Ending consonant Maximum score : 15

4) Long and short vowels Maximum score 10 each

Maximum score : 20

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 with early exposure to English.

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

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

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

	1	ł	1	1	1	1		1			1
a c	-				111 		¥	¥1	¥11 	¥]]]	I NAXI MUMI I SCORES
IVISUAL DISCRIMINATION -	1 S.D.	ł	15.4 0.8	15.2 0.74	16.0 0.0	16.0 0.0	16.0 0.0	0.01	0.01	0.0	1 1
	HEAN	1	12.0 1.5	14.6 0.8	14.2 1	15.6 ¦ 1.01	16.0 1.48	16.4 0.8	17.0 0.0	17.0 0.0	117 1
LAUDITORY DISCRIMINATION			29.0 0.89	29.8 1	29.6 0.8	30.0	29.6	1 29.6	29.8	30.0	1 30

Table 1 : Performance of the eight classes on the test

		1	1	1	1	1	1	ł		I I MAXIMUM I SCORES
ALPHABET IDENTIFI- ; CATION UPPER CASE ;	MEAN I S.D.	25.8 0.4	26.0	26.0	26.0 0.0	26.0 0.0	26.0 0.0	26.0 1	26.0 0.0	26
ALPHABET IDENTIFI- CATION LOWER CASE	MEAN S.D. 1	25.6 0 8	26.0 0.0	26.0 0.0	26.0 0.0	26.0 0.0	26.0 0.0	26.0 0.0	26.0 0.0	1 26
AUDITORY RECALL UPPER CASE	MEAN I S.D.	25 6 0.8	26.0 0.0	25.6 0.8	26.0 ¦ 0.0	26.0 0.0	26.0	26.0 ¦ 0.0	26.0 0.0	1 26 1
AUDITORY RECALL Lower case	MEAN S.D. 1	1 25 6 1 0.8 1	25.0 1.0	26.0	26.0 0.0	26.0 0.0	26.0 1	26.0 0.0	26.0 0.0	26
IDENTIFICATION OF I BEGINNING CONSONANT:	MEAN I S.D.	16 6 1 1 02	17.4 0.52	17.4 1	17.4	17.4	17.6 0.48	17.6 0.48	17.2	18
IDENTIFICATION OF I ENDING CONSONANT	MEAN S.D. I	12.4 1.35	13.2 0.971	13.8 0.971	13.4	13.2 1.46	14.6 0.48]	14.6 0.48	14.6 0.48	15
	MEAN I	16 2	19.4 1	19.2	19.8	19.6	20.0	20.0	20.0	1 20
IDENTIFICATION OF LONG VOWEL	S.D.	3.21	2.051	1 85	2.75	3.281	0.66;	0.0	0.4	1
IDENTIFICATION OF I SHORT YOWEL	MEAN S.D.	621 1.18	8.2 1.93	9.8 0.4	9.8 1 0.4	9.01	10.0 0.0	10.0 0.0	10.0 0.0	10 1
IDENTIFICATION OF BEGINNING CONSONANT	MEAN S.D.	29 4 0.72	29.8	29.8 0.4	29.8	30.0 0.0	30.0 0.0	29.6 0.8	29.6 0.8	30
IDENTIFICATION OF I ENDING CONSONANT	HEAN S.D.	25.6 3.12	28.4 0.48	27.8	26.4	27.0 2.0	28.4 0.66	28.0 1.67	27.6	30 81
IDENTIFICATION OF	I MEAN S.D.	1 0.0 1 0.0 1	1 5.0 2.0 1	1 9.0 1.48	7.8 1.16	1 9.6 1 0.48	10.0 0.0	9.2	9.4 1.2	- A.U.
STRUCTURAL ANALYSIS LEVEL 1	MEAN IS.D.	801 1.41	P 4 1 1.41	9.8 1 0.4	9.4	9.6	10.0	10.0	10.0	-] 10
ISTRUCTURAL AWALYSIS ILEVEL 11	I MEAN S.D.	1 5.4 1 3.08	1 9.0 1 2.75	1 18.8 4.16	5.81	3.01	0.48	ALL TRACTOR	1 25.8	and the second s
	HEAN S.D.	1 0.0	I 0.0 I I 0.00	5.8 2.78	1 7.0 11 1.78	1 8.2	9.2	1. I.T	1 9.8 31 0.4	

	ł		ł	1	1	1	1	1	1	1	1	
1	1		ł	1 :	11	111 ;	14 1	V I	VI ¦	¥11	¥111	HAXIHUM
	ł		ł	1	1	1	1	1	1	1	1	SCORES
	-1-						}	1				
BLENDING LEVEL 1	ł	MEAN	ł.	0.0	2.0 1	10.2	10.4	12.0	12.0	12.0 1	12.0	12
1	1	S.D.	1	0.0 1	0.4 1	2.711	1.351	0.0 1	0.0 1	0.0 1	0.0	
	- -		1-				-		-			
BLENDING LEVEL 11	1	MEAN	ł	0.0 1	4.4 1	5.61	6.2 1	6.4 1	7.21	7.4 1	7.8	8
7.0	ł	S.D.	1	0.0 1	1.541	0.8	1.16	1.021	0.981	0.8 1	0.4 1	
	-1		1-		{	{	{	{				
SYLLABICATION	ł	MEAN	ł	0.0	1.6	7.0	8.8 ;	8.6	9.8	10.4	9.2 1	12
ł	1	S.D.	1	0.0	1.541	1.891	3.051	1.621	1.721	1.02	1.33	1
	-1-		- 1									
ORAL READING	1	HEAN	1	7.6	11.4 /	12.4 :	11.8	14.4	14.6	16.0	16.0	16
	ł	S.D.	ł.	2.4 1	1.01;	2.571	2.13;	1.11	1.741	0.0 1	0.0	
	1		1	1	1	1	1	1	1			1

The mean scores of eight groups across the reading tasks with valuable information which can be used for provide us comparing children suspected of reading disability. The scores show that performance on each task varies with class and follows a normal developmental sequence. The way in which Indian children acquire reading skills are probably not equal to the acquisition reading skills in western children who have English as of their therefore it is imperative to mother tongue, compare the performance of Indian children with Indian norms. The mean scores obtained here can be used in evaluating 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 but who have had significant exposure to English before entering the school.

The percentile scores of all the eight grades across the reading tasks is represented in two graphs. It was found

necessary to have two separate graphs because of considerable clustering and overlap of scores. In each graph, alternate classes were taken to show the developmental sequence appropriately.

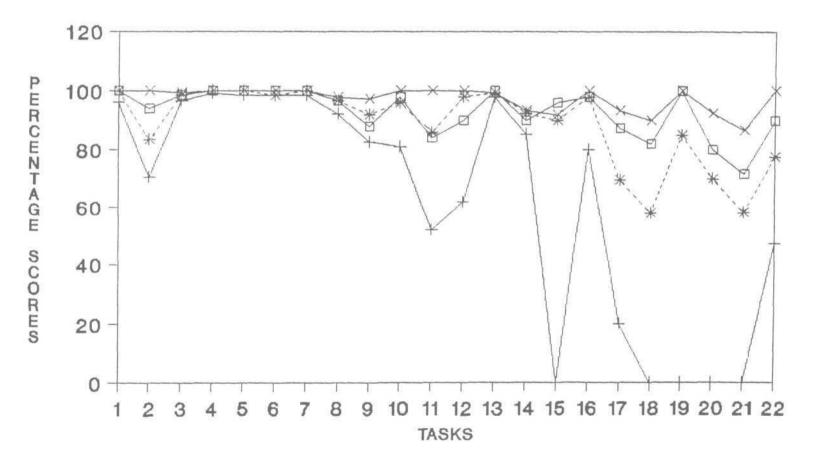
Figure 1.1 (performance of class I, III, V and VII across twenty two tasks) and 1.2 (performance of class II, IV, VI and VIII across twenty two tasks) show the sequence of progression of reading skills.

It is evident that the earlier tasks like perceptual discrimination (1, 2, 3), alphabet generation and recall tests (4, 5, 6, 7), identification of beginning and ending consonants (8, 9) were attempted by all classes and a high level of performance was seen. Tasks like identification of medial vowel (15), identification of root words, prefixes and suffixes (18, 19, 20), and syllabication (21) do not emerge until after class second and third.

The overall performance shows considerable overlap in percentage scores for the earlier tasks across the grades. For the later complex tasks, where the reading skills emerge by the second and third grade, there is a consistent progression in performance across the grades. Performance across the higher grades that is sixth, seventh and eighth does not vary much and percentage scores overlap. Hundred percent performance was obtained for most of the lower level tasks by the higher grades, but for the complex tasks like medial vowel identification,

FIGURE 1.1 : PERFORMANCE OF THE CLASSES I, III, V AND VII ON THE TEST

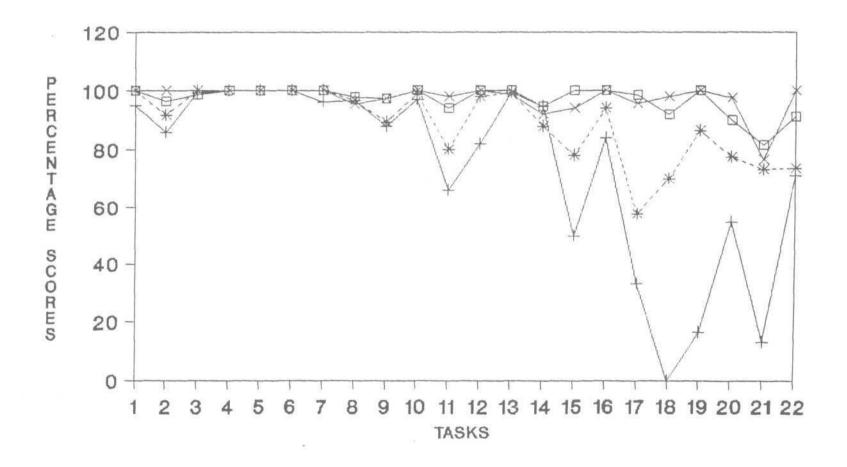
---- Grade I -*- Grade III ---- Grade V ----- Grade VII



66

FIGURE 1.2 : PERFORMANCE OF THE CLASSES II, IV, VI AND VIII ON THE TEST

-+- Grade II -*- Grade IV -B- Grade VI -*- Grade VIII



structural analysis and syllabication, hundred percent performance wasn't obtained even by the eighth grade children.

Table 2 : Performance on perceptual discrimination across

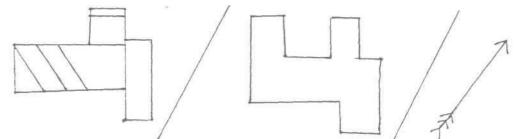
eight groups

1			11 1	1	ł	¥	1	I	VIII (MAXIM SCORES	S
VISUAL DISCRIMINATION - 1	MEAN I S.D.	15.4 0.8	15.2 0.74	16.0 ¦ 0.0 ¦	16.0 0.0	16.0 0.0	16.0 0.0	16.0 0.0	16.0 / 16	
la companya da la comp	HEAN S.D. I	12.0	14.6 0.8	14.2	15.6 1.01	16.0	16.4 ; 0.8 ;	17.0 0.0	17.0 17 0.0	
AUDITORY	MEAN ;	29.0	29.8 ¦		30.0	29.6	29.6	29.8 ;	30.0 30	

As seen in the table, the perceptual discrimination scores show a rapid progression in performance across the grades. In fact, near maximum performance is achieved by the first grade itself. However for the visual discrimination II subtest, a gradual increase in scores is seen upto grade VII and VIII. The scores obtained by children who come from an English speaking background on this task were higher and better performance was seen in comparison to children from a non English speaking background (Loomba M. 1995).

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

 The discrimination of shapes was good across all the grades considered. Subjects below fourth grade however presented scattered errors in the following shapes.



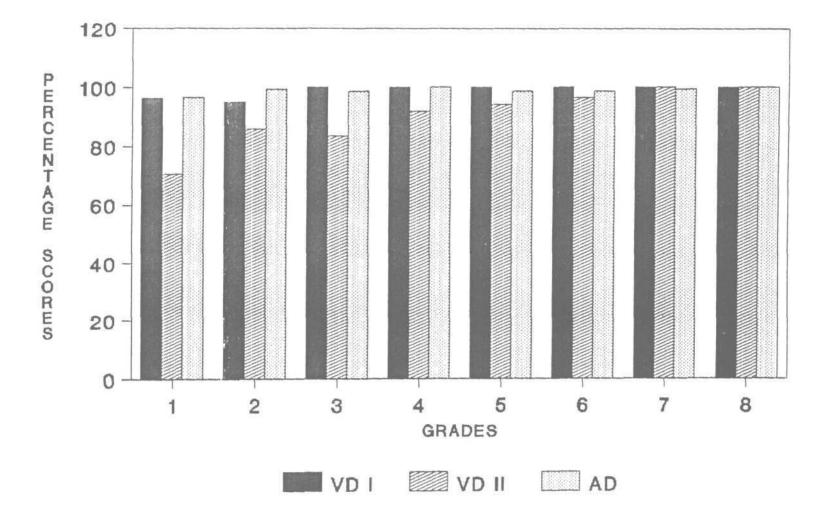
- 2) Errors of visual similarity was commonly seen (sod/sob, tobay/today, drwiitz/brwiitz, runninq/running, moistem/ moisten).
- 3) Errors of order was found in same subjects (conutrified/ countrified, baeutiful/beautiful).
- 4) The variation of scores across classes reflects the frequency of occurrence rather than the quality of errors.

In the auditory discrimination task the error patterns seen were

- difficulty with final consonant distinctive minimal pair;
 Pat Pad, Mean Meal, Sun Sum.
- difficulty with medial vowel distinctive minimal pair; seal - sail, heat - hit.
- difficulty with initial consonant distinctive minimal pair;
 chair share.

Figure 2.0 represents performance on perceptual discrimination tasks. As seen in the bar diagram there is an increase in the performance level of each subtest. In class I the

FIGURE 2 : PERFORMANCE OF THE 8 CLASSES ON THE PERCEPTUAL DISCRIMINATION TEST



performance on visual discrimination I is the best, followed by auditory discrimination and the visual discrimination II. On the other hand, by eighth class there is hundred percent scores obtained for all the tasks.

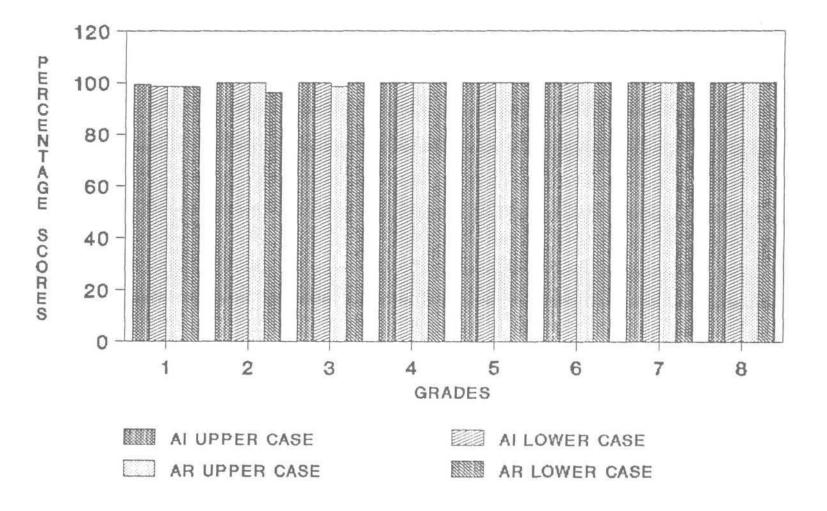
Table 3 : Performance on Alphabet Generation and Recall Test

			11	111	1: 1:	1	VI I VII	VIII IMAXIMUMI I SCORES I
ALPHABET IDENTIFI- CATION UPPER CASE	I NEAN	25.8 0.4	26.0 0.0	26.0 1 0.0 1	26.0 0.0	26.0 0.0		1 26.0 1 26 1 0.0 1 1
ALPHABET IDENTIFI- ICATION LOWER CASE	1 S.D.	25.6 0.8	26.0 1	26.0 0.0	26.0 0.0	26.0 0.0	26.0 26.0 0.0 0.0	Francisco de marco con
LAUDITORY RECALL UPPER CASE	I MEAN I S.D. I	25.6 0.8	26.0 0.0	25.6 0.8 1	26.0 0.0	26.0 0.0	1	
AUDITORY RECALL LOWER CASE	I MEAN I I S.D.	25.6	25.0	26.0	26.0	26.0 1	26.0 26.0	26.0 26

As seen in Table 3, the scores obtained in alphabet test are good across the classes. Performance for alphabet identification reached hundred percent by second class.

In the same way, hundred percent scores for auditory recall test was obtained by class three. Children from an English speaking background did much better across all grades in comparison to those from non English speaking backgrounds.

FIGURE 3 : PERFORMANCE OF THE 8 CLASSES ON THE ALPHABET GENERATION & RECALL TEST



The error analysis of alphabet test showed the following results :

1) One subject in class one had error in identifying capital

- One subject in class one showed b/d/g confusion. This type of confusion is a visual similarity confusion.
- 3) In auditory recall of upper case, errors were seen only in subjects of classes first and third. Substitution of I for T and L for I was seen.
- In auditory recall of lower case the common errors seen were i/1 substitution and h/w substitution.

The Figure 3 depicts the performance of all eight grades on the alphabet test. The overall performance on this task is very good. Hundred percent scores were obtained by class three.

Table 4 : Performance on phoneme grapheme correspondence - I

			1	1	1	1	ł	1	1	
1	1	1 1	11 1	111	14 1	¥ I	VI 1	¥11 ¦	VIII IM	AXIMUMI
		1 1	1	1	1	1	1	1	15	CORES
						-			-	
IDENTIFICATION OF	MEAN	16.6 1	17.4 1	17.4 1	17.4 1	17.4	17.6 ¦	17.6 (17.2	18
BEGINNING CONSONANTI	S.D. 1	1.021	0.521	0.481	0.491	0.481	0.481	0.481	0.4 1	1
									-	
IDENTIFICATION OF	HEAN :	12.4	13.2	13.8	13.4 1	13.2	14.6	14.6	14.6 ;	15 1
ENDING CONSONANT	S.D.	1.351	0.971	0.971	1.351	1.461	0.481	0.481	0.481	
		-	-						-	
BLENDS	MEAN	1 16.2 1	19.4 1	19.2	19.8	19.6	20.0	20.0 1	20.0	20
1	S.D. 1	2.631	0.481	1.161	0.4 1	0.481	0.01	0.0 1	0.01	1
									-	
IDENTIFICATION OF	MEAN	5.2 1	6.6 1	8.6 1	8.0 1	8.4 1	9.4 1	10.0	9.8 1	10 1
LONG VOWEL	S.D.	3.211	2.051	1.851	2.751	3.281	0.661	0.0 1	D.4 1	
					{		{			
IDENTIFICATION OF	MEAN	6.21	8.2 1	9.8 1	9.8 1	9.0 1	10.0	10.0	10.0	10
SHORT VOWEL	S.D.	1.18	1.931	0.4 1	0.4 1	2.01	0.0 1	0.0 1	0.0	1
	1	1 1	1	1	1	1	1	1	1	

In phoneme grapheme correspondence test - I there is a gradual increase in performance across the eight grades. Identification of beginning and ending consonants was better than identification of long and short vowels. Maximum scores were not achieved even by class eight for identification of beginning and consonant and identification of long vowel. For ending blends there was a sudden spurt in performance between class one (16.4)and class two (19.4) and a consistent increase thereafter with maximum scores being achieved by class six and being maintained thereafter. There is a gradual increase in performance on identification of long vowel. Short vowel identification was better compared to long vowel identification. It is seen that a ceiling score is achieved by sixth class and there is overlap of scores after grade six.

Subjects coming from an English speaking background achieved much higher scores and showed more rapid progression in acquisition of these skills when compared to subjects from a non English speaking background.

The common errors seen in phoneme grapheme test I are discussed below :

 Confusion of w/v as in the wine were was seen in all the classes. This was present across all the grades and was occasionally the only error displayed by the higher grades (sixth, seventh and eighth).

- 2) Performance on final consonant identification fell slightly below that of initial consonant identification. Errors seen were substitution of e/1 in the word pastel and s/z in the word jazz across all classes. There were other errors of substitution like p/b in the word barb.
- 3) Blend identification errors were usually substitution of sa/sw in the word swarm, this was seen across ail grades. Other errors which were less frequently observed where co/cl in word closet and kr/cr in the word crack. We can conclude by saying that blends of [c] and [s] presented difficulty.
- 4) In long vowels most of the subjects had difficulty in grapheme correspondence for vowels : (u) in the word fume,
 (u) in the word cute, (o) in the word coax, (ai) in the word dine, and (i) in the word heat.

In general sound symbol correspondence was good for vowel (au) and (ai) as in the words hot and rice respectively.

- 5) In sound symbol correspondence of short vowels, the difficulty in vowel (i) and (o) was common across classes upto class six.
 - (i) as in kit where e/i substitution was seen.
 - (i) as in fist where (i) was omitted.
 - (i) as in sick was also not identified.
 - (o) as in stop where preceding consonant (t) was substituted.
 - (o) as in hot where identification of (o) was not done.

FIGURE 4 : PERFORMANCE OF THE 8 CLASSES ON THE PHONEME GRAPHEME CORRESPONDENCE 1

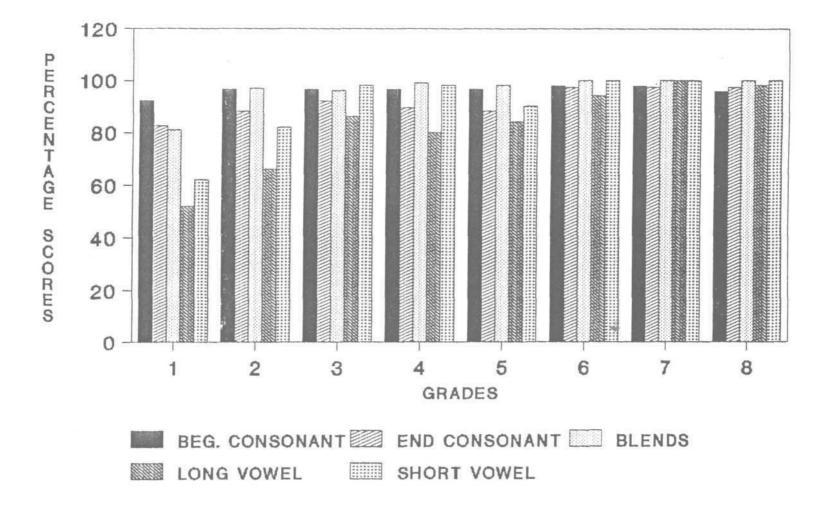


Figure 4 represents the performance on phoneme grapheme correspondence I. The performance on all the tasks increases gradually.

Table 5	:	Performance	on	Phoneme	Grapheme	correspondence	-	ΙI	
---------	---	-------------	----	---------	----------	----------------	---	----	--

	1	1	1	1	1	1	1	1	1	1	1
	ł	1	1	11	111	14 1	Y I	¥1 (V11 (¥111 {	MAXIMUM
	1	1	1	1	1	1	1	1	1	12	SCORES
IDENTIFICATION OF	MEA	8 1	29.4 1	29.8 1	29.8 1	29.8	30.0	30.0 1	29.6	29.6	30 1
BEGINNING CONSONANT	1 S.I).	0.72	0.4 1	0.4 1	0.4 1	0.0 1	0.0 1	0.8 1	0.8	
			{			{	{	{	{	{-	{
IDENTIFICATION OF	I MER	I W	25.6	28.4 1	27.8	26.4 ;	27.0 1	28.4 1	28.0 1	27.6 1	30
ENDING CONSONANT	S.D	. 1	3.121	0.481	1.16!	0.801	2.0 1	0.661	1.671	0.481	1
	1	}					}	}			
IDENTIFICATION OF	HEA	N I	0.0 ;	5.0 1	9.0 1	7.8 1	9.6 1	10.0 ;	9.2 1	9.4	10
MEDIAL VOWEL	S.I). {	0.0	2.0	1.48	1.161	0.48	0.0 1	0.751	1.2 :	
	1	1		1	1	1	1	1	1	1	

As can be observed from the table, there is a variation in the progression of scores of consonant and vowel identification. There is not much difference in scores between class one and class eight, in the identification of beginning consonants. As evidenced from a score of 29.4 for class one and 29.6 in class eight. There is considerable overlap in scores seen across all the grades. It can be deduced that children perform well on this task across all grades.

Identification of final consonant shows a very slight progression in performance across the grades from first to eighth. Class one had a score of 25.6 and class eight, 27.6. Ιt can be seen that beginning consonants were better identified than Identification of medial vowels is the final consonants. most difficult task in this series. This skill is seen to emerge only by the class two and a sudden spurt in performance is seen between class two and three. After class three there, is considerable overlap in scores across the grades.

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

- Most of the subjects had difficulty in identification of beginning consonant (w) as in the word wear. A few subjects also had difficulty in identification of initial consonant (m) as in mouse.
- Erroneous recognition of ending consonant due to silent xe' at the end of the word, example : rose, white, late, care.
- 3) Difficult in identification of final consonants which were not clearly stressed. Example : bear, clever.
- Erroneous identification of ending consonants in words which begin with the target letter.

Example S : Set (). The response is required to be negative because the word does not end with the target letter (s).

- 5) Subjects; had difficulty with identification of medial vowels (a, i, e, o, u). This was greater for the lower classes than in the upper classes. The types of errors seen in vowel identification were :
 - i) difficulty in distinguishing words which differ in terms of long and short middle vowels, example : they couldn't differentiate call from cod and mop.
 - ii) difficulty in distinguishing words whose middle sound is different but are written similarly, example : couldn't differentiate mule, yule from but, couldn't distinguish between grinder and cinder.

Figure 5 shows the performance of subjects on phoneme grapheme correspondence II. It is clearly seen that the performance on identification of initial and final consonant was good across all the classes. Scores for medial vowel were obtained only by class two and performance gradually increased yet hundred percent scores could not be obtained.

FIGURE 5: PERFORMANCE OF THE 8 CLASSES ON THE PHONEME GRAPHEME CORRESPONDENCE II

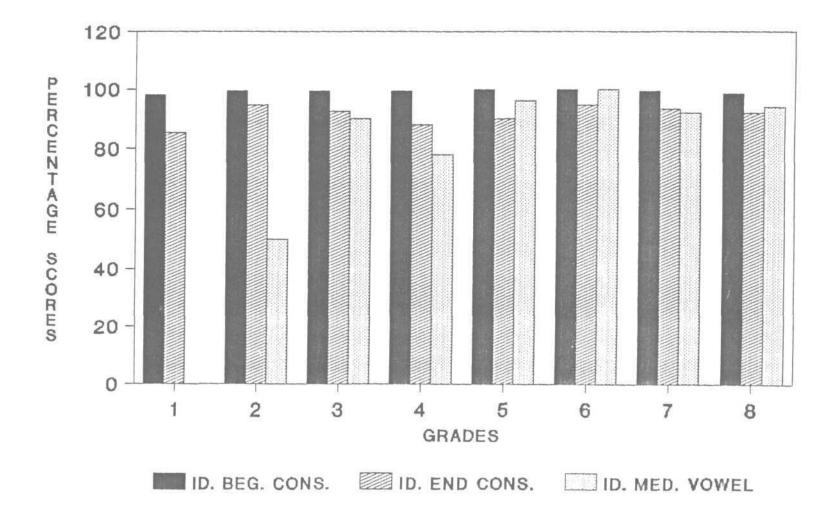


Table 6 : Performance on structural Analysis

	1	1		1	1	1			1	1	1		1
	1	1	1	1	11	111	14 1	¥	ł	¥1 1	¥]]	¥]]]	HAXIMUM
	1	1		1	2	ł		1	1	1	1		ISCORES
				-1-		-			-1-				
STRUCTURAL	ANALYSIS:	MEAN :	8.0	11	8.4 1	9.8 1	9.4	9.6	; ;	10.0 1	10.0 ;	10.0	1 10
LEVEL 1	ł	S.D. 1	1.4	11	1.411	0.4 1	0.8	0.4	1	0.01	0.0 1	0.0	1
		}		-1.	1	}				}	}		
STREETURAL	ANALYSISI	MEAN :	5.4	ł	9.0 1	18.8 ¦	15.6	23.6	1	26.6	25.2 1	25.8	27
LEVEL 11	1	S.D. 1	3.(181	2.751	4.161	5.81	3.1)1;	0.481	2.141	1.47	1
				- -		{			-1-	-			
STRUCTURAL	ANALYSISI	MEAN !	0.0) ;	0.01	5.8 1	7.0	8.2	2 1	9.2 1	9.0 1	9.8	1
LEVEL 111	1	S.D. 1	0.0	1	0.001	2.781	1.78	1.3	21	0.4 1	1.091	0.4	1 10
1	1	1		1	1			1	1	1	1		1

seen from the table 6, performance by all the eight As grades was better on level I followed by level II and finally level III. These levels are in increasing order of complexity. There is seen a gradual progression in scores across all grades for level I. Level II scores show a sharp rise in performance in the lower grades with grade one having 5.4 and grade two having 9.0 and grade three having 18.8 as their scores. A slight dip in the performance in grade four is seen (15.6). This could be attributed to small subject selection whereby poor performance of two or three subjects could tilt the scores. After grade four a gradual progression in performance is seen. Performance at level three shows that these skills do not emerge until class three after which a gradual progression in scores is seen. One observation that can be made is that there is not much change in the performance between grades six to eight. This is evidenced by considerable overlap in scores.

Children who came from an English speaking background seem to acquire these skills earlier than those who do not come from such a background. Also, the performance of these children is better at each grade and higher ceiling scores are achieved.

The qualitative analysis of the errors showed the following pattern :

Level I :

Subjects were able to identify the correct word which fits into the sentence most of the time. Even in class 1 the performance was good. The errors that were seen were usually on.

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

By sixth class maximum performance (hundred percent scores) was achieved and maintained.

2) Level II :

The emergence of affixes for plurality and tense marker were the first to appear (by second class) and they were stabilized by fifth class. The kind of error seen could be analyzed as follows;

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

Example baby's/babies

ruler's/rulers

Another error seen was identification of thoughtlessness as plural rather than thoughts.

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

The comparatives could be identified by one subject in class one and most of the subjects in class two. The stabilization of comparatives was seen by fourth and fifth class. The errors seen were :

Inability to identify abstract comparatives example :
 Happier

2) Generalization of markers of comparatives to noncomparative words.

example : recognition of painter as comparative.

The response for negative markers was obtained by class three. Of the negative markers 'un' and dis' were easier than 'il' and im' which were seen only in older subjects. By sixth grade all the subjects could identify the negative marker.

Identification of affixes for repeated action (re-) was obtained first from subjects of class four and was stabilized by class six.

The markers for against (anti -), before (pre-) and with (co-) were identified first by subjects of class five and was stabilized by class six. Of the three prefixes, the one which indicates with'. (co-), was seen to be most difficult.

Level III :

This is one of the most difficult tasks and couldn't be administered on subjects upto third grade. Children in grade one and two couldn't answer this test even when examples were provided.

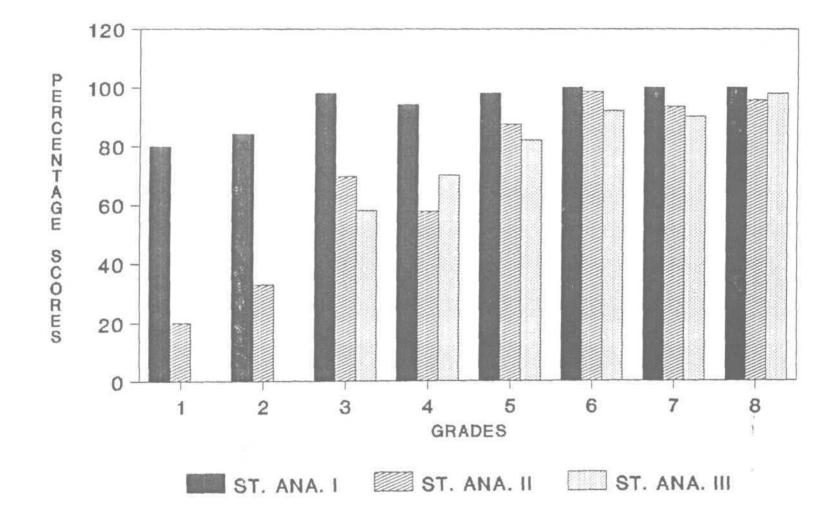
Most of the subjects had difficulty in identification root and non-root word, for the following words :

1)	Listed unlisted relisted	listen
	 V	V
	root words	non root word
2)	Parental, parents	transparent
	V I	v
	root words	non root word
3)	Kindly, unkindly, kindness	kindling
	I I V	V
	root words	non root word

Identification of non root words like fastest (refasten, fasten, unfasten being the other words where the root word was fast), painter (painful, painless, painstaking being the other words where the root word was pain), from other root words was easier for most of the subjects.

The performance on structural analysis test is represented in figure 6. It follows a gradual upward progression for all the subtests.

FIGURE 6: PERFORMANCE OF THE 8 CLASSES ON THE STRUCTURAL ANALYSIS TEST



1	1	1	1	1	1	1	1	1	ł	1 1
	1	1	1 1	11 1	111 1	17 1	¥ 1	V1 1	V11 V11	HUMIXAMI 11
4	1	1	1	1	ł	ł	1	1	1	ISCORES I
	-		-	-			-	-		
BLENDING LEVEL 1	I MEI	AN 1	0.0 ;	2.0 1	10.2 1	10.4 1	12.0 ;	12.0	12.0 12	.0 12
	1 S.D	1.1	0.0 1	0.4 1	2.711	1.351	0.0 1	0.0 1	0.0 0	.01 1
						-				
BLENDING LEVEL 11	I MEA	NI	0.0	4.4 1	5.6	6.2 1	6.4	7.2 1	7.4 7	.8 8
1	1 S.I	D. 1	0.01	1.541	0.8 }	1.161	1.021	0.981	0.810	1.4.1 1
	-			{-					{	
SYLLABICATION	I ME	AN I	0.0 1	1.6	7.0 1	8.8 ;	8.6	9.8 1	10.4 / 9	.2 12
	1 S.D). [0.01	1.541	1.891	3.051	1.621	1.721	1.021 1	. 331 1
1	1	1	1	1	1	1			1	11

Table 7 : Performance on biending and syllabication

As can be deduced from table 7, it is seen that this reading skill emerged only by class two for all the tasks. Blending level I could not be obtained for class one and class two had a score of 20. A quantum leap in performance is seen from class two to class three and a gradual progression in performance is seen thereafter. Maximum performance was achieved by class six and was seen in class seven and eight also.

Biending level II, showed progressive increase in performance from class two to class eight. Hundred percent scores were not obtained even by class eight.

The syllabication test was also a difficult test. This skill was not found in class 1 and class 2 had a score of 1.6. Class 3 however showed a rapid and large increase in performance with a score of 7.0. After class three a progression in performance is noted.

All the three tasks above are metaphonological tasks.

Error analysis of the metaphonological skills showed the following :

1) Most of the subjects had difficulty in blending picture and letters to form words like battle (a picture of a baseball bat was used to represent bat).

Swarm (unfamiliarity with the word swarm).

Road (a picture of a toad was wrongly identified as frog). Slid (the picture of lid was not identified correctly).

2) Blending of trisyllabic words was difficult. These were Direction = di + rec + tions Silently = si + lent + ly.

3) The common error seen across classes were on the blending of two words.

Pitcher - Pic + ture was substituted for pitcher
Nitrate - Night + rate was substituted for ni + trate

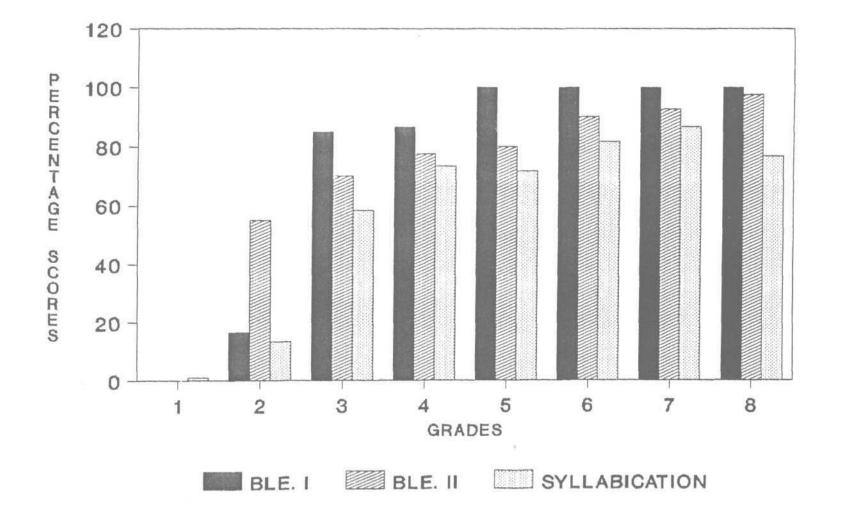
4) Blending of the words strite (str + ite) and stringent (strin + gent) and decode (de + code) was the easiest.

5) Syllabication of words like wholesome (whole + some) presented some difficulty in the younger grades.

Syllabication of bisyliabic words was easier than syllabication of trisyllabic words.

example : unshrinkable, unsuspecting.

FIGURE 7: PERFORMANCE OF THE 8 CLASSES ON THE BLENDING AND SYLLABICATION TEST



The performance on an blending and eyllabication is represented in figure 7. The subjects from class one couldn't attempt any of the tasks. A low performance is seen by class two and an increase in performance from class three upwards.

Table 8 : Performance on oral reading

1	. 1		1		ł		1		1	1		1		1			1	1		
1	1		1	1	1	11	1	111	1]¥ ¦	¥	4	V1	1	¥]	1	¥111 !		MAXIN	S I
			1-		j.		i -		-					!-				_		
ORAL READING	i	MEAN	1	7.6	ì	11.4	1	12.4	1	11.8	14	41	14	6 1	16.	0	16.	0	16	1
	1	S.D.	1	2.4	1	1.01		2.57	l	2.131	1.	111	1.	741	0.	0	0.0)		1
1			1		1		E		1	ł		1 E		1			1			

The scores of oral reading increased from grade one upwards. Hundred percent performance is achieved by grade seven and eight. In the lower classes a rapid progression in performance is seen. Grade one shows 7.6 and grade two, 11.4.

There were four reading passages in increasing order of difficulty.

The subjects from first and second classes could read the first and second passages. Two subjects in class one and most of the subjects in class two attempted the third reading passage. The fourth reading passage was successfully attempted by class four upwards.

The subjects from class one used letter by letter reading to read the longer and more difficult words. Their fluency was fairly good and reading comprehension for the first passage was good, and fair for the second and third passage.

Subjects from class two showed more fluent reading. However unfamiliar words like Subhas, bangles and frock were distorted or mispronounced. Reading comprehension was seen to be good.

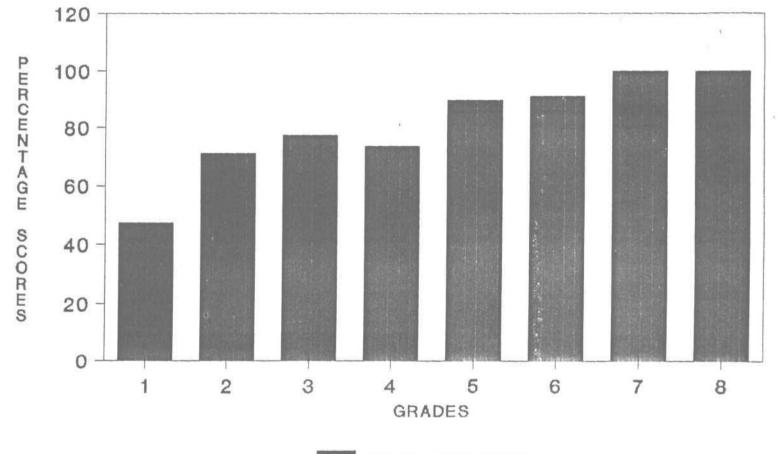
Children from grade three could read and answer questions from passage one and two without difficulty. They also attempted passage three. They evidenced difficulty with words like crab, crane, beak, pond, wicked etc. They could answer atleast two questions from passage three correctly.

Children from fourth and fifth grade could answer questions from passage 1-3 accurately. They attempted passage four and had difficulty with words like propeller, Orville glider, Wright, rudder, designed etc. These words being both unfamiliar, irregular and multisyllabic words, were more difficult.

Grades six, seven and eight performed almost on par. They were able to successfully attempt and answer questions ail the passages. Class six showed slight difficulty with passage four classes seven and eight could read ail passages and answer but them correctly. It was seen that children in these higher classes could rephrase the answer from the passage and could expand on answer also. Therefore grammatical formulation of an the answer was seen.

The performance on oral reading task is seen in figure 8. It can be seen that reading follows an upward course with increase in educational level.

FIGURE 8: PERFORMANCE OF THE 8 CLASSES ON THE ORAL READING



ORAL READING

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, this is because these are prerequisite skills to the naming of alphabets reflects learning of reading. The the association between a given phoneme and its grapheme. This phonic skill also appears early and is stabilized by the primary school The acquisition of phonic skills for vowels however years. emerged later in the school years and was fully acquired by sixth grade.

The structural analysis of words and blending abilities were attempted only at the second grade level. These tasks tap higher levels of language and complex reading skills. They require adequate exposure to language and the formal learning of reading.

The identification of non root words/root words medial vowels and syllabication were found to be other skills that presented difficulty for these children. These tasks were attempted only by the second and third grade and a rapid progression is seen in the grades three and four and gradual progression thereafter.

Oral reading and comprehension showed a steady progression across the grades.

The subjects considered for the study were representative of the Indian population who have had sufficient early exposure to English at home.

The results of this study when compared to a study carried out on Indian children who have had exposure to English only at school, show higher average scores across all grades for all the tasks. The skills were acquired earlier in English speaking children and stabilization of these skills were also at a lower class than when compared to children from a non English speaking background.

A diagnostic tool is labelled successful only in if acts as a blue print for management. The results obtained by using "Informal Reading Diagnosis' also has its implication for the management and treatment of reading disabled. The mean scores serve to diagnose a reading disabled child, identify specific areas of weakness and act as a pointer to indicate the level at which the child is. Management of the learning disabled child is based on the profile drawn by the test and proceeds in a sequential order.

SUMMARY & CONCLUSION

SUMMARY AND CONCLUSION

This investigation is aimed at evaluating the sequential progression of English reading skill in Indian children.

Forty normal school going children studying in the class range of first xo eighth were investigated. All of the subjects were English speaking with their mother tongue being different Indian languages like Tamil, Malayalam etc. All the subjects had adequate early exposure to English at home. Most of the subjects selected were from a middle to higher socioeconomic background with parents being in the medical profession.

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 results obtained on the test for the various tasks was computed separately for each class. The analysis was carried out by calculating the mean and standard deviation for each task, across the classes first to eighth. The mean percentage scores were calculated for each task which were then used to graphically represent the performance of each class a cross 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 sequential progression reading by native speaker of English. There was however a of lag seen in the scores of children in the younger slight age group (grades first to fifth) with regard to tasks like analysis, blending, syllabication. structural This can be attributed to the fact that English reading instruction begins only in the school for these children. The perceptual discrimination abilities and alphabet identification and recall skills are seen to be acquired by these children in the preschool years. These children achieved near maximum to maximum performance on these tasks from first grade upwards. Phoneme grapheme correbeginning and ending consonants, long and short spondence of vowels and oral reading skills followed a slow progression in the early grades with high scores being achieved by fifth grade upwards and plateau in performance seen thereafter Identification of root words, medial vowels and syllabication didn't emerge until the fourth class as these skills require certain amount of vocabulary and experience of the language.

It seen that these children who came from English was speaking backgrounds with early exposure to English at home performed better than their peers who did not have exposure to English at home and studied it as a language only in school. The difference in performance was more marked in the earlier grades (first to fifth). [Children with adequate exposure to English performed almost on par with western children]. Children in the higher grades however had almost equivalent performance, regard-

less of their early exposure to English or lack of it. This reflects the role that the formal learning of a language plays on acquisition of reading skills. In the more difficult tasks like blending and sequencing and structural analysis the children with good English background tended to acquire the skills earlier as well as reach higher levels of achievement when compared to those who did not have an English speaking background.

In the light of these findings, 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 posits the danger of placing a normal Indian child into the reading disabled category. Moreover, in the evaluation of Indian children it becomes imperative to probe for details of the mother tongue, exposure to medium of instruction at language school. The and results any reading test should be interpreted keeping obtained on in mind how each of these details have a bearing on the findings.

This normative data can be used for evaluating Indian children who are exposed to English at home during their early years and belong to middle to upper socio economic background.

One drawback of this study was the small number of subjects selected which may have influenced the percentile scores. Further research can be carried out in this area using larger number of subjects and choosing subjects from different socio economic backgrounds for a cross comparison. BIBLIOGRAPHY

Badian., Nathlie, A., McAnnulty., Gloria, B., Duffy., Frank, H., AIS., & Heidelise. (1990). Prediction of Dyslexia in Kindergarten boy. Annals of Dyslexia, 40, 152-169.

Barbara, A.J., Mathews, M.A., & Seymour, C. (1981). The performance of Learning disabled children on test of auditory discrimination. Journal of Learning Disabilities, 14, 9-11.

Border, E. (1971). Diagnostic Screening test for Developmental dyslexia. Cited by Whiting, S.A., & Jarrico, S. (1980). Spelling patterns of normal readers. Journal of Learning Disabilities, 13, 45-46.

Bryant, P., and Bradley, L. (1985). Childrens reading problems Oxford : Basil Blackwell Ltd.

Chall, J.S. & Rosewell, F.G. (1959). The Rosewell-Chall diagnostic reading test of word analysis skills. New York : Essay Press.

Cook, A. (1993). Tackling dyslexia : The Bangor way. London : Whurr Publishers Ltd.

Craver, R.P. (1991), Using letter naming speed to diagnose reading disability. Remedial and Special education, 12, 33-43.

Critchley. (1970). Cited by Critchley, M., and Critchley, E. (1978). Dyslexia Defined. London : Heinemann Medical Books.

Devaki, R. (1978). A reading readiness test in Kannada : its development and standardization. Unpublished master's thesis, University of Mysore.

Doehring, D.C, Trites, R.L., Patel, P.G., Fiedorowicz, C.A.M. (1981). Reading disabilities : The interaction of reading, language and neuropsychological deficits. New York : Academic Press Inc.

Dubrocard & Touche (1993). A developmental study of left or right handed girls during period of learning to read. Brain and Language, 4, 385-400.

Durrell, D.D. (1955). Durrell analysis of reading difficulty. Cited by Spache, CD, (1977). Diagnosing and correcting reading disabilities. Boston : Allyn and Bacon, Inc.

Eisen, M.L. (1989). Diagnosis and Remediation of the disabled reader. Boston : Allyn and Bacon, Inc.

Fay, C, Trupin, E., & Towers, B.D. (1981). The young disabled Reader : Acquisition Strategies and associated deficits. Journal of Learning Disabilities, 14, 32-34 Goldman, Shiffman & Bender. (1983). Interdisciplinary approaches to reading disabilities. New York : Grune and Stratton, Inc.

Harwell, J.M. (1989). Complete learning disabilities handbook. New York : The Center for Applied Research in Education, Inc.

Henry, E.B. (1908). Cited by Adams, M.J. Modelling the reader versus modelling the learner - In Hulme and Snowling (Ed)., Reading Development and Dyslexia.

Hillis & Caramazza (1995). Spatially specific deficits in processing graphemic representation in reading and writing. Brain and Language, 48 (4), 583-597.

Hirsh, KD., & Jefferson, J.J. (1968). Early prediction of reading disability. In Keeney and Keeney (Ed), Dyslexia : diagnosis and treatment of reading disorders. Saint Louis : The C.V. Mosby Company.

Johnson, D.J. & Myklebust, H.R. (1967). Learning disabilities : Educational principles and practices. New York : Grune & Stratton, Inc.

Leij, V.D., Aryan., Smeets., & Harry. (1992). Assessment of reading disability. In Verhoeven., Ludo., D., & John (Ed)., The construction of language proficiency : application of psychological models of language assessment. Amersterdam : John Benjamins Publishing Company.

Lindamood auditory conceptualization test. Boston : Teaching resources. Cited by Spache, CD. (1977). Diagnosing and correcting reading disabilities. Boston : Allyn and Bacon, Inc.

Loomba, M. (1995). Descriptive analysis of the sequential progression of English reading skills among Indian children. Unpublished master's thesis, University of Mysore.

Maitland, S., Nadeau, J., & Nadeau, G. (1974). Early school screening practices, Journal of Learning Disabilities, 7, 645-649.

Money, J. (1962). Reading disability. Baltimore ; The John Hopkin Press.

Morais. J. (1994). Introduction : reasons to pursue the study of phonological awareness Reading and writing : an interdisciplinary Journal, 6, 219-220.

Moyle, D. (1968). The teaching of reading. London : Ward Lock Educational.

Otto, W., Peters, C.W., and Peters, N. (1977). Reading problems. A multidisciplinary perspective. Massachusetts : Addison - Wesley Publishing Company. Pope, J., Lehrer, B., & Stevens, J. (1980). Kindergarten Reading Screening Battery. Cited by Pope, J., Lehrer, B., & Stevens, J. (1980). Multiphasic Reading Screening Procedure. Journal of Learning Disabilities, 13, 99

Pumfrey, P.D. (1971). Cited by Spache, CD. (1977). Diagnosing and correcting reading disabilities. Boston : Allyn and Bacon, Inc

Rae, C, & Potter, T.C. (1973). Informal Reading Diagnosis : A practical guide for the classroom teacher. New Jersey : Prentice Hall, Inc.

Richardson, E., DiBenedetto, B., Chrest, A., & Press, M. (1980). Relationship of auditory and visual skills to reading retardation. Journal of Learning Disabilities, 13, 7-62.

Rosewell, F.G., & Natchez, C. (1977). Reading disability : a human approach to Learning. New York : Basic Books, Inc.

Russell, D.H. (1949). Cited in Anderson, V.D. (1969), Reading and young children. Ontario : The Macmillan Company.

Savage, J.F., and Mooney, J.F. (1979). Teaching reading to children with special needs.Boston : Aliyn and Bacon, Inc.

Seymour, P.H.K., & Evans, H.M. (1994). Levels of phonological awareness and learning to read. Reading and Writing : an interdisciplinary Journal, 6, 221-240

Slingierland, (1969). Slingerland Screening Test. Cited by Meade, L.S., Nelson, R.D., & Clark, R.P. (1981). Concurrent and construct validity of Slingerland screening test for children with specific language disability. Journal of Learning Disabilities, 14, 264-266.

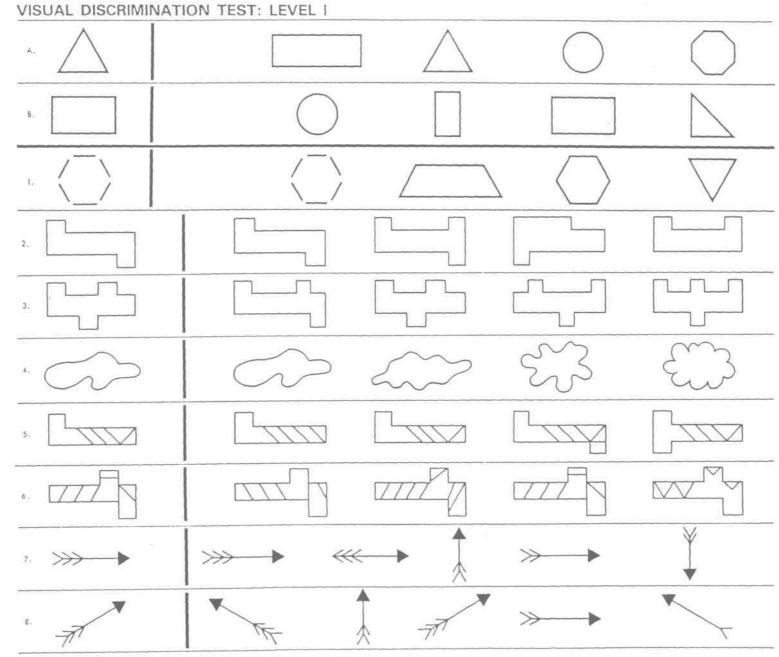
Spache, CD. (1977). Diagnosing and correcting reading Disabilities. Boston : Allyn and Bacon, Inc.

Spache, G.D. (1978). Investigating the issues of reading disabilities. Boston : Allyn and Bacon, Inc.

Thompson, M. (1984). Cited by Thomson, M. (1990). Developmental Dyslexia. London ; Whurr Publishers.

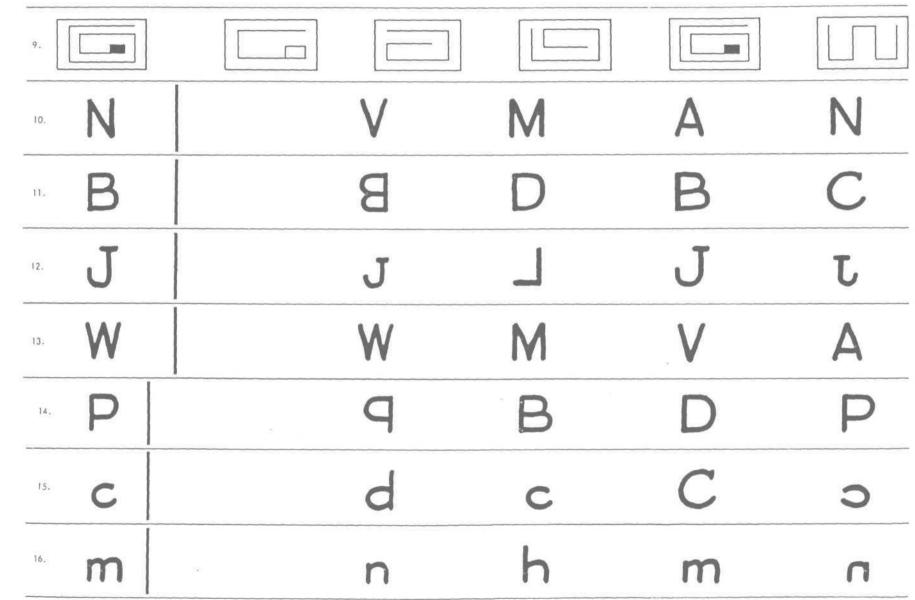
Weschler. (1949). Weschler Intelligence scale for children. Cited by Ackerman, P.T., Peters, J.E., & Dykman, R.A. (1971). Children with specific learning disabilities : WISC profiles. Journal of Learning Disabilities, 4, 150-166.

Wong, B.Y.L. Ed. (1991). Learning about learning disabled. Harcourt Brace Jovanovich : Academic Press, Inc. APPENDIX



See p. 36 for directions.

VISUAL DISCRIMINATION TEST (cont.)



VISUAL DISCRIMINATION TEST: LEVEL III

Α.	þp	þą	Pd	bd	bp
в.	mnn	mam	nmm	mnn	nnm
1.	gh	gn	ph	bh	gh
2.	sdo	sbo	bos	sod	sab
3.	not	tan	not	hot	tch
4.	bad	bob	bad	bob	dad
5.	pot	got	pot	tæ	tog
6.	pen	gen	pon	nep	pen
7.	awb	baw	amb	awb	awb
	still	Still	Still	Still	ztill
9.	today	tobay	today	dayto	today
10.	brwiltz	brwiltz	brwiltz	brwiltz	brwiltz
11.	moisten	moisten	moisten	moisten	moisten
11.	running	running	running	running	running
	_		_	_	
13.	dentally	dentally	dentally	bentally	dentaly
14.	beautiful	beautiful	deautiful	becutiful	beautiful
15	discriminate	discriminate	discriminate	discrininate	biscriminate
16.	rutherford	rufordther	rudrofther	rutherford	rutherford
17.	countrified	conutrified	countrified	counfiedtri	countritrtfied

Name

See p. 37 for directions.

AUDITORY DISCRIMINATION

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

ALPHABE	T TEST: IDENTIFICATION LEVEI	_
PART A:	UPPER CASE	

ALPHABET TEST: IDENTIFICATION LEVEL PART B: LOWER CASE

Nam	e			Grade			
1.	q	1	b	f	р	V	X
2.	1	r	а	е	i	h	t
З.	Γ	g	f	m	n	d	h
4.	V	u	Z	g	е	W	V
5.	\vee	n	m	u	r	q	С
6.	m	n	V	W	h	e	f
7.	h	t	i	f	1	b	d
8.	У	V	u	W	m	n	X
9.	0	d	n	m	g	r	q
10.	С	r	h	u	d	g	0
11.	VV'	Х	Z	V	У	a	W
12.	d	k	q	r	р	b	g
13.	i	р	q	n	b	g	d
14.	6	b	d	S	g	Z	f
15.	n	W	t	Z	m		V
16.	m	W	р	b	Z	n	u
17.	Ì	1	j	b	n	k	r
18.	k	b	h	е	1	f	Z
19.	С	n	i	m	е	S	f
20.	Х	V	r	j	n	W	k
21.	С	n	0	S	р	q	b
22.	V	Z	t	k	f	I	W
23.	S	g	f	Z	а	I	Х
24.	Î	t	f	Z	r	b	n
25.		m	n	е	u	q	С
26.	a	d	С	r	b	С	р

<u>AUDIT</u>ORY RECALL <u>PART A</u>: UPPER CASE

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24.	B N G R H	RTLMDPSXTWABTPRNSLZDECTE	אחרבוטוסטרטכרט דוסבאוט × אטרד טרא צ	ZPKDCOGZ>IXBODAHZJPKZDEZ
23. 24	K L		<u>_</u>	F
			×	1
25.	\vee	U		M
26.	K	<u>4</u>	£	Z

	PART B	LOWER	CASE	
4.	K	¥	e	3
2.	V	ri	w	m
З.	A	e	Z	l
4.	γ^{\sim}	t	R	£
5.	9	c	d	re
6	n	e	A	m
7.	Ь	d	K	e
-8.	x	z	y	d
9.	V	l	x	K
10.	Ł	5	C	p
11.	L	n	3	· u
12.	Y	<u>~</u>	n	w
13.	d	R	q	·
14.	g	Ł	R	d
15.	R	b	C	d
16.	m	a	F	b
17.	V	w	a	x
HB.	S	t	N	$\underline{\mathcal{V}}$
19.	i	Z	l	n
20.	9	S	x	g
21.	γ^{\sim}	p	g	0
22.	P	d	b	ic
23.	w	m	n	-d
24.	£	l	t	k
25.	w	t	×	P
26.	a	R	2 10	z n

		PHONEM	E- GRAPH	EME CORR	ESPONDENC	E I
	PART A :	BEGINNING	CONSONANTS	5		
1.	dog	4. pound	7. Sat	10. run	13. Win	16. yelisio
og .	ham	5. band	8. vine	II. note	14. tall	17. jurr.p
3.	lamb	6. man	9. kit	12. fat	15. gone	
	PART	B : ENDING	CONSONAN	TS	Ų	
1.	nick	4. стор	7. ham	10. End	13. Yazz	
		s. barb			14. muff	
3.	pastel	6 door	9. Set	12. men	15. thirty	
	PART	C : BLEND	S	22	2	
٢.	blast	s. frog	9. trinket	13. slice	17. Swarm	× 1
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 I); VOWELS	:- LONG 1	JOWELS		
1.	safe	3. fume	s. rice	7. cute	9. COax	20
2.	dine	4. Соре	6. соре	s. heat	io. hot	
	PART D	· VOWELS	: SHORT V	OWELS		
١.	kit :	3. pack	s. watch	7. Sick	9. bug	
Q.	cut .	4 fist	6. CCb	s. stop	10. Sat	

PHONEME - GRAPHEME CORRESPONDENCE II

PART A : BEGINNING CONSONANTS

1-	γ	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.	5	top.	sun	sit	Caught	ear

PART B. : ENDING CONSONANTS

.

].	5	Light	useless	sold	cats	rose
		rained	door	rub	had	friend
3.	K	Crank	king	back	kite	skirt
4.	ŧ	hat	tag	white	tree	late
		rat	care	clever	road	bear
6.	L	Small	long	call	Lie	nine

PART C: MEDIAL VOWELS

1	bale	pack safe
	answer:	bull, make
2.	Сир	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 to te
	answer:	hole, run
7.	site	Set Fresh
	answer:	mint, mend
З.	gap	sat pearl
	answer:	girl, map
9.	yes	bit sit
	answer ;	help, mill
10.	feel	peak nice
	answer;	peak nice seek, find
		111

Name	Grade
Sample	
A. The <u>baby</u> bab	_were crying. Dies babied
1. The boy was ride rided	the horse. riding
2. Isee many toys toying	toy
3. My balloon is the big biggs	biggest
4. Tne dog jump jumped	over the gate. d jumping
5. He <u>ver</u> run running	runs
6. Joe is tallest taller	than Dick. tails
7. Heis h come connec	
8. They will not goes go	
9. The <u>a</u> r child childs	e coming soon. chiidren
10. The bird flew flyed	over the house. flying

STRUCTURAL ANALYSIS TEST: LEVEL II

Name_____Grade____

- 1. Circle the word or words in each row that indicate more than one (plural).
 - a. baby babies baby's babied b. cries cried criers crying c. thoughtlessness rethought thoughts thoughtful
 d. ruler's ruling rulers unruled
- 2. Circle the word or words in each row that show past.
 - a. jumped run walks walked b. stopped flew is eating listing brusher c. were come
- 3. Circle the word or words in each rowthat have a part (affix) meaning "more" or "less than."
 - a. bigger tall fewer high b. painter smaller manly mixedc. paying happier frozen reviews

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

- a. happiness unhappy happily happening
- b. disoriented reoriented orienting orienter
- interesting disinterested reinterest c. uninterested
- 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
h	wiewed	nroviow	roviow

b. viewed preview review

STRUCTURAL ANALYSIS TEST: LEVEL III

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, countless, and uncounted have the same root and that country does not

Sample:

recount countless uncounted

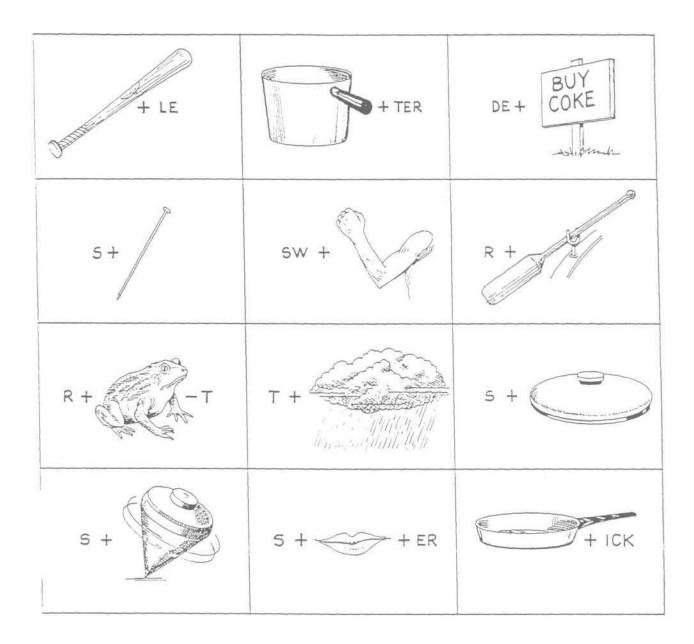
Now work the problems below in the same way:

- 1. unmarked remark marking markproof
- 2. listen unlisted listing relisted
- 3. alone loner lonely abalone
- 4. parental parentless transparent parents
- 5. refasten fasten fastest unfasten
- 6. eating heater eats uneaten
- 7. kindly unkindly kindling kindness
- 8. famed famous famously famine
- 9. painful painless painstaking painter
- 10. reader reread ready reading

BLENDING TEST: LEVEL I

Name

Grade



Name		Grade
1. str + ite	str + ide	str + eed
2. strin + gent	string + ent	stri + dent
3. pit + full	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.sil+ent+ly	si + lente + ly	sil +entl + y
8. ban + dan +a	band+anda	ban + da+na

SYLLABICATIONTEST

Read each word below and divide it into syllables by drawing a iine between each syllable. For example, "undelivered" must be divided into four syllables like this: un/de/iiv/ered. Divide each word below in the same way.

- 1. develop 7. unshrinkab!e
- 2. wholesome 8. recharged
- 3. speedometer 9. innocent
- 4. rounded 10. battle
- 5. lighter 11. interpret
- 6. floating 12. unsuspecting

Reading Passage 1

Today is Monday. It is half past nine. The Sun is shining in the sky. Raju and Bhaskar are going to school. They ore friends. Are they carrying bags? Yes, they are. Are they riding bicycles? No, they aren't riding bicycles. They are walking.

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

Reading Passage 3

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

There tived a wicked crane near the pond. It was fond of eating fish. It thought of a plan. it went to the pond and said to the fish, "Dear friends. t 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 ram the water)n this pond will soon dry up. Then aH of you witt die"

All the fish, frogs and crabs sad in one voice, "Please tell us, how can we save cur-selves?"

The clever crane said, There is a big lake with a lot of water nearby. If you want, I can carry all of you, one by one in my beak and leave you in the take" Att 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. Everyday tt came to the pond, took 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 covertng about 36 meters. Later Wilbur flew for 59 seconds 120 covering nearty 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 the clouds. They took 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 I 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 bond? 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 I 1. Who were Wright brothers? Who flew for a longer distance than wright brother. 2. 3. How did they design their glider?

4. How is the modern air flight?