Chapter - 2
CHAPTER 2
READING COMPREHENSION

2.1 Reading comprehension - An overview

Reading means reading with comprehension. If not, 'it is barking at print'. Reading is essentially recognizing, understanding or getting an impression of some written material. A passage can be properly read with varying degrees of understanding. The scale of comprehension ranges from no understanding of meaning to complete understanding. There are various skills that make up the ability to comprehend the material that is being read. The specific skills may be classified according to the reader's purpose, and according to the length and nature of the material that is being read.

The following are the reader's purpose behind reading a selected material:

a) to find the main idea of the selection
b) to find significant details
c) to answer the questions related to a selection
d) to summarize the details found in a passage and to organise them:
e) to arrive at a generalization after reading the selection
f) to follow the directions and act accordingly
g) to predict outcomes and to develop an attitude called anticipation
h) to evaluate critically and to develop the act of active, creative reading
i) to get meaning from graphs, tables, charts and maps

Getting meaning from the printed page involves the ability to perceive and understand the words in combination. Thus, the ability to recognise individual words is not enough. A reader needs to learn the ways of getting meanings from phrases, sentences, paragraphs and longer selections.

2.2 Inter-relationships among comprehension skills

Different skills are subsumed under reading comprehension and all of them are related. An understanding of these skills and their inter-relationships is needed for intelligently guiding the learner to undergo through the successive stages of reading process.

2.2.1 Comprehension and word recognition

Word recognition is a pre-requisite to comprehension, but it does not guarantee fuller skill of comprehension. Moreover full recognition of all the words in a passage is not always necessary for the achievement of the full degree of comprehension.
2.2.2 Comprehension and retention

It is not at all uncommon to find a reader who could remember and recite verbally some materials even without a proper understanding of the meaning of them. Here the retention aspect is perfect but comprehension aspect is zero.

2.2.3 Comprehension and rate of reading

The rate of reading and the degree of comprehension are not highly correlated. Although there is a positive correlation between rate of reading and quality of comprehension, it cannot be unconditionally assumed that a fast reader is the best comprehender. The relationship between these factors is not correlatable due to the fact that an efficient reader may also encounter comprehension problem due to the difficulty raised by the material itself. Yet it may be claimed in a loose sense that a good reader can also be a fast reader.

2.2.4 Comprehension and reference materials

A reader with poor comprehension ability may lack the skill of locating information. He may not be capable of making efficient use of an index. His ineffectiveness often arises partly due to the fact that he has only a vague idea of the material he has read. Furthermore, even if he locates the needed data in a book, he may fail to select the main points and the
supporting details from what he reads or he may fail to follow the directions given. A reader may also face problems when he tries to summarize the information found in reference books.

2.3 Reading comprehension: Influencing factors

Reading comprehension seems to involve language, motivation, perception, concept development and the whole of experience itself. It seems to be subjected to some constraints similar to the ones associated with thinking, reasoning and problem solving.

We can conveniently bring the factors which influence comprehension under two headings viz., internal and external factors. Under the internal factors, linguistic competence (what the reader knows about the language) and motivation (how much the reader cares about the task at hand as well as his or her general mood about reading, schooling and accumulated reading ability, how well the reader can read) are included.

Under the external factors, the elements on the printed page and the qualities of the reading environment are included.

The elements on the page: This includes factors related to textual characteristics like text readability and text organisation.
The qualities of the reading environment: This includes factors like teacher activity that incorporates what a teacher does before, during or after reading in order to help the students understand the information found in the text. Moreover, the way peer groups react to the reading task and the general atmosphere in which the reading task is completed are also included.

It is asserted that linguistic competence is an absolute prerequisite for reading comprehension since language is the medium through which information is comprehended. Added to this, interest and motivation also influence comprehension. In general, students understand better when they are interested in a topic. By altering a student's degree of motivation positively or negatively, it is possible to alter his or her degree of comprehension.

While the ability to identify words accurately and automatically has a direct effect on comprehension, it must be remembered that comprehension also affects duly word identification.

Factors that are in the written message which affect comprehension are word frequency, word abstractness, sentence complexity, story structure, thematic information and visual displays, etc. These can be manipulated to increase or decrease the degree of comprehension.
Finally, factors in the reading environment also affect comprehension. The home environment prepares children for reading by helping them to understand their world. The school environment, teachers, peers and classroom setting, etc. shed their effect on comprehension, both positive and negative.

2.4 Teaching reading comprehension strategies

Reading is a private affair apparent between the reader and the author. The old saying "you can lead a horse to water but you cannot make it drink", holds good even in the context of reading. A person can learn to read if he wishes but he cannot really be taught to read: the motivation should come from the reader himself.

Good readers make use of many strategies and techniques to understand the information found in the printed texts of various types. Some of the strategies normally used by instructors are the following:

1. Helping students to identify the purpose behind reading and to direct their attention.
2. Showing students how to use chapter headings, charts, diagrams, illustrations, glossaries, summaries, bold types and other text cues.
3. Incorporating learning strategies such as imagining, note taking, integrating new information with the existing knowledge framework, making word/idea associations, predicting, confirming and questioning.

4. Demonstrating different kinds of reading techniques to be used in different reading situations such as scanning, skimming, reading for main idea, reading for details, re-reading to confirm or classify.

5. Introducing activities like summarizing, self monitoring, recalling events in chronological order, retelling in one's own words, outlining and the use of graphic organizers, as pre- and post-reading text management techniques.

6. Fostering higher level thinking skills used by good readers. Introducing problem solving with selections that contain relatively simple language but which require students to process print in thoughtful ways.

7. Posing questions that invite students to analyse, make comparisons, predict and draw conclusions.

Contemporary educators agree that effective comprehension results come from the interaction of four important sets of variables: 1. reader variable (age, ability, affect, motivation), 2. text variables (type, feature, considerateness), 3. educational context variables (environment, task, social grouping, purpose) and 4. teacher variables (knowledge, experience, attitude and pedagogical approach).
2.5 Taxonomy of reading comprehension

If a major goal of reading instruction is to develop in students the ability to think about and react to written materials in a variety of ways, all teachers, and particularly middle grade teachers must have a clear understanding of what reading comprehension means. In an effort to aid teachers to gain such an understanding, a taxonomy based on the work of Bloom (1956), Guilford (1958), Sandere (1966) and Guszak (1967) may be provided to them. Reading skill taxonomy is an effort to define and classify reading comprehension abilities and to provide example of the tasks which may help in the development of each of the comprehension abilities so classified.

2.5.1 Literal comprehension

Literal comprehension means getting ideas and information which are explicitly stated in the reading selection. The purpose behind reading and teacher's questions designed to elicit responses at this level of comprehension may be simple or complex. A simple task based on literal comprehension may be the recognition or recall of a single fact or incident. A more complex task might be the recognition or recall of a series of facts or the sequencing of incidents from a reading selection.
Recognition requires the students to locate or identify ideas or information explicitly stated in the reading selection itself. Recall requires the students to produce from memory ideas and information explicitly stated in the reading selection. The recognition/recall tasks are further identified in the following way:

**Recognition or recall of details:** It is the skill of locating or identifying or producing from memory facts such as the names of characters, the events of the story, or the locale of the story comprehended from the text.

**Recognition or recall of main ideas:** It is the ability to locate or identify or produce from memory an explicit statement representing the main idea appearing in a reading text.

**Recognition or recall of a sequence:** It is the ability to locate or identify or produce from memory the order of incidents or actions explicitly stated in the reading text.

**Recognition or recall of comparison:** It is the ability to locate or identify or produce from memory the identity and difference in the characters, events and locales that are explicitly stated in the reading text.

**Recognition or recall of cause and effect relationship:** It is the ability to locate or identify or produce from memory
the explicitly stated reasons for certain happenings or actions reported in the reading text.

**Recognition or recall of character traits:** It is the ability to identify or locate or call from memory the explicit statements about the personality of a character figuring in a reading text.

2.5.2 **Reorganisation**

Reorganisation means the task of analysing, synthesising and organising ideas or information explicitly stated in the reading selection. To produce the desired reorganisation of ideas, the reader may utilise verbatim repetition of the statements of the author or paraphrase or translate the author's statements in his own way. Reorganisation tasks include the following skills:

**Classifying:** This is the ability to place people, things, places and/or events into categories.

**Outlining:** This is the ability of converting the reading text into an outline making use of the direct statements drawn from the reading selection or by paraphrasing the statements by the reader in his own way.
Summarising: It involves the task of condensing the selection making use of direct statements drawn from the selection or by paraphrasing them.

Synthesising: It involves the task of consolidating explicit ideas or information obtained from more than one source of reading texts.

2.5.3 Inferential comprehension

Inferential comprehension involves the task of making use of the ideas and information explicitly stated in the reading selection and utilising one's intuition and personal experience in order to frame conjectures and hypotheses. In general, then, inferential comprehension is stimulated by purposes underlying reading and teacher's questions which demand thinking and imagination that go beyond the printed page.

Inferring supporting details: It is the ability to predict additional facts from what the author might have exposed in the selection, which makes the selection more informative, interesting, or appealing.

Inferring main ideas: It is the ability to infer the main idea, general significance, theme or moral related to selection which is not explicitly stated in the selection.
Inferring sequence: It is the ability to predict the actions or incidents which might have occurred between two explicitly stated actions or incidents. It may include the task of predicting about what would happen next if the event reported in the selection had not come to an end point.

Inferring comparisons: It involves the ability to infer the similarity and differences in characters, temporal aspect of events or locale figuring in a reading selection. Such inferential comparisons revolve around ideas kept in opposition.

Inferring cause and effect relationships: This is a task in which one makes hypothesis about the motivations of characters and their interactions in relation to time and place. This task also involves making required predictions about the cause controlling the author to include certain ideas, words, characterisations and actions in his writing.

Inferring character traits: This task involves making prediction about the nature of the characters on the basis of explicit clues presented in the reading selection.

Predicting outcomes: It is a task in which one is requested to read an initial portion of the selection and on the basis of this reading, he is required to make predictions about the outcome of certain events portrayed in the selection.
Interpreting figurative language: This is a task in which one is pushed to infer literal meanings from the author's figurative use of language.

2.5.4 Evaluation

Purposes for reading and teacher's questions, with reference to evaluation task expect responses from the student evaluative judgements. Evaluation can be made with the help of comparing ideas presented in the selection, associating external information provided by the teacher, other authorities, other written sources or by making use of the reader's experience, knowledge or values. In essence evaluation deals with judgement and focuses on qualities of accuracy, acceptability, desirability, worth, or probability of occurrence. Evaluative thinking may be demonstrated by asking the student to make the following judgements.

Judgements of reality or fantasy: The question like 'could this really happen?' may be used to get judgement from the reader who can decide it on the basis of his experience.

Judgements of fact or opinion: Making use of questions such as 'does the author provide adequate support for his conclusions?', 'Is the author attempting to sway your thinking?', the students will be made to analyse and evaluate the writing. For this, the students will use the knowledge they have on the
subject. By this procedure the students may be made to analyse and evaluate the intent of the author also.

Judgements of adequacy and validity: Questions like "Is the information presented here is in confirmation with what you have read on that subject from other sources? can make the reader compare written sources of information, with a view toward deciding agreement and disagreement or completeness and incompleteness.

Judgements of appropriateness: Questions like "What part of the story describes the main character better?" push the reader to make a judgement about the relative adequacy of different parts of the reading selection and to answer the question regarding appropriate aspects of the text.

Judgement of worth, desirability and acceptability: Questions like "Was the character right or wrong in what he did?, Was his behaviour good or bad?" etc. can elicit judgements from the reader which may be based on the reader's moral code or his value system.

2.5.5 Appreciation

Appreciation involves all the previously cited cognitive dimensions of reading, for it deals with the psychological and aesthetic impact of the selection on the reader. The task of
appreciation keeps the student to be emotionally and aesthetically sensitive to the work and to have a reaction over the worth of the psychological elements appearing in the reading selections. Appreciation includes both the knowledge of and emotional response to literary techniques, forms, styles and structures employed by the writers.

**Emotional response to the content:** After reading a text, a reader may verbalise his feelings about the selection in terms of interest, excitement, boredom, fear, amusement, etc. This emotional response is concerned with the emotional impact the total text brings to the reader of a text.

**Identification with characters or incidents:** Identification involves appreciation of the reader which demonstrates his sensitivity to, sympathy for and empathy with the characters and happenings portrayed by the author in the text.

**Reactions over the author's use of language:** Reaction means the ability to respond to the author's craftsmanship in terms of the semantic dimensions of the selection. namely, connotations and denotations of the words and the linguistic elements used in the text.

**Imagery:** Imagery is the author's artistic ability to paint word pictures which cause the reader to visualise smell,
One aspect of reading comprehension is appreciating imagery.

2.6 Principles governing the use of the taxonomy of skills

First, it is important to think of the taxonomy of skills, not as a means to a complete classification of comprehension abilities and tasks but as skills to be developed through teaching. The four major categories of literal comprehension namely recall, inference, evaluation and appreciation are logically derived in an effort to designate the comprehension abilities.

The tasks listed within each category should not be thought of as compartmentalised comprehension sub-abilities that are to be developed independently. In fact, they should be viewed as tasks which will contribute to the development of the comprehension ability as a whole.

Certainly, there is some amount of overlap among the categories of tasks identified by educationists. Appreciation may very well involve inference and evaluation may be based on inference.
2.7 Uses of the taxonomy

The taxonomy of skills described is intended to provide teachers with an understandable and manageable framework for planning, teaching and evaluating with reference to the area of reading comprehension and for helping the readers to think about and react to what they read.

The taxonomy so far discussed may help the teacher and the taught to achieve their goals with regards to reading very easily if both are involved in the teaching learning of their own native language. This happens because the child lives in the same language prevailing environment and also he has a compulsion to learn the language in order to use it for satisfying his basic needs. On the other hand, in the case of a reader of a second language, there is no guarantee that these connections are readily available for enhancing his understanding of the textual information he reads. After recognizing the language unit through the deciphering of the written code, he may still be at a loss in comprehending what the writing means. He may not be able to quickly achieve the higher order sub-skills of reading such as reading between the lines, making inference, reacting to and reconstructing the text, interpreting it and forming opinions and comments over it.

Smith (1971) has urged that "letter by letter, or word by word reading will be proved to be extremely detrimental
because the meaning of one will be forgotten before the next word is built and thus no meaningful relationships will be established between the words. No comprehension will be possible”. This point is of extreme importance in the case of ESL reader.

2.8 Past and present views on reading and comprehension

Before 1900, it was assumed that reading was primarily a perceptual act and that other steps required for reading were not essential. Some of the researchers observed that reading involves nothing more than correlation of a sound image with its corresponding visual image. However, the view that written language is nothing more than ciphered speech and that reading is merely the ability to decode or translate the script into its spoken equivalent is not convincing. Yet another observes, what we really mean by reading is the ability to comprehend written tests, and our current knowledge of reading tells us that it is dependent on factors which are much more wider in scope than just visual word recognition and oral language skills.

A related point that is to be made is that traditionally, it was assumed that a text was the sole repository to meaning and that during the act of reading, the meaning of a text could be derived by the reader by decoding the linguistic elements that make up a text. As Anderson (1984) observes, following conventional view on reading that comprehension involves computing the meanings of the words found in a text in
order to derive the meaning of clauses, computing the meanings of clauses in order to derive the meaning of sentences, and computing the meanings of sentences so as to form the meanings of paragraphs and so on. Implicit in this view is the assumption that a text has a fixed meaning, a repository of information and during comprehension, the flow of information takes a unidirectional course from the text to the reader.

In sharp contrast to this conventional view is the currently, accepted view of comprehension which considers it as a constructive process (Bartlett, 1932; Spiro, 1980) in which the reader is not seen as a passive recipient of meanings of a text, but, as an active constructor or negotiator of meaning. In the latter view, a text has only potential for meaning (Widdowson, 1979). Spiro (1980) presents this view as follows: "Meaning does not reside 'in a text'. Rather linguistic analysis of a text provides a 'blue print' to guide and constrain the creation of meaning. Existing knowledge is brought to bear to enrich and embellish that blue print. It is only in the interaction of the linguistic characteristics of texts and the knowledge employed in their understanding that psychological meaning arises".

Reading whether in the mother tongue or in the foreign language, sets three centres in motion a centre on the reader, a centre on the text and a centre on the interaction between the reader and the text and by extension beyond to the writer of the
text. These three cores are not to be seen in isolation, but they should be viewed as interactive and interdependent.

Another aspect of the conventional view regarding reading comprehension is based on the assumption of memory. For example, Carroll (1971) observed that comprehension is a process which occurs immediately on the reception of information and in that process only short term memory is involved. His contention was that when longer intervals are involved in the testing of comprehension skills, there is the possibility of saying that we are studying memory process along with or in place of, comprehension process. But the current understanding of the process of comprehension strongly suggests that comprehension process is a complex one. It cannot be studied meaningfully without reference to the process related to memory that accompanies it.

2.9 Major trends in recent research

Recently the researchers in the field of reading have shifted their attention from the mechanics of reading, methods of reading, techniques of reading, etc., to the area of comprehension, for reading is of little interest without focus given over comprehension.

The University of Chicago Annual Conference on Reading (1952) saw the beginning of the shift in emphasis that emerged in reading instruction. The major earlier focus which had been on
improving the general ability to read, had been shifted to special reading programmes for the development of higher order reading skills. Reading experts continued to stress the same goals through 1970s. Innovations such as the shift in emphasis from decoding to comprehension, from reading product to reading process, etc. were accepted during this period. It was argued that there is a need for programmes which help students to process texts with due increase in speed and with deeper understandings. Instructions for developing basic reading skills came to be considered as appropriate for high school students and for those who are at advanced levels. It was suggested instead that reading instruction for students of high school level and above, should focus on evaluative and critical reading and on developing students' ability through both reading and discussion.

By the early 1970s reading and the reading process were conceived in the sense of comprehension which meant reconstructing the text with the help of organizing the thinking process. When the human brain, via the eyes, encounters print, it faces the task of extracting meaning. Meaning, however, does not exist in the readers' head or in the printed page but in the interaction between the reader and the text. The goal of reading was, therefore, to construct meaning actively and not to receive meaning passively from the text. When readers do not interact successfully with texts, they fail to build meaning and as a result poor comprehension results. To help students who have difficulty in interacting with texts, it was proposed that the
nature of reader-text transactions should be examined, the cause of comprehension failure should be ascertained and guidance should be provided for the use of strategies enabling successful reading and reader-text interaction.

Another branch of research came up with the finding that comprehension never occurs in vacuum and it cannot take place independently of a readers' fund of related experiences or background knowledge. The factors that influence the reader's comprehension of the text are word difficulty, background knowledge, text structure, etc. These factors, among others are considered as crucial for the reader while interacting with the text so as to make the text comprehensible.

Topics for reading instruction were also identified. The significance of typographic features of text viz., commas, periods, capitalization, interaction, etc., was felt and these features received instructional attention as do pronouns and adverb referents. Later, signal words for cause-effect relationships and sequences and for statements of facts, opinion and similar other topics assumed importance. More sophisticated use of anaphora along with various kinds of cohesive ties, etc., were treated as subject matter for instruction related to reading. Although instruction for comprehension is viewed as being text-based, the significance of the knowledge about vocabulary for comprehending is not minimized.
'Studying' is another area of concern like 'reading' to theoreticians and researchers. Since it is an essential and almost a daily activity in the lives of students they need to develop it. Recent investigations over the process of 'studying' have revealed that most of the students do not employ effective study techniques. A few seem to be aware of the various strategies that could lead one to improve one's study ability. Even the students who have been taught specific strategies, fail to note the purpose and value of those strategies since they have fewer opportunities to actually practice those relevant strategies given during instruction.

Students in secondary level of the curriculum are also, according to the research data available, are not up to the mark. They are unaware of the basic techniques, such as identifying key ideas and summarizing. The exclusive focus on the text and lack of exposure with the world beyond the classroom have pushed the students to be isolated. They do not understand the purpose for acquiring the information presented in texts. The U.S. National Assessment of Education Progress (NAEP) in a recent report has revealed that present educational methods are not producing critical readers. Although young students throughout the U.S. are reading better than they did 10 years ago, older students have difficulty in thinking about what they read.

Critical reading is defined as getting the fact and interpreting deeper meanings as the reader evaluates and passes
judgement upon the purpose, the fair-mindedness, the bias, the truthfulness of statements, etc., made in the text. The ability to discern the author's purpose to infer precise and appropriate meanings of words are important foundation skills for reactive and thoughtful reading which are expected to be achieved by students in high school.

2.9.1 Schema theoretical view of comprehension

Recent theoretical views about the reading process, as well as models evolved to represent the structure of knowledge, have focussed attention on the role of knowledge in reading comprehension. This knowledge is usually described as organised and stored in structures, most commonly labelled as 'schemata'.

"In a schema-theoretic view of reading comprehension, meaning is supposed to be not present in a text. Instead, individuals must use their knowledge to interact with the text and through their interaction they should construct meaning from the text" (Dreher and Singer, 1987).

According to Schema theory, a reader's scheme or background knowledge provides a basis for comprehending, learning and retrieving information from the text. As a reader begins to read, he begins the search for a schema to fit in the information found in the text and on the basis of the schema, the reader constructs a partial model of the meaning of the text. The model
is refined as the reader gathers new information from the text. Reading comprehension, according to scheme-theoretic view, involves the progressive focussing and refinement of a complete plausible and coherent model of the meaning of texts. In schema theoretic accounts of reading comprehension, text processing involves both top-down and bottom-up processing simultaneously. Subscribers to the schema-theoretic view are of the opinion that if students are to develop proficiency in reading unfamiliar materials, then teachers should provide contexts and schemata that support comprehension of both background knowledge and the structure of the text. Pre-reading activities, such as providing pictures, learning to do an activity that is mentioned, or discussing cultural experiences are believed to be helpful in this regard. Teachers are expected to bridge the gap between the content of the text and the reader's schemata.

Reviews of recent reading research suggest that there is a strong trend for researchers to adopt a theory of reading that acknowledges the active role of the reader in constructing meanings from texts. Pearson's (1985) opinion in this regard is the following:

"We now view text as a sort of blueprint for meaning, a set of tracks or clues that the reader uses as she or he builds a model of what the text means." This trend reveals that researchers have moved away from information transfer theories and towards schema-theoretic models of reading process. ESL
researchers, building on and replicating the schema research conducted with native speakers of English suggest that the reader's content schema is a vital factor in comprehension.

No doubt schema theory is of immense value and use in theorising the meaning making activities of L1 learners. However, its value and relevance to a L2 learner, is yet to be studied in detail.

2.9.2 Strategic reading and comprehension

Recent researches on comprehension emphasize the strategic nature of reading and the relationship between metacognition and performance. They suggest that when the structure or conceptual aspect of a text is complex and when comprehension is blocked, good readers use different strategies to restore meaning. The problem of poor learners, lies in the learners inability to bring prior knowledge to bear on the text they read as well as their inability to recognize text organization and patterns and not in their inability to decode.

Researches also show that attempts have been made to make learners to ask their own questions before, during and after reading. This process, during reading is analogous to a question answer dialogue between the reader and the text. The student establishes the goal, determines the content that is important, generates his own questions and searches for answer in the text.
This kind of instruction emphasizes the training of students to ask their own questions while reading a text. Since the students are egoistically involved in raising their own questions they are more likely to exert effort in processing the text to get the answers to their own questions.

Numerous research studies support the use of specific cognitive and metacognitive reading strategies for the improvement of textual comprehension. Generally, different strategies are used during the course of reading. Pre-reading strategies are meant for creating awareness, for activating the content knowledge that the learner brings into the learning situation, for setting a purpose for reading, for analysing the text structure and for developing vocabulary. The strategies used during reading include note taking, summarizing, outlining, self-questioning, answering adjunct questions that are textually explicit and monitoring one's success. Post-reading strategies usually assist readers in reorganizing, integrating and reviewing textual material, etc., which enable the reader to prepare for a text. Most comprehensive strategies adopted for reading comprehension incorporate pre-reading, reading and post-reading activities. Examples of such activities reported are the following:

1. SQ3R - [Survey, Question, Read, Recite and Review (Robinson, 1940)]

2. DRTA - [Directed Reading and Thinking Activity (Stauffer, 1975)]

3. NYKTU PASS - Schumaker (1982)
The notion of reading as an interactive process between a text and a reader brings in the notion of reading strategies. Research in this area advocates that reading instruction should focus on the strategic nature of reading.