Items of Reading Test and Construction of a Diagnostic Reading Test in Kannada

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Abstract

Some diagnostic reading tests in English were analyzed. The test items were categorized and the literature is reviewed. Also presented is the outcome of research on the related con cepts of test items. The important factors for testing reading are identified. Kannada material for diagnostic testing is presented with details of testing, interpretation and usage.

Introduction

Reading:

Whether it is considered as a process or a skill or an aspect of behaviour. reading has not been defined satisfactorily yet. And its process of acquisition is also not very clear. However, each author seems to be convincing in the model she/he put up. There may be several sub-skills of reading which haves to be mastered in order to read. It is also possible that the reading skills are mastered on a spiral continuum where in several skills may be deferred to be acquired at a later stages (Aukerman, 1972). If this idea is true we do not know at what stage we can call a subject a reader.

The problems that have plagued in understanding language and speech also prevail in understanding reading. Reading is considered to be one of the modes of language. It is also thought and found to a good extent that reading and writing are based on speech. "Whatever the relation of speech to writing, the fact that almost all children have acquired a good deal of verbal fluency before they face the task of learning to read has a dual significance for understanding the reading process. In the first place children haves a basis of language that is obviously relevant to the process of learning to read. The written language is basically the same language as that of speech even if it has special lexical, syntactic and communicational aspects . . . " (Smith. 1971). It also supports the view that reading acquisition starts well at the age when speech and language development reach their peak, i.e., around the age of seven years.

With the awareness of the complexity of speech and language processes, it is not surprising and one can even appreciate the much more complex process of reading. It naturally follows then, that understanding of the disorder of the process can not be clearer than the process itself.

DISORDERS OF READING:

Though understanding the processing of language and reading can be deferred the disorders have to be looked into and intervened so that the subjects can do better than they would without help.

Probably it should not be difficult at all in practice to identify the subjects with the disorders of reading. The foremost characteristic is that the subject does not read as well as he is expected to. It does follow that one does expect the reading acquisition to be affected in certain children with known handicaps like hearing loss, mental retardation, brain damage and severe visual problems. When children are expected to learn to read and they do not achieve the same it becomes necessary to put it in clear scientific terms so that further action can be in an organized way.

It has become important to define the problem quantitatively and qualitatively. The U.S. National Advisory Committee for the Handicapped has defined the Learning Disability which is inclusive of the reading disability. This following definition is also used in professional areas.'Children with special (specific) Learning Disabilities exhibit disorders 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, to mental retardation, emotional disturbance or to environmental disadvantage".

There are numerous definitions by various professionals on the disorders of reading for the purposes of theory and research. For the practical purposes the most common definition used recommends the selection of children who are reading one and a half to two or more grades below the expected grade level.

It should be noted that interestingly the definitions have said as to who is having the problem than what the problem is, even many professional definitions do the same.

Why Identify The problem:

It is imperative that the problem should be identified to ameliorate it. The implications are far reaching. Proper programme helps not only individuals affected but the society on a long run. Primarily, reading has become necessary for daily living activities, recreation and adjusting better. In fact the reading disabled had been misidentified and classified as mentally retarded and emotionally disturbed apart from being identified as underachieves. In India, unfortunately it is not enforced that such problems are identified and intervened.

How To Identify The Problem:

Usually it is not difficult to identify the pupils who have difficulties in reading or in learning to read. In fact teacher observation is one of the most useful techniques in diagnostic process,. "The first step in diagnosing a student's specific reading skill strengths and weaknesses is by teacher observation. Usually, the teacher should do some type of structured observation before using any other diagnostic procedure" (Miller, 1974). To aid the teacher observation certain checklist may be used.

Nevertheless just recognising the children as having difficulty and labeling them is not diagnosing the problem, though diagnosis includes labeling the child as having the problem. According to many definitions the children's reading behaviour has to be sampled using test/tests to say that there is a discrepancy between their ability and achievement. Further it is also needed to indicate as in what psychological process/reading skills the children are poor so that the remedial programme can be planned accordingly.

"In dealing with deviant children, the primary concern is, through formal or informal methods of evaluation, to delineate abilities and disabilities and to organize instructional materials to ameliorate deficits in psychological abilities and academic achievement" (Kirk and Kirk, 1971). Through tests one analyses the specific errors and faulty habits. To some extent it is possible to say what a reader can do and what he can not do. Later in the treatment these supposed causes can be worked on.

The diagnosis is a mapping process of reading ability. In a school system administering achievement tests gives an estimate of the children's achievement in general. The poor achieving students are the ones who will need further assessment and treatment. Diagnostic reading tests provide more detailed mapping of reading and the difficulties therein. Unlike as in achievement tests in diagnostic tests the particular child's reading subskills are described and he is not necessarily compared with other children. "A diagnostic reading test analyzes the process by which the child attempts to read. An analysis of specific errors and faulty habits as vowel errors and consonant errors, substitutions slow reading, repetitions in reading, methods of word attack etc., is usually provided by a diagnostic test" (kirk and Kirk, 1971).

One has to be cautious in making use of tests. Test provides the information in a structured manner. It should be remembered that tests do not tell us about the real causes of reading problems and explain why one has failed. This may be so as there are larger variations in the normal process as well as the types of difficulties of reading.

In a broad sense there are two models concerning the diagnosis and treatment aspects. Basically these are different views as to how the deficits have to be viewed in the affected children and dealt with. These are the Psychoeducational process model and the Task analysis mode. Wong (1979) views these models as neurologically oriented and educationally oriented respectively.

The psychoeducational process model assumes that children experience learning difficulties as a result of deficits in processing skills, such as visual perception, auditory perception and short term memory. It is assumed that theses skills are necessary for academic achievement and thus remediating them in necessary whenever deficits are found.

The educationally oriented model/task analysis model assumes that children have difficulty in learning because of past failures to master prerequisite academic skills (Helton, et. al. 1982). Reading is a skill because it is something that children have to learn to do. It may have several component skills which can be performed with varying degrees of proficiency. When they are patterned coordinated and used together they go to make up the skill of reading proper (Vincent and Cresswell, 1976). For example, in English children need to discriminate letters of the alphabet before learning their respective sounds. From this becomes crucial to identify the lower level skills that have not been mastered and help children to master them.

According to Helton and others (1982) a model to be effective in planning progress should satisfy the following assumptions.

1. The deficits in children emphasized by the model cause academic problems.
2. The deficits emphasized by the model can be reliably and validly assessed.
3. The deficits emphasized by the model can be remediated.
4. Remediation of the deficits emphasized by the model leads to improved academic performance.

With the available data, they state that, only analysis model satisfies the evidential requirement for these assumptions.

In the following pages it has been attempted to see -

a. How certain tests based on this model test the reading skills;
b. What component skills of reading do they test;
c. Is there a particular rationale for testing on an item either given by the author or others; and
d. What does the research say on testing these item skills.

The following tests were looked into as these are some of the most used tests.

1. Silent Reading Diagnostic Tests. 1955
2. Durrell Analysis of Reading Difficulty. 1955
3. Gates Mc Killop Reading Diagnostic Test. 1962
4. Gray Oral Reading Test. 1963
5. Diagnostic Reading Scales. 1963
6. Gilmore Oral Reading Test. 1968
7. Criterion Test of Basic Skills. 1976
8. Stanford Reading Diagnostic Test. 1976

These standardised reading tests assess the skills of vocabulary (word meaning, sight vocabulary), comprehension, auditory discrimination, visual discrimination, phonics, syllabication, reading rate, oral reading (passages) and silent reading. Dividing reading into these subskills is arbitrary and without any support of research evidence. (Farr, 1969). However, there is some data on the tests which evaluate such items inclusion, post hoc.

Testing The Skills

Letters of The Alphabet:

Letters are the units of writing but they need not be the units in reading. However, learning them is a necessity for the reading process. Thus testing for following skills is common among tests.

1. Naming the letters: Consonant, Vowel, Lower case and capital letters.
2. Identifying the letters: when the sound of the letter is presented.
3. Sounding the letters presented.
4. Naming the letters when the sound is presented.
5. Matching the letters
6. Discriminating letters in presence of reversed letters.

High positive correlations between knowledge of alphabet letter names and learning to read have been reported. Knowledge of letter names is found to be the best single predictor of beginning reading achievement, even better than intelligence! According to Ehri (1983) researchers have been reluctant to conclude that letter name knowledge facilitates reading acquisition as some studies have failed to show the advantage with the letter name learning in experiments. However, studies have shown that letter name instruction combined with letter sound instruction facilitates reading acquisition. It is suggested that theses skills should be viewed as functionally related skills whose integration may be the factor promoting the reading acquisition.

Tes'ing for the names and sounds of letters seems apt. It is necessitated by the orthography of the English lanyuac e. The child learns the letters with which he can spell the unfamiliar words using phonic knowledge as he progresses.

Word Identification:

The terms word attack, word analysis, word recognition and word decoding are often used synonymously in reference to a cluster of rather diverse skills that readers employ to identify words that they do not easily read from print. There may be different skills used to read a word like configuration, picture cues, phonics, syllabication, structural analysis, and context. (Johnson, 1973).

There seem to be two alternative methods of word identification. One can be thought of as similar to using word configuration and the other with word analysis. The immediate identification of words can bypass the identification of letters (Smith, 1971). According to Massaro et. al., (1980) the primary recognition process

operates on a number of letters simultaneously (in parallel). The visual features detected at each special location define a possible set of letters for that position. The primary recognition process chooses from this set of candidates the letter alternative which has the best correspondence in terms of visual features. However, the selection of a best correspondence can be facilitated by knowledge of orthographic structure. The primary recognition process therefore, attempts to utilize both the featural information and knowledge about the structure of legal letter strings. It is also assumed that both the sources contribute to the process independently.

According to Spache (1976) word recognition is basic to all levels of reading and unless an individual can recognize word and their meanings reading is literally impossible. He emphasizes that meaning words and functions words are to be dealt differently. Testing the word recognition is also important in the view that most approaches to teaching consider word as the unit. Thus the skills and processes in reading words may be considered first in the development of reading ability.

Among the tests looked into, except two, all test for word identification skills. Some have word lists to be read during which responses are noted. Some expose words for a short duration to test sight word reading. They also allow the subjects to read slowly with analysis. Silent reading test provides the stimulus picture, word choices, context and also reversible word among the choice words. Gilmore and Gray test use the passage reading itself to evaluate the word recognition.

Children who learn to decode must learn, atleast implicitly, the properties of a great many linguistic units. Furthermore they must learn to manipulate these units in various rule governed ways. They must learn how to recognise, analyze, combine and recombine phonemes, syllables, words, phrases and sentences. On the graphic side they must learn to work with letters, syllables, words, phrases and sentences. (Mac Ginitie, 1978).

Some tests have items to test the skills of flexible visual perceptual habits; knowledge of phonics and structural word elements and fluent oral and visual synthesis of word parts which Bond, et. al. (1979) consider are needed for word recognition. The items test for the tasks of a) identifying the first syllable from a choice; (b) identifying affixes, root words; (c) locating word elements i.e, different parts of the words; (d) dividing the multisyllabled words into syllables; (e) identifying the common word parts; (f) blending the syllables into normal/ artificial words; (d) reading artificial words; (h) synthesizing the words that are hyphenated at the end of a line; and (i) match the word embedded in another word.

Vogel (1977) had suggested that in assessing children with reading difficulties specific measures of morphological ability may be included. This was on the basis that significant differences had been found in the morphological abilities of normal and dyslexic children. But recently she concluded that there is not a qualitative difference between normal and children with reading difficulties in this respect. The significant quantitative deficits may be seen as reflecting a delay in onset and rate of acquisition of morphological rules in the affected children rather than a unique idiosyncratic pattern. (Vogel, 1983).

Children keep learning to blend visually and phonetically for quite some time. Mathews et. al. (1980) found that children's ability to read broken paragraphs (in to words, syllables, letters) is predictive of reading ability. Probably the ability to combine different parts of the word reaches maturity becomes automatic normally by the time children are through fourth grade.

Every author of diagnostic tests emphasizes that a keen observation of child's reading has to be made particularly while reading. Some tests do not incorporate certain items to be tested but demand that on observation the reading errors be recorded.

Most tests direct the examiner to note the errors in reading like substitutions, mispronunciation, words read by the examiner to assist, disregard of punctation, insertions, hesitations, omissions, repetitions, inverting/ changing the word order, contractions and transpositions in addition to noting whether the errors occur in the word beginning middle or at the ending.

There seems to be a general agreement that the reading errors have to be studied. However, it is argued as to how exactly the errors reveal the underlying problem and to what extent they can be useful (Kaufman, M. 1976, Leu, D.J. Jr. 1982, D'Angelo, K. & Mahlios, M. 1983). Noting the frequency of errors and comparing it with the ability level may not be easily compared to reading comprehension. In recent years researchers have started looking at the categories of errors made i.e., syntactically acceptable/unacceptable, semantically acceptable/unacceptable, graphemically similar/ dissimilar errors. Thus the errors are seen as miscues on linguistic bases.

It was thought that proficient readers use more contextual information and that they uses less graphic information. It was suggested that less proficient readers should receive instruction in context use strategies. But the evidence suggests that proficient readers use equal/ less amounts of contextual information and equal/greater amounts of graphic information compared to less proficient readers (Leu, D.J. Jr, 1982).

It has been found that skilled readers identify words more quickly and are less affected by context and also less affected by stimulus degrading compared with less

skilled readers. Less skilled readers are more dependent on content to compensate for less efficient word identification skills, they are also less able to use context to predict words. (Perfetti, 1982).

There are basic issues regarding the reading error evaluation which are not resolved yet. Different categories of errors are not defined. Some may count repetitions and self corrections as errors but some others do not. Even the same way of counting errors is also not used by all.

Spelling:

Children's ability to spell is a different one in contrast to identifying words, letters, and naming of letters. Spelling is to represent phonemes. Phonemes have to be represented by letters, but the letters do not sound the same consistently. Thus the child needs to say the word depending on phonic rules where in letters sound differently depending on the context. There may be many able readers who spell poorly. Spelling in this sense seems to be more demanding than reading (Henderson, 1981).

Among the diagnostic tests seen only Gates-Mc Killop and Durrel Analysis test particularly for the spelling ability. Task for the child is to write the spelling. Even the irregular spelling if phonetically right, may be accepted as a correct response. (Spache, 1976).

There is found to be a good amount of correlation between spelling achievement and oral reading accuracy. Cheek (1979) found among 6th and 8 th graders those who were good at graphemic options were also achieving at spelling and reading accuracy.

Kochnower, et. al., (1983) found that normal reading children as compared with learning disabled children were able to read significantly more phonetically regular real and nonsense words. They see the evidence as suggesting that children who face difficulty in reading have specific deficiency in the use of phonetic code, whereas normal children quickly learn the phonetic code as they are also adept at phonemic processing.

Vocabulary:

Vocabularly is one part of the language which keeps growing through old age unlike other aspects of language. In diagnostic tests the items testing word recognition (word list) do test the sight vocabulary. Among the dealt tests Stanford and Gates Me Killop tests have items to test auditory vocabulary. The tasks are to complete the incomplete sentences by filling the word from the given choice words. The sentence is read to the child. The other task is to match a picture to the word said by the examiner. The processes involve finding a word as well as understanding them. Vocabulary is invariably tested in achievement testing than in diagnostic testing.

The child who fails to build a large sight vocabulary and who does not have the habit of recognising these words at a glance can not hope to become an able reader (Hond, et. al. 1979). Farr (1969) states that testing vocabulary is not a simple task. A number of vocabulary tests impose severe test limits. Time limits may tend to increase the reliability of the test, but at the same time they reduce the validity. He opines that a test which confuses the speed and vocabulary cannot validly assess the vocabulary of a slow but methodical reader. Also the reliability of the test is related to directions on guessing and timing. Too many difficult items or too much guessing reduces test reliability.

Auditory Abilities:

It is needless to say that auditory perception is basic to oral language acquisition and maintenance. It is believed that reading is based on and borrows much from the oral language. There is no conclusive research on the auditory aspects as related to reading.

Many diagnostic test include items to test the auditory skills. This is based on the belief that they are related to reading. The tasks included are as follows. Auditory discrimination is tested using minimal pairs, words with one sound difference, and same words repeated, wherein the child is needed to respond in the directed manner, for example saying whether the words are same or not. The sounds concerned may be in the initial, middle or final part of the word. Auditory blending is tested by having the child to hear parts of the word presented separately and requiring him to say the word as a unit. Ability to hear the beginning, middle or final sound in the word and discern it is tested by first presenting a target word whose particular sound the child has to match with in a different word from the given choice words. Childs ability in learning to hear sounds is tested by presenting the sound intensified, with emphasis, in some words and checking for its identification in other words presented later. Childs ability to identify nonsenses/artificial word is tested by having him identify it when presented orally.

There is no consensus among researchers as to what constitutes auditory perception. It may include reception, discrimination, interpretation, integration, sequencing and memory. The literature indicates that when comparisons are made between matched groups of good and poor readers auditory perceptual abilities appear to be significantly related to achievement in reading. But his should be viewed carefully as the groups made on the basis of reading ability may actually differ on the basis of intelligence (Lyon, 1977). The relationship of auditory abilities to reading seems to be higher when the subjects are young children and relationship decreases with increasing age. Intelligence Quotient seems to be a predictor of reading than auditory abilities. Lyon views

the studies which report improvement in reading after auditory training doing so as they incorporate tasks which resemble the act of reading itself.

Harber (1980) also reports similar findings that the correlation between the auditory perception skills (sound blending and auditory closure in this case) and reading is found significant but too small to have any application value to education. However, it is felt that these skills are to some extent related to success in the learning disabled children and should receive some attention in assessment and instruction processes. Surprisingly, he finds that several researchers have found auditory perceptual measures as better predictors than visual perceptual measures for reading achievement.

There is some support for the role of auditory measures in reading. It is found that adults reporting complaints of difficulty in hearing, understanding, remembering and writing exhibited disorders in a number of auditory measures. They were poor in; auditory memory for noncontextual speech, contextual speech, auditory figure ground; and auditory discrimination for sequencing of sounds. Hasbrouk (1983) suggests the desirability for examining auditory perceptual abilities in adults of all ages even though tools available might have been designed for children. Kochnower (1983) reports a study wherein normal readers and poor readers matched otherwise were tested on tasks of categorization of phonemes with in words. The results were in consonance with other studies that poor readers performed significantly worse. It is thought that disability in phoneme identification impedes the effective use of phonetics in learning to read. Thus it may be useful, though not significantly, to test for certain auditory abilities.

Oral Vs. Silent Reading:

"oral reading in itself tends to improve overall reading skill. Since there appears to be a rather close relationship between oral reading habits and silent reading comprehension, it is reasonable to assume that if one can read well orally he can read well silently. Oral reading also increases auditory acuity. It enables the pupil to discriminate the sounds of words which may be of great aid in pronunciation. Furthermore oral reading may be of value in improving vocabulary; if a pupil can pronounce a word, his chances of remembering that word are increased". Gilmore and Gilmore (1968).

There are tests which have passage items to be read orally or silently for testing reading skills and comprehension. Thus it is important to know whether the claims for either oral or silent reading can be held. It does not seem to be the cases that there is a significant difference between them. According to Juel and Holmes (1981) oral and silent reading represent a similar congnitive process. However, they observe that readers decrease processing time on difficult words in silent as compared to oral reading. This was particularly striking among poor readers.

Silent and oral reading were thought to be different because eye movements and reading rates are different. Oral reading necessarily involves phonological recoding of the written text, silent reading may or may not. Phonological recoding may form preliminary 'bottom-up' step to lexical access in both oral and silent reading. A fairly direct mapping from one code to another can happen for oral reading. On the other hand lexical access in both oral and silent reading may be achieved through interaction of perceptual and contextual information. (perceptual information here mean critical features for words and/or analysis of orthographic redundancies, contextual information mean syntactic and sematic cues.) The speech code for reading could come after lexical access, derived from the sematic representation and not necessarily mediated through letter sound correspondence. Given these possibilities Juel and Holmes draft the following probabilities. It is possible that less comprehension can occur in oral reading as the process can stop at phonological processing as this may be happening among young readers who attend to decoding skills and are required to read aloud. But the suggestion is plausible that addition of auditory modality in oral reading can aid in comprehension. However, further research has to establish facts in this regard.

Gates-Mc Killop test makes use of a phrase presentation for oral reading. The phrase is exposed as a flash for half a second. The child is expected to read', if he is a proficient one, otherwise the response is recorded for oral reading error analysis.

Paragraph Reading:

Diagnostic tests include paragraph reading as test items. But these items are meant to test different aspects. Generally oral reading errors are noted when the subject reads the paragraph. Many times the reading is timed. This reading is mostly to evaluate comprehension.

Of the tests looked into most of them use paragraph reading for comprehension testing. At the end of reading the paragraph the subject is asked questions on what he read and the responses are recorded and scored. The subjects response may be to select from the choice answers. It can not be pinned down as to what skill exactly these items test. For example, in Gray's (1963) test "the test questions are not made to measure comprehension. They are designed to determine the extent of understanding at the simplest level".

Davis (1983) has delineated subskills basic to comprehension.

1. Knowledge of word meanings
2. Ability to select the appropriate meanings for a word or phrase in the light of its particular contextual setting.
3. Ability to follow the organisation of a passage and to identify antecedents and references in it.
4. Ability to select the main thought of a passage.
5. Ability to answer questions that are answered in a passage but not in the words in which the question is asked.
7. Ability to draw inferences from a passage about its contents.
8. Ability to recognize the literary devices in a passage and to determine its tone and mode.
9. Ability to determine a writer's purpose, intent and point of the view i.e. to draw inferences about a writer.

Of these items he found that individual scores in component skills listed in 1 and 2 are sufficiently reliable to warrant their use for practical purposes.

There are internal and external factors which influence comprehension. Samuels, S.J. 1983) weighs internal and external factors equally in their contribution to reading comprehension. "All the internal factors and external factors interact. For example, the topics in a selection which are external interact with the readers knowledge about the topic which is internal. With some topic the student may appear to have poor comprehension whereas about other topics the student may have good comprehension. At some other time poor comprehension may be a result of an internal factor as poor decoding skills". He lists a number of factors, internal and external mentioned below, which he has explained at length.

Inside the head	Outside the head
1. Intelligence	1. Quality of instruction
2. Language instruction	2. Text topic
3. Decoding ability	3. Conventions of print
4. Background knowledge. and schema	4. Clarity of writing style
5. Text structure	5. Text readability
6. Anaphoric terms structural	6. Format design and text elements
7. Meta-cognitivestrategies	7. Time
8. Language facility	
9. Graphic literacy	
10. Motivation, attention	

Samuels idea about comprehension is sound as far as the theoretical understanding is concerned. But in reality the assessment procedure has been criticized heavily. There are number of doubts regarding what to measure, how to measure and with what standards" (Vulz, 1979).

Many researchers agree that the test items, usually passages, often do not test comprehension as authors intend. (Allington, et. *sA.* 1977, Johns, 1978, Smith & Weston, 1980). According to Johns most subjects may score above chance on tests and exercises of reading comprehension even without reading the test passages. When a subject answers questions without reading the items the time is said to be possessing passage independence'. Smith and Weston compared two groups who answered the test questions with and with out reading passages. The subjects performed quite well on 'passage out' condition. This suggested that most variance was accounted for, by the subjects background knowledge, thinking, experience and such abilities. Allington and others tested for the passage dependence of times from Diagnostic Reading Scales, Durrell Analysis of Reading Difficulty, Gilmore and Gray oral reading tests. The results seem to indicate that these tests share two basic weaknesses which limit their usefulness in assessment of individual comprehension abilities. There was the general passage independence of a rather high percentage of test items found. Also the range of types of comprehension abilities tested was limited.

In measuring comprehension cloze tests are also used. "Although cloze is generally accepted as a global measure of reading comprehension and cloze tests are reportedly well correlated with those of traditional comprehension tests the question of which specific components of reading comprehension are measured by cloze tests has not been adequately explored" (Shanahan, et. al. 1982).

Carver (1973) sees the process of comprehension at four different levels. Level 1. involves decoding of words and the determination of their meanings in the particular sentences being read. Level 2. involves combination of meanings of individual words into the complete understanding of the sentence. Level 3. involves the recognition of implied main idea of the paragraph. Level 4. involves thinking activity which is not at all associated with the literal, implied or tangential meanings of the prose. Level 3. seems to be including a great deal of reasoning. But level 4 is best regarded as not being a part of reading process at all. According to Carver "Reading is not primarily reasoning, but most standardized reading tests are actually standardized reasoning tests . . . E.L. Thorndike's technique of presenting paragraphs with questions beside them has influenced standardized testing of reading achievement

to the present day. . . . . .What has changed through the past 50 years is the addition of multiple choice answers and highly sophisticated ways of revising, scoring, analyzing and reporting test results".

Many tests time the reading of comprehension item paragraphs. The confounding of rate and comprehension in earlier studies has lead to the idea that 'fast readers are good readers'. Only a slight relationship has been found between rate and power of comprehension. When the material is most difficult, when more thought processes are involved and when the readers purpose is more exacting the relationship between rate and comprehension is minimal. The concepts of rate, comprehension, and rate of comprehension have their value in diagnosis, but one has to be aware of the artifacts that the confounding of rate and comprehension creates in the measurement. (Farr, 1969).

Listening Comprehension:

Only two, Durrell Analysis of Reading difficulty and Diagnostic Reading Scales, have items to test listening comprehension. The subject is read to a passage and asked questions to test for comprehension. It is assumed that a subject is capable of understanding the material that is even more difficult than those he can read orally and silently (Spache, 1963). As with the oral reading comprehension, for listening comprehension too the knowledge of the topic has influence. It has been found that the knowledge of the topic is more influential than the interest in the topic. (Chouttare and Devine, 1983).

Reading Rate:

One of the goals of reading acquisition is to read at a good speed. Hartson and Gerlach (1981) indicate that there are several factors affecting the reading rate. Those are the difficulty of reading material, decoding skills, rate of word recognition; phrasing, reading habits (eye-head movements, regressions, repetitions, etc.) and experiential factors (familiarity with words, vocabulary, etc).

It seems possible that one may read at a slow rate not only when he is comprehending but also when he is not comprehending. As long as both comprehension and speed are confounded the validity of measuring the rate of reading would be difficulty. Farr (1969) gives a hypothetical example to illustrate the confusion. Suppose one reads 300 words per minute and score 85% on comprehension. Multiplying them gives a score of rate of 255 words per minute. If one reads only title and scores 55% on a particular test his rate would be say 11,000 words per minute! Thus one should be cautious in dealing with the measurement and the score of reading rate. It is also found that the majority of readers do not change their reading rate to any great extent.

Hand Writing:

Not many tests test for writing skills and even test do not do it intensively. Criterion test of Basic Skills tests subject's ability to write capital and lower case letters. Durrel Analysis of Reading Difficulty tests child's ability to copy words and paragraph.

Writing seems to influence reading and the relationship is much more than what is usually thought to be. Writing instruction or activity may have a positive impact on learning to read. Though may not be causally related good writers are found to be good readers. The intensive rehearsal provided by writing seems to be an effective memory enhancing technique. Elementary students who wrote frequently are found to be better spellers. The act of writing has even more than this. "It should be noted that written language is more elaborate, in terms of explicitness and amount of embedding for example, than oral language; writing is probably the only activity that allows students the opportunity to evaluate their understanding of complex syntactic structures through production". (Shanahan, 1980).

Learning Rate:

Only the one test (Durrel Analysis of Reading Difficulties) has an item testing the learning rate in the testing situation. The subject is explained about the word, its definition etc. Child will be seeing the word as he learns about it. He is exposed to in this manner to many words. After an interval he is asked to identify the words introduced from a list. This can be thought of as testing of the subjects ability to learn the word by sight.

Summary Conclusions:

The methods of diagnosis are not changing fast. The task analysis model which sees the reading process as formed of different subskills seems clinically appropriate and useful. However, the tests which are set out for testing the reading skills and their deficiencies are be set with problems in measurement. The basses for including of the test items or tasks are not enough and are wanting. The test constructors had not given explanations for including the items and the way they are measured, at the stage of construction. This is revealed by the later studies and their interpretations. There have been researchers and clinicians who are concerned about the different reading skills and have kept the work going. The latest tests looked into were constructed in 1976 and the oldest in 1955. The contents do not seem to differ greatly.

The recent research, however, seems to be giving us more 'cautions' regarding the measurement aspects. This is due to the better understanding of the complexity of subskills thought not the right ways of measuring them. Today's test givers have more information than did those many years ago. Also the suggestion of earlier authors

prevails that it is equally important to observe the reader and note the abilities and disabilities. That is, the role of the tester remains important than the test itself. The tests remain as guides than decisive factors.

The importance of letter name, letter sound learning is supported, though not substantiated. Testing them can be useful. Reading miscues reflect the subject's functioning. The miscues are better explained now. There is more information on the word reading, on its perceptual and psycholinguistic aspects. This seems to be one area where in most research is being done though it is yet to reflect in measurement aspects.

The aspect of vocabulary is considered mostly in achievement tests. It inherits the problem of word recognition as well as of comprehension. The efficiencies and limitations of certain techniques re not conclusive yet, for example, Cloze test.

Testing auditory perceptual factors may be useful particularly at younger age levels. Auditory abilities like phoneme perception does seem to contribute indirectly to reading. Testing them may be useful to understand if they contribute to the problem if not directly in their treatment.

The oral and silent reading though do not differ significantly oral reading remains to be the way to test the behaviour in action. Obviously oral reading reveals more to the examiner than otherwise.

Comprehension can be seen at some level as a factor which is removed from reading itself. But it is the goal achieved through reading. Thus research suggests that in its testing the factor of purpose, familiarity and rate are to be taken care of and should be tested through various means and the yielded scores are not be treated separately. It is warranted that the aspect of rate not be added in measuring comprehension as a competing factor.

Construction of a Diagnostic test in Kannada

Children from India have ranked poorest among readers in a survey of 15 countries - (Tharndike 1973). Formal remedial reading is yet to take shape with us. Let alone the public school system providing it, even on private basis remedial teaching of reading is not in vogue.

Paucity of diagnostic test in regional language will also be a hurdle in the way of remedial teaching. It is necessary to direct the remedial teacher discretely about the tasks to be dealt with. With this in view a task was taken up to build a framework for testing Kannada Reading on the bases of Automaticity, Rules of Orthorgraphy, and sequential processing.

The said work has taken up as a part of doctoral study at the University of Rochester. Following is the abstract of that work which provides a brief outline and outcome of the study.

The purpose of this study was to differentiate the good and poor reading Kannada children on the bases of the factors of automaticity, rules of orthography, and sequential processing. The relationship of the strategies of simultaneous and sequential processing to reading was also looked into.

Kannada is a Dravidian language, written in a phonetically regular script. The script has a 50 letter alphabet and involves a large number of regular and irregular rules in forming syllables.

Two groups of grade III children, 10 good achievers and 10 poor achievers, aged eight years, ;served as subjects. The subjects were tested for automaticity in reading (words and syllables exposed for one half a second) and reading at their own pace. The subjects were also tested for their nonverbal sequential and simultaneous strategies using the tests -Auditory Sequential Memory; Visual /Sequential Memory; Raven's Progressive Matrices;; and Memory for Designs.

Using ANOVA, with repeated measures on one factor, it was found that the groups were significantly different in the automatic processing of reading stimuli. The poor readers scored significantly less in reading the following: words using orthographic rules, syllables with orthographic rules, and words of alphabet letters. The relationship between reading and sequential processing was not significant for either group. However, interestingly, some difficulties of sequencing in reading words as well as reversals in reading of certain tetters and diacritical features were observed in both groups. The relationship found between reading and simultaneous processing was not consistent. Good reading was correlated with automaticity in reading as well as the knowledge of the rules of orthography but not with sequential processing. It is suggested that the factors of automaticity and the knowledge of the rules of orthography can be used in differentiating good and poor readers of Kannada.

The poor readers inability increases markedly with the increasing complexity of syllables. Testing on orthographic knowledge and automaticity in reading can be telling the difference between good and poor readers.

The following material provides the remedial teacher to learn as to how the poor reader is reading poorly. The responses recorded provide the starting point to work on for amelioration of reading.

Diagnostic Reading Test/Material and administration:

The test material consists of paragraphs, word lists and word pairs. The test is to be administered in this following order.

The paragraphs are arranged in an ascending order of complexity in accordance with the learning that goes on in the curriculum of the primary schools. The arrangement is show below.

PARAGRAPHS

	I	II	III	IV
Components: Letters	Letters	Letters	Letters	
vowel ligatures	vowel ligatures	vowel ligatures	vowel ligatures	
	ligatures blends,	ligatures blends		
		anaphoric relations	anaphoric relations	
Per sentence				
words:	3	5	6	7
Syllables:	8	16	23	28

In the beginning a prepared sentence having all consonants except aspirated ones and using long and short vowels of Kannada is provided for the pupil to read (Appendix A). If the pupil prods over it from word to word the paragraph reading (Appendix A) is not taken up and testing on the lists of words (Appendex B) is taken up directly.

The paragraphs for reading may be prepared by a tester himself/herself if they feel that the contents are unfamiliar to the child. It should be kept in mind that the level of complexity should be comparable to that of a prescribed text book that the child has been trained to read.

There are two forms of these paragraphs. Forms 1, 2, 3, 4 are expected to read fluently by the pupils who have completed the respective grades in school. Forms 1 a, 2a, 3a, 4a may be used if testing needs repetition or for reliability.

The paragraphs are to give an experience of reading to the pupil and to the examiner on Optimum time for observation. The examiner should record the misreading verbatim on the lines in the paragraph given in the data sheet. If there be distortions or substitutions that should also be recorded. The data sheet can be simply a copy of the reading material with three lines space between lines.

The tester should in detail comment on the data sheet of the observation on reading. Any characteristics that are deviant from normal reading may be recorded including postual deviations, squinting etc.

There are five word lists A B C D E arranged in an order of increasing complexity of syllables (Appendix B). Their contents are as follows:

A; word using the letters from the alphabet,

B: words with syllables having various vowel ligatures

C: words with syllables of geminated consonants,

D: words with syllables of blend consonants and

E: words with syllables having three consonant blends.

These words are to be used for testing automaticity in reading. Each word is exposed before the pupil for a short period of only about one half of a second. The examiner may count 'One-tow' quickly for himself, which covers about that time duration. Flash cards can be well used for the purpose. Each correctly read word gets a score of one. Each self corrected answer also gets a full score. Misreading are recorded verbatim on the data sheet.

There are three paired word lists, P Q R (AppendixC). These are based on the confusions observed in reading. The word pairs in list P to be read need correct identification of the alphabet letters. The word pairs in lists Q and R need correct identification of vowel and consonant representations respectively in additions to the alphabet letters.

Each correct reading of a pair is given a score of one. Misreading of either or both of the words is scored zero and the responses are recorded verbatim on the data score sheet.

After going through the lists there is another important part of the testing to be through. This is termed as 'interaction' as the examiner is going to interact with the child in constructing some syllables and to see if the pupil can take help from the clues given. The examiner will go over the misread items of all word lists and find as to which syllables were misread specifically. He is going to explain to the child the construction of each syllable starting from the basic alphabet letter and by adding features one by one. When the child fails to read it the examiner will explain the construction and present another similar syllable to see if he can read correctly. This will be a good exercise to see as to upto what level of complexity the pupil will be able to produce syllables, as he asked to read at each level of construction.

Interpretation:

If a child read through the paragraphs fluently invariably he will also do so through the word lists and word pairs. When a child prods over words in paragraph reading the examiner will come to know as to why he does so when he reads the word lists for automaticity and the word pairs for his knowledge of graphic representation of vowels and consonants. If a child performs poorly on reading word lists A B C D E and performs well on lists of word pairs his problem would be of automaticity in reading which needs systematic

practice in reading. if his performance is poor in all three of reading task, he would be in need of training in Kannada alphabet and in constructing various Kannada syllables. In interaction it will become clear to the examiner about the child's awareness of alphabet, letters, vowels representations or consonant representations.

It is best if the examiner is also the remedial reading teacher himself. Otherwise the whole data should be made available to the teacher with a note on the findings of interaction.

Discussion:

Construction of this diagnostic reading test depended on the factors which have been identified as important factors contributing to reading (Puroshothama 1986) and also those factors which have been found to differentiate the good readers and poor readers (Puroshothama 1988). Research has been suggesting that in the process of reading 'Bottomup' process is a critical one as much as the knowledge of the rules of orthography. Planning plays an important role in the comprehension of the material apart form the knowledge of the topic. The author subscribes to the following ideas of Shankweitler ad Liberman(1972)

> One often encounters the claim that there are many children who can read individual words well yet do not seem able to comprehend connected text. The existence of such children is taken to support the view that methods of instruction that stress spelling to sound correspondences and other aspects of decoding are insufficient and even produce mechanical readers who are expert at decoding but fail to comprehend sentences. It may well be that such children do exist; if so, they merit careful study. Our experience suggest that the problem is rare, and that poor reading of test with little comprehension among beginning readers is usually a consequence of reading words poorly (i.e. with many errors and / or at a slow rate) (p.294)

Unless the child learns the rules of orthography and becomes so adept that it permits him to read words automatically he will prod over the reading of words. Such a child will find it difficult to exploit the use of morphological and syntactic constructions at the sentence level. His attention, having been vested at word level, will not be available for higher planning to obtain information from the reading process.

For correcting reading, from the data available from testing on reading paragraphs, word lists, and list of word pairs, one will be able to start working. The testing provides the analysis of the problem at different levels. In case one finds that a given child can read the material fluently but not able to answer questions; which is not expected, then one will have to look for reasons elsewhere. Checking on the meaning of the vocabularly used and questioning over the knowledge of the topic may reveal the problem; in addition a psychological evaluation may help.

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Appendix – A

Sentence consisting all Consonants except aspirated ones and using long and short vowels of Kannada

ZÀzÀÁzÀPÀqÀ£ÀzÉÆÀ

Form 1

¹AºÀÀÀ gÁªÀ£ÀªÀÅ

AiÀÄªÀgÁd EAzÀÄvÀ«£À

¥ÀÁ©üÉÆÀ

Form 1a

¥ÁoÀªÀÅV¬ÄvÀ ¸ÀªÀ±Á¯ÉÄzÀªÀÅÇÉ§AzÀÀ CªÀ ºÁ®Ä ©¹ ªÀÅrzÀÀ ¸ÀªÀ ºÁ®Ä PÀrzÀÀ ªÀÅÉ§AvÀ Dl DqÀÄ ºÉgÀÉºÉÄUÀ® CªÀ PÀÉºÉ½zÀÀ w£ÀÄ PÁ¼À PÉÆl¼À PÀÀÁ¬ÄvÀ ¸ÀªÀ ¥ÁoÀ§gÉÀÀ Hl ªÀÅr ªÀ®VzÀÀ

Form 2

§¸ÀÀgÁªÀÅÀUÉÆÀ. D ¢ªÀÀ¨sÁ£ÀªÁgÀ¸À°UÉgÀ. gÁªÀÅÀªÀÇÉ§¸ÀÀÀ DqÀÄ §AzÀUÉÄ°AiÀÄDl Drzà ªÉ¯ÉUÉA¨ÉÉMAzÀ ªÀÅÉPÀzà UÉA¨É zÉqÀvÀ ªÀÅÉaPÀÀ UÉA¨ÉÀ ªÀÅÉÉ¼»r¸À®. ªÀÅÉÀÄ©azà zÉqÀÁV ¨ÉgÉAzÀ ªÀÅÉªÀÅrzà

Form 2a

ºÀUÀ £ÀgÀÀ ªÁ¸ÀÀªÉ£ÀgÀÀd£ÀºÉÁV PÁSÁð£ÉÀÀ D¦ÛÀÀ PÉ¸À ªÀqÀvÁgÉ£ÀgÀÀ©Ä¢UÀÀ «zÀw£À¢Ä¥ÀÀ EgÀvÀÉ£ÀAiÀ £ÉgÀ §gÀvÀÉºÀAiÀgÀ ««zsÀjÃwAiÀ ¨ÉÆÀÀ¨ÉÆÀvÁgÉºÀAiÀgÀ §mÉGqÀjÃwAiÀ ¨ÉgÀÉ. D jÃwAiÀ §mÉCªÀUÉPÉ¸ÀªÀqÀ C£ÀÄ®ªÁVgÀvÀÉCªgÀ PÀÀÄ zÀrAiÀvÁgÉºÀAiÀ C£ÀÄ® PÀªÉ

Form 3

§ÄzÀÀªÉzÀ£ÀºÉgÀ ¹zÁxÀ ¨Á®zÀ CªÀÀ CªÀÀvÀzÉÁ¬ÄAiÀgÀ CvÉvÀ eÉÃ¥Á£ÀÁV ¨ÉÆÉzgÀ CªÀÀ ªÀAzÉ¸ÀÁ¹AiÀÄUÀ§ºÀzÉzÀ ¨ÀµÀ¢vÀvÉDzÀAzÀ CªÀÀ AiÀÄªÀPÀÀÀÀ PÁtzÀvÉCªÀÀ ¨ÉÆÉÁVvÀ DzgÉMAzÀ ¢£ÀCªÀÀ Hg¼É ¸ÀvÁqÀªÁUÀM§ gÉÃV, M§ ªÀÀºÁUÀ MAzÀ±ÀÀiÀvÉiÀÀ PÀqÀÀ C£ÀvÀÀCªÀUÉ CªÀÀÀ§UÉaAw¸ÀªÀÉ MAzÀC¨s¸ÀªÁ¬ÄvÀ AiÀÄgÀ ºÉ½zÀÀ CªÀÀaAvÉzÀgÁUÀ®.

MAzÀgÁw CªÀÀvÀÀgÁd¸, ºÉqÀ ºÁUÀ ªÀÀÀÀ©l PÁrUÉºÉgÀ£À §ºÀÀÀÀUÀÀÁ® vÀÀÀÀDZÀ¹zÀÀUÀiÉ JA§ ¸ÀÀÀ CªÀUÉeÁ¤ÃzÀÀªÁ¬ÄvÀ fÃªÀÀÁUÀ ªÀgÀÀUÀÀ§UÉCªÀÀÉ DzÀºÉ¸ÀiÉÄZÀÉÀ §AzÀÀ CA¢¤AzÀCªÀÀ ‘§ÄzÀÀÉzÀ¥ÀÁvÀÁzÀÀ gÁd C±ÉÄPÀzÀ¨ÉzÀÀvÀ¥ÀzÀÁ¬ÄvÀ

Form 3a

ªÀºÁ¨ÁsgÀÀ

¨ÁsgÀÀÀPÀÉÀ §º½ÀÀ¥ÀzÀÁzÀÀ gÁdPÁV CtvÀÀ¢gÀ DzÀªÀºÁAiÀzÀÀ PÀÉMAzÀPÀqÉ©ÜªÀdð£Á¢UÀÀ E£ÉAzÀPÀqÉzÀiÉÄðzÀÀªÀvÀ CªÀÀvÀÀ¢gÀ »ÃUÉ JgÀqÀ UÀ¥ÀÀÀ PÀqÀÀzÀ¥ÁAqÀÀÜÉ§ºÀÀ¸ÀÁAiÀªÁUÀvÀÉ¥ÁAqÀÀgÀ M½ÉÀªÀgÀ MAzÀ CªÀÜÉ¸ÀÁAiÀ ªÀÅqÀvÁ£ÉPÀqÀPÉªÀgÀÀgÀ CAzÀÉzÀiÉÄðzÀÀªÀvÀ CªÀÀPÀqÉÀªÀgÀ JµÉ §®±Á°UÀÁVzÀ PÀqÀÀ¸ÀÁAiÀ«®zÉ¸ÉÃvÀ ºÉÃUÀvÁgÉ

PÉgÀgÉgÀ AiÀÄzÀÀ ¸ÁAiÀvÁgÉ£ÀvÀ¥ÁAqÀgÀ gÁdªÁ¼vÁgÉ§ºÀªÀÀUÀÀ £ÀvÀ¥ÁAqÀgÀ£ÀÉPÉAqÉ¸ÀPÉºÉÃUÀvÁgÉCªÀ ¸À vÀ¥ÀÀzÀgÁAiÀ M§£É

¤ÃgÀ

Form 4

¤ÃjUÉªÀÅgÀ gÀ¥ÀªÉCzÀºÀAiÀªÀ¤Ãj£ÀvÉgÀvÀÉ©¹ ªÀrzÁUÀºÀÉvÉ D«AiÀUÀvÀÉCw vÀUÉªÀrzÁUÀªÀdÄUÀÉÀUÀvÀÉºÀÉÀ ¤ÃgÁUÀvÀÉ ªÀdÄUÀÉÀ ¤ÃgÁUÀvÀÉDzÀzÀCªÀ¤Ãj£À¨ÉgÉgÀ¥ÀÀ

Appendix B

-Lists Items for word reading

List A	List B	
CUÀ	zÉÆgÀ	PÀð
DUÀ	zÀgÀ	Cxð
EvÀ	¢ÅªÀUÉ	±Ã
F±À	eÁgÀ	§r
GzÀiÀ	eËUÀ	gÀÀ
H l	dA§Å	¸Á
JgÀ¸À	l Æ©qÀ	CzÀvÀ
KvÀ	mÉÆ¡	¨sÁÀ
LzÀ	PÀmÁgÀ	£ÁiÀ
M t	ªÉgÀ	ZÀÀ
NI	ªÉÁgÉ	DªÀ
OvÀ	ªÀÆ®AV	zÀ
CAzÀ	ºÀ£ªÁV	ªÀµÀ
CAvÀgÀ	ºÁªÉÆzÀ	ªÀÀ
PÀ£À	ªÀiªÀ	
SÁ¢		List E
UÀvÀ		PÁAiÀÄ
WÀÀWÀÀ	List C	PÁgÀ
ZÀÀZÀ	¸ÀgÉ	PÀÀ
bÀ	ªÉUÀ	PgÀ
gÀ¼À	ªÀZÀ	wAªÀ
lUgÀ	PÀÄ	¸ÀÉ
ªÀoÀ	zÀ¸À	¸ÀvÉ
qÁ	§ t	«ÄÃ£À
q£q£	ªÀzÀ	«ÄÃ£À
ªÀt	PÀÀ	ªÀÅÃgÀ PÀÀ
UÀzÀ	wÃ£À	
zÀ	PÀÉ	
qÁ	wªÀ	List F
£ÀgÀ	vÁvÀÀ	®PÀt
¥À	PgÀÉ	®PÀ
¥Á	a®Å	gÁµÀ
§£À	CªÀ	¸ÁvÀvÀ
¨sgÀ	§±À	ªÉµÀ
ªÀ¼É	§¸À	
AiÀªÀ	PÀÀ	
gÀt	List D	
®ªÀ	¸À®Å	
ªÀÀ	£ÃiÉ	
±À£À	PÀð	
¥ÀgÀµÀ	UÀð£É	
¸gÀÀ	EµÀ	
ºgÀ	UÁ¼À	

Appendix C- Word pairs

List ‘P’

1. ¨Át-¨Ál
2. PÁlÄ-PÁl
3 gÁªÀ-LªgÀ
4. ¥À-ªÀ
5. ªÀªÀÀªÀ¥ÀÀ
6. JqÉªÀÉ
7. ªÀgÀªÀzÀ
8. zÁr-gÁr
9. ªÀgÀAiÀgÀ
10. PÁAiÀPÁªÀ
11. £gÉJgÉ
12. K½-J½
13. R°-§°
14. ©ÃgÀTÃgÀ
15. °ÀiÀªÀiÀ
16. H£ÀRÆ¤
17. OlÄ-NlÄ
18. KlÄ-OlÄ
19. §Ar-NlÄ
20. °ÁgÀzÁgÀ
21. d¯ÉM°
22. G¥ÁGµÀ
23. ªÀWÀªÀ¥À
24. bÀ-xÀ
25. ªÀzÀgÀªÀxÀgÀ
26. ®AUÀgÀUÀ
27. ªÀoÀªÀgÀ
28. ¯Áj-¯Áp
29. vÁgÀPÁgÀ
30. vÀ-PÀ
31. °À-°Ç
32. ±gÀPgÀ
33. bÀbÀ- ¥À¥À
34. gÀUÀÀUÀ
35. UÁr-gÁr
36. PÉÃ®Ä-qÉÃ®Ä
37. §A¢-§Ar
38. ªÀlÈªÀqÀÀ
39. ¥ÀÀ¥gÀ
40. ¨ÁqÀ¨ÁvÀ
41. ±gÀvgÀ
42. ¨ÁZÀ¨ÁPÀ
43. PÀ-ZÀ
44. PÁ¼ÀPÁqÀ
45. EzÀLzÀ
46. EªgÀLªgÀ
47. °ÁgÀAiÀgÀ
48. PÀqÀPÀzÀ
49. gÀAqÀiÀqÀ
50. °À-gÀj
51. £ÁgÀ¸ÁgÀ
52. ªÀ¸ÀªÀ£À

List ‘Q’

1. ¨Á¨Á-¨Ë¨Ë
2. °Á®-©Ã®
3. ¨sµÀ-¨sµÀ
4. ¨Á£À¨ÉÃ£À
5. ©PÀ¨ÉÀ
6. gÁr-gËr
7. gÁV-gÉV
8. ªÀ£ÀªÀ£À
9. ªÀUÀ ªÀEUÀ
10. ªÀj-ªÉj
11. ªÀ¸ÀªÉÃ¸À
12. «ÄÃgÀªÉgÀ
13. ªÀÆ¼ÉªÉ¼É
14. ªÀÆw- ªÉÃw
15. zÁ°À zÉ°À
16. zÁgÀ zÀgÀ

17. zÀgÀzÀgÀ
18. zÀgÀzÉÃgÉ
19. eÁUÀeËUÀ
20. eÁr-eÉr
21. eÁgÀdÆ®Ä
22. eÁUÀeÉÃUÀ
23. fÃ£ÀeÉÃÀ
24. dÆ®Ä-eÉÃ®Ä
25. d£Àf£À
26. ªÁzÀªÉzÀ
27. «µÀªÉµÀ
28. ¥Áj-¥Àj
29. ¥Á®Ä-¥ÉÃ®Ä
30. ¦£À¥ÉÀ
31. ¦ÃqÉ¥ÉqÉ
32. ¥Àj-¥ÉÃj

List ‘R’

1. ªÀÀ-ªÉµÀ
2. PÀð-PÀÄ
3. ZÀÀZÀÉ
4. Cxà-CzÀ
5. CzÀvÀCzÀvÀ
6. ¸À-¸gÀ
7. zà-zà
8. gÀÀgÀ
9. DªÀCªÀ
10. PÀÀð-PÀÀ
11. §r-§r
12. ªÀÀªÀÀÀ
13. ¨ÉÀ§¸À
14. ¸À®Ä-¸Á®Ä
15. EµÀEªÀ
16. £ÁAiÀÄ£Á¬Ä
17. ¨ÉÃgÀ¨ÉÃgÀ
18. ±À-±À¨À