Chapter - 2
CHAPTER II
READING COMPREHENSION

2.1 Introduction

2.2 The Nature of Reading
  2.2.1 Physiological Aspect of Reading
  2.2.2 Eye Movement of Reading
  2.2.3 Psychological Aspect of Reading

2.3 Reading: Its Definitions

2.4 Cloze Procedure: Its Concept and Rationale
  2.4.1 Approaches to Cloze-Procedure
  2.4.2 Logic to Cloze-Procedure

2.5 Cloze-Procedure - Twin Uses
  2.5.1 Reading Comprehension
  2.5.2 How it works
  2.5.3 Cloze-test Construction

References
Whole Goodman says: "Reading is a meaning-selecting rather than a meaning-extracting process". 2

Further, John Carroll in his book, "The Nature of Reading Process" says, "Reading is a complex and carefully integrated hierarchy of well-organised system of stimuli". 3

Thus reading is more than pronouncing printed words or recognising them. It is a meaning-seeking process rather than a meaning-extracting process. Reading is, further, a purposeful, complex process consisting of various skills such as perception, recognition, interpretation, understanding, reaction and evaluation.

In the light of the views of the thinkers and scholars as quoted above one can conclude that reading is a matter of great importance in study in particular and in life in general. Hence, naturally a person would like to be a good reader. A person can definitely become a good and efficient reader provided the nature of reading is within his knowledge and understanding.

2.2 The Nature of Reading

The point that has been discussed so far enables us to establish the significance of reading and its vital role in the development of the personality of an individual. If it is so, one should know the process of reading. Reading is a purposeful activity done with various objectives. The role of oral reading
as a process, as a form of thinking, as a real experience, as a vicarious experience and as a tool of communication is significant.

As an activity reading involves visual discrimination, identification of words, rhythmic progress along a line of print, accuracy in a return sweep of eyes and adjustment of the rate of reading. Thus reading as an activity has many objectives to fulfill. Edward L. Thorndike has rightly stated:

"The reading of a paragraph involves the same sort of organisation and analysis as does thinking. It includes learning, reflection, judgement, analysis, synthesis, problem solving behaviours, selection, inference, organisation, comparison of data, determination of relationship and critical evaluation of what is being read".4

Thus reading involves many tasks. It involves real experience, real thinking and real speaking too.

Reading provides vicarious experience as a result of which we can identify reality and imagination through reading material.

In this sense reading is something more than recognition of graphic symbols, and pronunciation of words given on the printed papers.
As Burton says:

"Word-calning without understanding is not reading. Reading always involves the arousal of meaning in response to symbols and sometimes it is necessary to select one specific meaning from numerous possible meanings".5

In support of this, Gray rightly says: "Reading includes recognition, understanding, reaction and integration".6

To support this statement, Philip Show's views be quoted. He says:

"Reading is the process of seeing or perceiving independent items of observing and assimilating their inter-relationships and of integrating or grouping them into main ideas".7

This discussion leads us to conclude that reading claims inference, weighing the relative importance of ideas and meaning, and seeing the relationship among them. This is why reading is a means of learning. In the absence of the ability to comprehend the meaning of the written passages, reading becomes a sterile intellectual activity.

Briefly speaking reading is a bifold process. The first fold contains the mechanical or sensory process in which the printed symbols are brought to the brain. The second fold consists of the natural mental process which can be recognised as the perceptual, conceptual or thinking process. The stimuli are interpreted after they reach the brain of a reader. In other
words, we can say that reading has two aspects; namely physiological and psychological.

2.2.1 Physiological Aspect of Reading

It is clear that reading is a much more complex process, involving many factors that contribute to its formation. This can well be understood by examining the physiological aspect of the reading process. The physiology of reading relates to the visual auditory speech or articulation with other bodily process that functions in the process or act of reading.

The primary process in reading is to establish recognition of the print. Carl Lefeverve says: "We go first to the print and then from the print to the sound and from the sound to the meaning".8

Thus the process of reading words in a logical order. This order is based on physiological principle. Accordingly, the process of reading involves certain physiological activities. Eve moment is one of them.

2.2.2 Eve Movement of Reading

Javal has worked on this aspect. The knowledge as to how the eyes react during reading has come from his early work. Javal took up the investigation on the movement of
eyes during the reading process and proved in 1879 that eyes do not move steadily and continuously along the printed line of the reading material. The reader's eyes do not make a non-stop sweep across the printed lines while reading. They move in quick, short saccadic movement with pauses. They eyes glide from one spot to the next and from left to right of the printed line. George D. Spache says: "The eyes do not read in a smooth sweep along line but only when they stop at some point called fixation".}

The eyes take certain words into vision and the impressions are sent to the brain. This is called the physiological process. The photographic records of the eye movement indicate that the eyes move in a series of stops call fixation from where the word perception occurs.

At times, eyes make backward movements also. That is to say the eyes retrace on their progress across a line of print. This is known as the regressive movement in reading that generally takes place in the case when:

1. a reader's thought is blocked by an unfamiliar word,
2. he reads to re-examine the sentence to understand it better or to relate it to other ideas in the passage,
3. his perception of successive words is inadequate,
4. he picks up a wrong clue of an idea in the first attempt and
5. his eyes move more quickly than his thoughts.

Ruth Strang says:
"Regression movement of eyes occur near the beginning of the line when the return sweep of the eyes is too short to take in all the first words". ¹⁰

Thus, the important point in reading is the fixation pauses. Reading depends upon what the reader perceives during this fixation pause because the eyes progress in a series of pauses and quick, jerky movements. The printed line is a blur, for the eyes move like a flash between the stops. There is no time to see the word clearly. The length and frequency of the fixation vary with the legibility of the reading material, with the reader's conversance with the words used, with the reader's facility in word recognition, with his vocabulary level, with his familiarity with the content, with his purpose, with his ability to assimilate ideas, and with the format of the printed pages. John J. DeBoer says:

"If he perceives only individual letters or a small groups of letters, he will not be reading because meaning is constructed not from letters but from whole words". ¹¹

This means that every individual letter does play a role in perceiving the word as a whole. Hence the reader must perceive the whole word or a group of words during the fixation pause. Any good and accurate reader normally
perceives one or two words at each fixation. G.J. Dunwell says: "The average child in grade are made between 15.5 and 18.6 fixation per 3.5 inch line. The average college student made only 5.9 fixation on line of similar length". Other studies indicate that the average college student makes about eight fixations per four-inch line.

A cluster of words that a reader can see in one fixation is called the recognition span. So, naturally the number of fixations per line would be fewer in case the recognition span is broad. Albert J. Herris says: "A good reader is characterised by a wide recognition span, smaller number of fixation per line and a small number of recognitions." To exemplify this E. Taylor says that the average first grade makes about 224 fixations per 100 words; and the average college student about 90. It can be inferred from the above discussion that the good readers have fewer fixation pauses and regressive movement. But this is not applicable in all cases. Ruth Strang says:

"A good reader who is intently trying to comprehend the author's thoughts in a difficult passage or to remember all the important details may pause frequently on each line and occasionally go back over the line. His eye movements tend to be irregular though not erratic or inconsistent. Properly interpreted eye movement may
give some indication of the ways in which the mind and eyes work while the person is reading". 16

When the process of understanding and pronouncing a word is going on, the eye moves ahead and secures the visual stimulus for the following response. The psychologists talk about the eye memory span in silent reading. This has been defined as the distance the eyes have travelled ahead of the print at which the interpretation occurs. The nature readers generally have large eye memory span. Hence, some thinkers have been led by the studies of the eye movement in reading to define it as an act of usual exploration.

The eye span can be widened in many ways and the reader can improve his reading speed thereby but his comprehension may not be better. But this is not the ultimate aim of the reading activity. Reading aims at comprehension primarily. "The size of eye span is not a perceptual problem but a conceptual one. That is, the question is not that more words cannot be seen by the reader but the interrelated meaning of words cannot be grasped quickly. Therefore, if people are helped to develop comprehension skills, the eye span will automatically widen". 17
2.2.3 **Psychological Aspect of Reading**

The preceding discussion pertains to the length of the eye-memory span that includes both seeing and thinking. In pausing time, the eye sees the print, thinks on it and then takes another pause. A good and nature reader has a wide eye-memory span. He does not commit to the interpretation until he has read a sufficient quantum of reading material. He establishes in his mind the previous reference and the context in order to make the best interpretation. Gertrude Hildreth says:

"Generally in silent reading, the mature reader has a span of fifteen to twenty letters. In oral reading it is slightly less. The rate of improvement depends, to a great extent, on the shortening of the fixation pauses and on the lengthening of the eye-memory span".18

The conceptual thought reacts with the meaning to the words, the sentence and the paragraph.

The foregoing discussion enables us to conclude that reading is also a thinking process. Perception refers to the interpretation of every thing that the mind senses. That is to say the mind gives meaning to them. For example, when one sees black dots on a paper, sensation consults the wealth of the past experience. Thus a reader needs to have
some awareness of the experiences that the word stands for in order to understand the meaning of the reading material. In some cases, in the beginning, the reader frequently confines himself to the mechanical aspect of reading so much that the comprehension aspect is over looked by him. Because of their exclusive concern for word identification and pronunciation aspects, they fail to understand the need for comprehension. In fact reading demands the interpretation of what is being read and that requires perception. What is perception? Perception is a consciousness or awareness of the experiences summarised by a symbol. D.O. Hebb defining perception says:

"Perception, is the mediating process to which sensation gives rise quite commonly. These mediating processes are labelled thought, cognition or ideation and they serve as a link between the sensory input and the organiser's response". 19

This discussion leads to conclude that quick word recognition is followed by quick perception; and hence word recognition is not only important for the fundamental to perception. This can be supplemented by quoting Albert J. Harris who says:

"Words are bricks with which the thoughts are built and when a child cannot recognize many of the words which
the author has used, he is at a great disadvantage in trying to extract meaning from the printed page". 20

This means, unless the pupil develops the skill of word recognition to a certain extent, he cannot be expected to progress in his reading ability. In this sense, the skill of reading depends upon the stock of the words that is within the knowledge of the reader. That is to say a reader must have an adequate fund of vocabulary that can be enriched up to one's highest ability.

The act of reading is complete only when the child has interpreted the printed symbol by deriving meaning from it. In short reading is a perceptual process, as well as a conceptual process. Reading is a bifold activity namely - physiological and psychological.

2.3 Reading : Its Definitions

Till now the investigator has made an attempt to describe the theoretical aspect of the reading activity. Hence in this section, it is worthwhile to discuss some definitions of reading.

According to Kenneth S. Goodman, "Reading is a complex process in which reader constructs, to some degree a message encoded by a writer in graphical language". 21
F.M. Hodgson says: "Reading is the process by which the reader receives, through the media of words, the message which the writer intends to convey".22

The above definitions reveal that a reader endeavours to see words with the aim of getting message from them. Thus these definitions emphasize the value of the interpretation of words written on paper.

In the words of John J. DeBoer: "Reading is an active process of reaching and searching for meaning".23

Accordingly, each mark has a separate entity that gives rise to some concept which is already in the mind of the reader.

The two definitions quoted above focus on the same viewpoint. So let us discuss them by turn.

Robinson, in his definition of reading says that reading enables the reader to perceive and interpret sounds and symbols. The discussion in the preceding paragraphs may be recalled here to interpret this definition. This definition involves two significant terms namely 'perceive' and 'interpret'. The term 'perceive' refers to the mechanical and psychological aspects which means seeing and perceiving the word. While reading, images and concepts are evoked by these marks or symbols which help the reader to gain the meaning. After finding out the meaning the reader tries to interpret it with a view to searching
what the author wants to say. So reading is an activity that involves both comprehension and interpretation of ideas symbolised in the printed page. The interpretation depends upon the meaning of the words that the reader has in mind. Hence, the meaning of the word is sometimes different in different contexts. Thus the contextual meaning of the words also play a vital role in the reading activity.

According to David H. Russel, "Reading is the act of identifying the symbol and obtaining meaning from the identified symbol".24

As per Mackey, "Reading involves skill in the visual recognition of words and the comprehension of their contents".25 'Interpretation' is the psychological process related to reading. According to this definition given by Robinson one can infer that the final product of the process of reading is comprehension.

W.F. Mackey's definition of 'reading' deals with the two aspects of reading process as it is in the case of definition by Robinson. His definition also includes two basic skills - one is the visual perception and the other is the skill of comprehension. The ultimate aim of reading is to comprehend the written materials. If it is so, one can conclude that reading is a process and comprehension is the output. The output can best be achieved by the efficient reading skill.
Reading skill can best be understood by knowing the Reading Process (R.P.).

There are five components of the Reading Process.

1. **Foundation**

   Foundation for reading involves the mental capacity, language ability and psychological maturity necessary for communicating ideas, recognizing and remembering printed word forms, understanding the content of reading materials and cooperating in a teaching-learning situation.

2. **Background**

   All the knowledge the child has stored provides a background for his learning to read previous experiences may be considered as factors in the reading process because it is through them that all the formal aspects of reading are learned.

3. **Word Recognition**

   The ability to recognize a visual word symbol and associate it with its correct sound and meaning is known as word recognition. This skill involves recognizing words instantly by sight, working out new or unknown words by analysis, and learning the meanings signified by the sound or appearance of words. There is no way that the message in printed matter can be found, understood, and interpreted unless the words symbolizing the ideas can be recognized and their meanings are interpreted. From
the standpoint of teaching, word recognition is considered to be more mechanical or drill-oriented than any other step in the reading process.

Four complementary skills are necessary in word recognition.

i) **Discriminating**: As applied to reading, discrimination is the ability to make distinctions between the sound and shape of similar words, which is essential to reading achievement. Visual discrimination develops the skills necessary to recognize words by their shape, note the beginning letters of words and find letter combination cues within or end of a word. Similarly auditory discrimination in hearing the sound indicated by individual letters.

ii) **Associating**: Ability to recognize the relationships between the form of a word and its meaning or between the form of a word and its sound is association. In word recognition, it is used to recognize a familiar word and pronounce it correctly, hear a word and visualize how it would appear in written form, and relate meaning to either the sight or sound of a word. Thus association stimulates thinking and makes reading possible.

iii) **Retaining**: In reading, ability to keep the shape or sound of a word in mind that constitutes retention. In conjunction with visual and auditory discrimination, retention makes it possible for students to remember the form or sound of a word long enough to recognize it and put it to practical use.
iv) Reproducing: Reproduction is the pupil's ability to pronounce, write and use a word he has seen or heard. It is through practice in reproducing the visual and auditory images of symbols that the ability to recognize, pronounce, and remember the meanings of words is made permanent.

A balanced programme in word recognition necessitates attention to the discrimination, association, retention and reproduction skills necessary for success at the student's maturity and achievement levels. If instructions in these factors is adequate, students will be able to recognize the words fully.

4. Comprehension

Developing the ability of pupils to translate word symbols into ideas is the chief purpose in reading. Its success depends directly upon mental ability, background knowledge, maturity and institutional methods. Indirectly, comprehension is made possible by appropriate reading materials, intellectual curiosity, and a desire to learn. Teaching children and adolescents to excel in comprehension is the most difficult task in reading instruction.

Four interrelated skills are necessary for developing comprehension. Failure to develop one or more of these skills will result in a poor comprehension or severe reading retardation.
i) Discerning: Ability to find and discriminate among abstract ideas is a pre-requisite to understanding. In reading, discerning is used to discover facts, ideas and incidents contained in a printed matter.

ii) Relating and Interpreting: Associating information with past experiences and evaluating its significance in terms of the reader's current needs are essential tasks in comprehending. Comprehension can take place only when both of these skills are functioning adequately.

iii) Retaining and Recalling: The ability to retain information and to think of it when it is needed is necessary in using factual information and ideas found in printed materials. Knowledge is also useless if it cannot be recalled when needed. Ability to retain does not guarantee ability to recall. Many pupils are able to locate facts but need guidance and practice in learning how to retain and use them. Instruction in this phase of comprehension is needed at all age levels.

iv) Organizing and Expressing: Reading will have little value unless a pupil has the ability to put facts or ideas into relevant order and express them through speech or writing clearly enough that others can interpret them. Ability to organize and express is the ultimate objective of comprehension. Many pupils who can find, understand, interpret and retain and recall ideas cannot organize and express them in language that is clear,
concise, and comprehensible. Much guided practice is needed to develop facility in organising and expressing ideas.

5. Utilization

The act of putting words, information, ideas, and new skills into use is termed as utilization. Understanding not used frequently are never fully developed, nor are they retained over a longer period. Utilization serves a dual purpose of making reading practical and assuring that its contributions are permanent. In a sense, it is the evaluative step in reading. If it functions properly, all other steps in the process are developing. If it does not, a weakness may exist in one or more of the prior steps in the reading act.

Utilisation is accomplished by:

i) reacting to what is read,

ii) integrating new ideas with old, and

iii) experimenting with new skills and ideas.

Now we can define the Reading Process. It consists of

i) acquiring the skills necessary in recognizing and attaching meaning to word symbols,

ii) interpreting meanings in terms of past experience,

iii) reacting to concepts and ideas contained in written materials,

iv) utilizing knowledge gained from written symbols, and

v) increasing the fund of knowledge possessed by an individual. The reader who has the above abilities can be said to have a good reading ability.
2.4 Cloze Procedures: Its Concept and Rationale

Cloze procedure, as a new approach to the assessment of readability, was first used by Taylor in 1953. It is an empirical measure which uses the performance of children upon the text being measured to obtain the readability level. Examination of the performance of children on the actual text has more face validity than the use of formula.

Gestalt psychologists applied the term 'closure' to the tendency to complete a pattern which has a part missing. Thus we tend to see a circle even when a small gap is left in the drawing. The fluent reader will often substitute a word of similar spelling and meaning to the one in the text or read correctly a word from which a letter has been omitted.

A cloze test can be constructed by deleting certain words in random from a verbal passage and substituting underlined blank spaces. The testee is asked to fill in the word which very suitably belongs to each blank space. Only minor misspellings are disregarded; otherwise responses must match the actual word deleted. The comprehension score on the cloze test consists of the number of correctly filled spaces.

2.4.1 Approaches to Cloze-Procedure

Approaches to cloze procedure concern with the methodology for constructing the cloze-test. There are various ways of constructing a cloze-test. It revolves round the
deletion of the words. The question posed is "which words are to be deleted and how?"

The various ways of constructing cloze-tests are:

(a) Lexical deletion of words.
(b) Structural deletion of words.
(c) Random deletion of words.

In lexical deletions certain parts of speech are omitted, for example, nouns or verbs.

In structural deletions, a certain percentage of words is removed from the text no matter what words these prove to be.

In Random deletions, every nth word is removed from the text no matter what words these prove to be.

Some authorities in the field are of the opinion that every fifth (nth) word in a passage should be deleted; others are in favour of every seventh or every ninth word; still others say that only verbs and nouns should be deleted. Many favour the random deletions of the words in such an order that ten per cent of the total words should be deleted randomly.

Moyle (1970)\(^{26}\) is of the opinion that omissions or deletions from the text can be selected on a structural or lexical basis. Rankin (1959)\(^{27}\) found that structural deletions correlated at a significantly higher level with vocabulary and reading comprehension scores than did lexical deletions.
Taylor (1953)\textsuperscript{28} found that though both methods - structural deletion and random deletion achieved a similar grade of the passages he employed, the deletion of every fifth word gave the best discrimination between passages. It must be added, however, the Taylor\textsuperscript{29} was working with adult subjects and it may be that there will be differences from one age to another in the deletion rate which gives the best discrimination.

Smith and Dechant (1961) suggest that among young children a passage cannot be understood if more than one word in ten is omitted. If this is so, then to omit more words than one in ten would prevent the child using his ability to understand the text in order to fill in the blanks.

2.4.2 Logic of Cloze-Procedure

The word "cloze" was coined by Taylor from the Gestalt concept of "closure", a tendency for an organism to form a complete whole by filling in gaps in a structure. In constructing a cloze test, a passage is mutilated by deleting certain words and substituting underlined blank spaces of constant length. A person taking the test is instructed to guess the precise word which was deleted from each space. If, for example, a person taking the test finds
the statement, "The professor assigned a ____ of reading to his students," he may form a complete structure by writing the word, "book" in the blank space. Provided that the original message contained the word "book", the subject will receive credit for the correct answer only if the exact word "book" is filled in. At this point the reader is no doubt thinking, "Why does the respondent have to fill in the precise word that was deleted?" This question can better be answered in the words of Taylor (1953) who originated the cloze procedure.

A 'cloze unit' is any single occurrence of a successful attempt to reproduce accurately a part deleted from a 'message' (any language product), by deciding, from the context that remains, what the missing part be. To the extent that the reader and the writer have similar backgrounds of experience, interests, language habits, etc., the reader should be able to make accurate predictions of words which have been deleted.

According to Wilson and Carroll (1954) the underlying logic of the method is as follows:

If the encoder producing a message and the decoder receiving it happen to have highly similar semantic and grammatical habit systems, the decoder ought to be able to predict or anticipate what the encoder will produce at each
moment with considerable accuracy. In other words, if both members of communication act share common associations and common construction tendencies, they should be able to anticipate each other's verbalizations.

Rankin\textsuperscript{32} puts it like this: The cloze procedure is an objective measure of language correspondence between reader and writer.

It may be inferred, however, that the ability to make correct word predictions of the precise words deleted in a cloze test is indicative of the respondent's grasp of "meaning" contained in the message. The ability to predict the precise word used by the writer is more indicative of the reader's understanding of the writer's total meaning (with all its semantic and stylistic connotations) than the prediction of a synonym with similar, but never quite the same, connotations or the prediction of another word which merely produces a plausible sentence.

Moyle (1970)\textsuperscript{33} states that cloze procedure involves accuracy, in that the child cannot hope to fill in blanks if he cannot recognize the majority of words given. It also involves fluency and a knowledge of grammatical structure. Further, it necessitates understanding the text and therefore comprehension. He suggests the following criteria for filling in the blanks: 
1. Select word according to grammatical rules.

2. Select word with the correct meaning.

3. Choose a word which fits in best with the language patterns and vocabulary employed by the author.

As such it would seem to measure total readability much more precisely than the formulae or other measures so far developed.

Thus, the cloze procedure is an objective measure of language correspondence between reader and writer.

Since it is possible to study the correspondence in the language habits of the reader and the writer as a function of writer, message or reader experimental variables, the cloze procedure can be used to study the communication process from several viewpoints. Thus far it has been used to study reliability and information or lack of redundancy of messages, knowledge, comprehension, and intelligence of readers. It has not, thus far, been used to study writers as such.

2.5 Cloze-procedure - Twin Uses

Thus cloze-procedure is a useful tool in the hands of the researcher for knowing the reading ability of the pupils as well as the readability of the passage. How reading comprehension can be known by cloze-procedure would now be described:
2.5.1 Reading Comprehension

The validity of cloze tests to measure reading comprehension will be considered from the standpoint of general and specific - comprehension, the comprehension of facts versus relationships and comprehension as process versus product.

General versus specific comprehension, the procedure can be used to construct tests for the purpose of measuring either general reading comprehension as measured by - standardized reading tests or the specific comprehension of a particular article.

"The essence of the cloze procedure is the random deletion of words from a text, the subjects then being required to replace those words. The more words a subject replaces exactly, the greater is his reading ability; a passage with a higher mean number of correct responses is easier than one with a smaller mean."34

2.5.2 How it works

There are a number of alternative approaches to the application of cloze techniques.

Passages can be presented either with deletions, the use of the original text with chosen words obliterated, or with omissions, i.e., with passage retyped, each word
omitted being represented by a blank of equal size. Both methods have their advantages and disadvantages. In the former the presence of illustration and the clue given to the size of the word omitted may influence results. In the latter the use of a different type phase may alter the difficulty of the task, especially among very young children.

Omissions or deletions from the text can be selected on a structural or lexical basis. Ranking (1959) found structural deletions correlated at a significantly higher level with vocabulary and reading comprehension scores than did lexical deletions.

In structural deletions a certain percentage of words are removed from the text no matter what words those prove to be. Structural words show the relationships between nouns and verbs and to a lesser extent adverbs and adjectives. Structural words belonged to closed classes are finite, and therefore all these words are at least theoretically, available to all members of the language group. These words were limited so that they would not differentiate between members of the language group. Structural deletion is related to both intelligence and pre-reading knowledge.
In lexical deletions the lexical words nouns, verbs and to a lesser extent adverbs and verbs are deleted from the passage. Lexical words belong to open classes which are unlimited and all such words could not possibly be known by any one person. 'Lexical' cloze is still a random \( \text{nth word} \) deletion, but the population, instead of being all the words, is restricted to lexical words. Lexical deletion is a better measure of post-reading knowledge.

In random deletions, every \( \text{n} \) \( \text{th} \) word is deleted from the given passage whether it may be verb, noun or any word. If enough words are struck out at random, the blanks will come to represent proportionately all kinds of words to the extent that the occur.

2.5.3 Cloze-test Construction

The striking utility of the cloze procedure lies in the ease with which it can be used in test construction. This fact can best be appreciated if one compares the times and effort expended in writing a set of objective questions which have suitable reliability with the corresponding time and effort involved in simply deleting, say every 5th word in an article or some portion of the article. The need for careful selection of questions for an objective test and the problems involved in writing these questions demand considerable skill and training. Whereas, different cloze
tests can be easily constructed in quantity by clerical personnel.

A word is defined by the white spaces with which the author has separated if from other words. A number is considered a word. There is some uncertainty as to whether a hyphen should be considered a white space.

A cloze item is the blank which is substituted for a deleted word. Blanks in a test are always of the same length. The item never replaces punctuation other than apostrophe in words.

A cloze response is what the subject writes or fails to write in a cloze item. Only responses which match the original text are usually counted as correct.

A cloze test is a collection of cloze items.

There are usually 50 items on a cloze test.

Cloze procedure is the set of rules by which cloze tests are made. Rules specify the definition of a word, the manner in which words are selected for deletion, the number of items in the test, the length of the blank and the spacing of the type.

Cloze comprehension of a passage is the number of correct responses on a cloze test over that passage. This may be score of a single subject or the total of the scores
by a group. The comprehension is expressed in a number which will allow it to be compared with other tests.

Hyphenated words are now counted as two words when each part is a free form. There is necessity of using standard or uniform length underlinings in the deletions. In view of the lack of agreement, it would appear advisable to maintain the practice of uniform length.

Even though responses to cloze tests are written in by persons taking them, they can be easily scored with a hand scoring key. Such scoring is very simple because it is strictly objective. The exact word that was deleted must be filled in, Taylor has shown that "the more laborious procedure of giving credit to synonyms does not yield a more discriminating measure of readability," and "Rankin found that test reliability and validity was not improved by synonym scoring."35

This aspect of cloze-scoring has also been explored in Gujarati by Dr. D.N. Patel. The credit given to exact replacement would yield higher correlations to grammatical response, class response, synonym response etc. The author recommended that the verbatim scoring (exact replacement) should be used for Gujarati materials.37
Another feature of this technique which contributes to this general utility is that it can be used to construct equivalent test forms drawn from the same or similar materials. It is possible to construct multiple test forms with similar means and variances and high intercorrelations.\textsuperscript{38}

The above discussion revolved round the twin aspects of cloze-procedure. It has been shown that it is specifically used for measuring the reability of the reading materials as well as the reading ability of the pupils. There are also other uses of cloze-procedure, which may be casually noted below:

References


20. Albert J. Harris. op. cit.,
27. Ibid., pp. 154-168.
28. Ibid., p. 162.
29. Ibid., p. 164.