CHAPTER – I

INTRODUCTION

1.1 INTRODUCTION

Language provides a fascinating object of study because of its unique role in capturing the breadth of human thought and endeavor. We look around us and are awed by variety of thousands of languages and dialects, expressing multiplicity of worldviews, literature and ways of life. Language enables man to open the gateways of knowledge. It is an essential tool for meaningful learning in all subject areas and it facilitates learner’s emotional, social and cognitive development. New entrants in school with poor language background remain poor learners and poorest performers in all subject areas unless specially helped in language skills. Failure to develop language competence properly and adequately in the early years will lead to difficulties in learning subsequently through the upper primary, the secondary and higher secondary stage. So language education has to be given a significant place in our educational system. In the present context, where the whole world has become a global village, where multilingualism is the norm rather than the exception, language education cannot be confined to the study of first language; that is mother tongue or regional language only. It should go beyond that. It has been addressed in India through three-language formula. The basic objective behind three-language formula was and continues to be, national unity and facile intra-state, inter-state and international communication.

1.2 IMPORTANCE OF TEACHING ENGLISH

The teaching of English Language has got much significance in the present context. In the 21st century, the whole world has become a global village. Now
information is sent and received at an interesting speed. The competitive demands of government, industries, and corporation both national and multinational for technological purpose require an understanding of the language of the technology – English. It opens up the ways for global communication and brings people in the global community closer. The global spread of English in the last several years is remarkable. It is unprecedented in several ways: by the increasing number of users of the language; by its depth of penetrating into societies; by its range of functions.

English is used for more purposes than ever before. There are mainly three factors that continue to contribute this spread of English: English usage in science, technology, and commerce; the ability to incorporate vocabulary from other languages and the acceptability of various English dialects.

Today, the information age has replaced industrial age and has compressed time and distance. This is transforming world economies from industrial production to information based goods and services. Ignoring geography and borders, the information revolution is redefining our world. English has got vital significance in this period, as it is the major language used in this global village. English has become a tool that opens window to the world, unlock the door of opportunities and expand mind to new ideas.

The Kothari Commission (1964-66), commenting on the role of English Language stated that, “….a working knowledge of English will be a valuable asset for all students and a reasonable proficiency in the language will be necessary for those who proceed to the university”.

The National Curriculum Framework (2005) states that “The goals for a second language curriculum are twofold: attainment of a basic proficiency and the development of language into an instrument for abstract thought and knowledge
acquisition through literacy” (p. 39). The current status of English stems from its overwhelming presence on the world stage and the reflection of it in the national arena.

In the teaching of English, the major focus was on the mastery of language skills along with the mastery of communicative competence. Children should have proficiency in all the modalities of language including listening, speaking reading and writing.

1.3 THE NATURE OF READING

Reading plays a significant role in one’s education. It gives pleasure and opens up the vista of knowledge to the children. In a modern society, the ability to read well is the cornerstone of a child’s education. In a modern economy, literacy is a prerequisite for successful life (NAEP, 2010). From the early years of schooling itself, reading gives a lot of pleasure for children. It is a vital skill that they use for learning any subject given in the curriculum. If a child is poor in his/her ability to read, it badly gets reflected in his/her academic performance. As far as adults are concerned, reading is a key means to learn and do their jobs; it is also a source of enjoyment and an essential way to connect with family, friends, and world around. The ability to read critically and analytically is crucial for effective participation in a democracy, as we are living in an “information age”. So the ability to read and understand information is essential to be successful in such an age.

The process of text comprehension has always provoked exasperated but nonetheless enthusiastic inquiry within the research community. Comprehension, or “understanding”, by its very nature, is a phenomenon that can only be observed indirectly (Pearson, Johnson & Johnston, 1978). We cannot see comprehension, we can only rely on indirect symptoms and artifacts of its occurrence.
Throughout these years, improving reading comprehension is always been an area of concern for the majority of language teachers and researchers. Numerous researches have been carried out in this area and it resulted in the development of various theories. The domain of reading has always responded to internal and external forces resulting in both gradual and dramatic changes to the domain – changes that have changed the study and practice of reading. The nature of reading – how people learn to process textual information – has been researched by behavioural and cognitive scientists for many decades, and their work contributed contrasting theories about what works best in the teaching of reading.

1.3.1 Behaviouristic Perspective

The traditional approach to reading instruction was influenced by behaviourist psychology of 1950’s, which claimed learning as based upon “habit formation, brought about by the repeated association of a stimulus with a response”. Language learning was characterized as a “response system that human acquire through automatic conditioning process” where “some patterns of language are reinforced and others are not” and “only those patterns reinforced by the community of language users will persist” (Omaggion, 1993, 46).

The behaviorists’ laid emphasis on studying observable behavior. As a result, there was a particular focus on reading as a perceptual activity. Such perceptual activities include the identification of visual signals; the transformation of these signals into sounds; and assembly of these sounds into words, phrases and sentences. This behaviourist perspective lead to the bottom-up approach to reading, which viewed reading as a linear process by which reader decode a text word by word, linking the word into phrases and then sentences (Gray & Rogers 1965, cited in Kucer, 1987).
The researchers and teachers who followed this paradigm viewed reading as a skill that could be decomposed into component set of sub skills involved in both decoding and comprehension. Based on this, the process and skills involved in reading are broken down into their constituent parts. And these constituent parts are practiced and reinforced in a systematic and orderly fashion during classroom instruction. According to this view, novice readers acquire a set of hierarchically ordered sub skills of reading that sequentially build towards comprehension ability. Once these skills have been mastered, readers are viewed as experts who comprehend what they read. Behaviourism treated reading as a word-recognition response to the stimuli of the printed-word, where little attempt was made to explain what went within the recess of mind that allowed the human to make sense of the printed page. This perspective considered learner as a passive decoder and give little or no importance to reader’s knowledge or experience with the subject matter or the structure of the text.

Though behaviourism had a significant impact on reading theories in the early years, it got discredited in the mid-1960s, as there was a general unrest in the reading community with the principles of Skinnerian behaviourism, and the conceptualization of reading as discrete skills passively drilled and practiced until reflexively demonstrated. This was further hastened as there was an increased interest in internal mental structures and processes sparked by advances in neurology and artificial intelligence (Erickson & Smith, 1991). These movements turned attention back to inside the human mind and away from environment. The new cognitive theory represented mind’s innate capacity for learning, which gave new explanatory power to how human acquired first language; this also has a tremendous impact in the field of English as second language/English as foreign language (ESL/EFL), as psychologists
explained “how such internal representations of the foreign language develop within learners mind”.

1.3.2 Cognitive Perspective

The cognitive based views of reading comprehension emphasize the interactive nature of reading (Rumelhart & Ortony, 1977) and the constructive nature of comprehension (Anderson, Reynolds, Shallert & Goetz, 1977). All the readers, both novice and experts, use their existing knowledge and a range of cues from the text and the situational context in which the reading occurs to build, or construct, a model of meaning from the text. Thus, two important characteristics of readers - the knowledge that reader bring to the task and the strategies that they use to foster and maintain understanding – play an important role.

These cognitive and top-down processing approaches revolutionized the conception of the way students learn to read. In this view, reading is not just extracting meaning from the text, but a process of connecting information in the text with the knowledge the reader brings to the act of reading. Reading in this sense is a dialogue between reader and the text (Grabe, 1988). It is seen as a cognitive process in which the reader’s background knowledge plays a key role in the creation of meaning (Tierney & Pearson, 1994). Reading is not a passive activity but “purposeful and rational dependent on the prior knowledge and expectations of the reader.

The knowledge that readers bring to the text is of at most importance. (Anderson, Reynolds, Shallert & Goetz, 1977). What we typically call ‘prior knowledge’ comes in many forms; It can be the specific knowledge about the topic of the text; general world knowledge about social relationships and causal structures; or even knowledge about the organization of the text.
In addition to knowledge, expert readers possess a set of flexible, adaptable strategies that they use to make sense of text and to monitor the ongoing understanding. The cognitive view of comprehension ascribes more credibility to reading strategies than to skills. The cognitive views of reading present a different view of the reader. The traditional view assumes a passive reader who has mastered a large number of sub skills and automatically and routinely applies them to all texts. The cognitive view assumes an active reader who constructs meaning through the integration of existing and new knowledge and uses flexible strategies to foster, monitor, regulate, and maintain comprehension.

In parallel with the focuses within the broader cognitive field, reading theorists and researchers investigated the organization of knowledge in the mind and how that organization distinguished between beginner readers from more expert readers. And the Information-processing research of this period resulted in a multitude of cognition-related constructs. Of the many constructs articulated in this decade, schema theory remains one of the potent legacies of the time.

1.3.3 Schema Perspective

The theoretical construct of Schemata - the building blocks of cognition, drew explicitly from the philosophy of Kant (Anderson, 1977). A Schema (plural Schemata) is a hypothetical mental structure for representing generic concepts stored in memory. It’s a kind of framework, or plan, or script. Schemata are created through experience with people, objects and events in the world.

The initial work in this area was by Bartlett and Frederick (1932) who proposed that the organization of readers’ past experiences directly influences the comprehension and retention of materials in the passage. In other words, readers understand a passage by analyzing the text according to their schemata, an internal organization of past experience.
The Schema theorists talk mainly about two types of schema. One type of schema, or background knowledge, a reader brings to a text is a content schema, which is knowledge relative to the content domain of the text. The other type is a formal schema, or knowledge relative to the formal, rhetorical organizational structures of different types of texts.

This view of schema theory asserts that activating or building readers’ existing knowledge prior to reading would improve and/or alter reading comprehension and recall. Thus the provision of vicarious or real experience would fill in or expand the reader’s existing culturally determined background knowledge of a topic and would prepare them to comprehend and retain materials on that topic in the reading material that followed.

One of the important roles of a teacher here is to activate the child’s existing knowledge or to provide the students with appropriate schemata he/she is lacking. The teacher must teach students how to build bridges between existing and new knowledge as the building of bridges between students’ existing knowledge and new knowledge are needed for text comprehension. A number of organized pre-reading activities like previewing, questioning and semantic mapping etc. are proposed to facilitate reading through the activation of background knowledge.

1.3.4 Constructivist Perspective

The most prevalent metaphor to emerge from this period was the “reader as builder” – and active meaning constructor (Collins, Brown & Larkin, 1980). Schema theory also promoted a constructivist view of comprehension; all readers, at every moment in the reading process, construct the most coherent model of meaning for the text they read.
1.3.5 Metacognitive Perspective

Later metacognitive theories also came into dominance. Metacognition refers to thinking about one’s own thinking. This concept also became very popular in reading research. Nearly as popular as the “builder” was the metaphor of the “fixer” – the problem solver who can repair virtually any comprehension failure with his/her toolbox of strategies. Most commonly referred to as strategic reader (Paris, Lipson & Wixson, 1983). Here the learner makes use of strategy to fix and overcome the problems associated with comprehension.

1.3.6 Social Constructivist Perspective

Along with the constructive orientation, the social perspective also has a significant impact on reading research. It came up with a range of hyphenated names, such as socio-cultural, social-historical, and even soc-psycholinguistics (Pearson, 2009). The scholars provided more socially oriented critiques, with constructs like the ‘social construction of reality’ imported from sociology. They provided research methodologies that emphasized the social and cultural and even political context of teaching, learning, and understanding (Pearson & Stephens, 1993).

In the social perspective, the reading researchers fixed their attention on the social nature of learning and the key role that teachers and peers play in facilitation of individual learning. The concepts like scaffolding, mediated learning, zone of proximal development, etc., came into prominence during this tradition.

1.4 READING COMPREHENSION INSTRUCTION

Reading comprehension has been a part of classroom instruction, as long as, there have been schools, texts, students who desire (or required) to read them, and teachers wanting them to both promote and assess their understanding (Pearson, 2009).
Though reading had long been a basic component of formal schooling, there was little concerted effort to apply research knowledge and instructional practices until much later in the 20th century. In the early 17th and 19th centuries, the default indicator of reading prowess in the oral capacity, indexed either by accuracy or by expressive fluency, in the tradition of declamation and oratory. It was in the 20th century, that comprehension arrived as a model index of reading comprehension and performance. Around the world, the changing demographic pattern of schooling, a rapidly industrializing society, the increase in enrollment rate, the rise in the number of children experiencing difficulties in learning to read etc., put a growing public pressure on the educational community to find solutions to the problem of reading acquisition. To find a solution to the grave problem faced by students in reading comprehension, the study of reading interfaced with the psychological research in the guise of Skinnerian behaviourism, which was the prevailing research orientation at that time. With its promise of bringing a scientific perspective to the reading “problem”, behaviourism seemed suited to the task at hand (Glaser, 1978). It dominated the reading comprehension instruction for several years, but it has got discredited with the advent of cognitive theories. The popularity of cognitive based theories of reading comprehension put a lot of thrust on cognitive strategy instruction as a solution to the myriad of problems faced by the students in reading comprehension.

1.4.1 Cognitive strategy instruction

At its simplest level, a strategy is a routine or procedure for accomplishing a goal. A cognitive strategy is a mental routine or procedure for accomplishing a cognitive goal (Dole, Nokes & Drits, 2009). According to Pressley, Johnson, Symons, M.C. Goldrick and Kurita (1989) strategies are thought of as conscious, instantiated,
and flexible plans readers adopt to a variety of texts and tasks. Pressley et al. (1989) are of the view that good readers make decisions about which strategy to use, when to use it, and how to adapt it to a particular text.

The findings from the researches show that human use cognitive and metacognitive strategies to process and monitor incoming information, to solve problems and to comprehend. It leads to the development on instructional strategies. The researches show that cognitive strategies can be taught, and when taught, they can lead to increased performance. The researchers used strategy instruction to promote reading comprehension such as the use of – mental imagery, generating specific type of questions, summarizing, semantic mapping, story mapping, predicting, etc.

The cognitive and constructivist oriented theories of learning put a lot of emphasis to the knowledge (prior knowledge) that a learner bring to the learning task. The schema theory also shares this view. According to them, all readers both novice and expert readers use their ‘existing knowledge’ and range of cues from the text and situational context in which the reading occurs to construct the meaning from the text and they also make use of cognitive strategies to construct meaning. The schema theorists use the word ‘schema’, to refer to prior knowledge. They talk about both content and formal schema. One type of background knowledge that a learner bring to the act of reading is content schema, the knowledge relative to the content domain of the text and another one is ‘formal schema’, to refer to the knowledge relative to the formal, rhetorical, or organizational structures of different types of texts. Both are crucial in reading comprehension.

1.4.2 Prior knowledge

A lot of studies have proved that the prior knowledge has a significant impact on reading comprehension (Carr & Thompson, 1996; Holmes B.C., 1983; Jackson,
Paul & Smith, 1997; Langer & Nicholich, 1981; Lipson, 1982; Maria & MacGinitie, 1980; Schmidt, et al., 1989; Spilich, Vesonder, Chiesi & Voss, 1979). The influence of prior knowledge on comprehension was so powerful that Johnson and Pearson found that prior knowledge of the topic was a better predictor of comprehension than either an intelligence test score or a reading achievement test score. (Johnston & Pearson, 1982; Johnston P.H., 1984). But mere possessing of prior knowledge is sufficient; it should be activated during information processing to connect the existing knowledge and the new information (Mayer, 1979). The process of knowledge activation facilitates the reading comprehension.

Researchers in the field of reading have come out with a lot of strategies to enhance the reading comprehension of the text. And Semantic Mapping strategy is one such strategy that can be used to promote the activation of the prior knowledge to facilitate reading comprehension.

1.4.3 The Structure of the Text

The studies on reading comprehension suggested that, apart from the knowledge of the content of reading, the structure of the text also play a vital role in reading comprehension. The studies have found that, good readers generally recognize and utilize the text structure to aid their comprehension while poor readers failed to do so (Hiebert, Englert & Brennan, 1983). A reader pays attention to different aspect of text as they try to understand different types of texts (Pressley, 2000). Text structure refers to the formal, rhetorical, or organizational structures of different types of texts. It defines the organization and elements within the text and refers to the way ideas are presented and connected to each other.

Based on text structure, the texts can be broadly divided into Literal and Informational Texts. Literal texts are marked by the distinct structural characteristics
that are different from informational texts. Studies conducted on the informational text have shown that, it has a distinct organizational pattern such as sequence or comparison and contrast. These structural features of the text have an impact on the comprehension of the reader.

The informational text can be broadly divided into two categories – Exposition and Argumentation and persuasive text.

(a) Exposition

An expository text tries to inform or instruct the reader. Longer expository texts are usually divided into different topic sections with separate headings. The major organizational features of exposition are description, sequence, cause and effect, problem and solution, and comparison and contrast. Generally exposition does not contain just one structural format rather it consists of several structures embedded in the text.

(b) Argumentation and Persuasive Text

Argumentation and Persuasive text present an argument or attempt to persuade the reader to a particular point of view. The text present information, express an opinion and try to convince the reader that a specific point is right. The major distinction between exposition and argumentation and persuasive text lies in the purpose for which an author writes as exposition seeks to inform and educate while argumentation and persuasive text seek to influence the readers thinking.

1.5 THE NATURE OF WRITING

In this 21st century of information and communication technology, the ability to write well is vital for the success of an individual. Writing permeates all walks of life and it has become a part of every human activity. The economy, law, government, bureaucracy, knowledge, journalism, literature, and professions rely on and are
structured around the production and distribution of texts (Bazerman, 2008). Writing is a necessity in everyday life (Graham & Perin, 2007). It is a lifelong requirement. In today’s world, students write a lot through social network pages, emails and instant messages. There is not one movie, magazine, article, advertising jingle, or hit song that did not begin with and rely heavily upon effective writing (The National Commission on Writing, 2003). Now-a-days, the access to higher education has expanded never before and writing has been viewed as a necessary skill for participation and success in higher education and to have access to the powerful social, professional and organizational roles in later years of one’s life. If a child is poor in his/her ability to write, it badly gets reflected in his/her academic performance. But writing is one of the neglected areas in our school education and the time spends on writing activities are very less. Most of the time, we take writing for granted. Our teachers are ill prepared to teach writing.

Improving writing ability of the students is always been an area of concern for the majority of language teachers and researchers. Writing is more than mastering of grammar and punctuation. The ability to diagram a few sentences does not make a good writer. There are students who are even capable of identifying every part of speech, who are barely able to produce a piece of prose (The National Commission on Writing, 2003).

1.5.1 Communicative Purposes of Writing

Written expression is viewed as the ability to express ones thoughts, ideas and feelings, correctly and meaningfully in a systematically organized manner through writing. It is a complex, multifaceted and purposeful act of communication. Every time, one writes, he/ she will have a clear purpose or goal in mind which he/she tries to attain through the writing process. It is the communicative purpose. A special
emphasis was given to the communicative purpose of writing in this study. There are three communicative purposes identified. They are ability to persuade, to explain and to convey experience.

(a) To persuade

In persuasive writing, the writer makes use of varieties of approaches to thinking and writing. Here, one has to consider one’s own views and the views of others to persuade a point effectively. It demands sharp thinking and effective use of language.

(b) To explain

It is one of the most commonly used tasks while writing. Here the writer presents the topic or views in an explicit manner so that the reader will understand. The writer presents ideas clearly, logically and effectively so as to communicate. It demands various approaches to thinking and writing

(c) To convey experience

In this form of writing, the writer brings real or imagined experience to the readers. Writer connects to the audience through various descriptive details, voice, style and by evocation of emotional response.

1.5.2 Product Oriented Approach to Writing Instruction

The product oriented approach dominated the principles underlying the writing practice from the early part of 20th century up to the 1960s. This period is known as traditional paradigm in writing research. The instructional practices during that period mainly focused on prescriptive text features of canonical literary texts written by exemplary writers. Students were supposed to master the intellectual principles of exposition, narration, description, argument and other rhetorical features. Model texts written by exemplary writers were the focus of composition. The product
oriented approach gave undue importance to the mechanics of writing and strict adherence to grammatical and syntactical features. The second language pedagogy of that period got highly influenced by the dominant approaches of audiolingualism, behaviourism and contrastive linguistics.

The product oriented approach to writing is highly concerned with “correctness” and form of writing product. Students were not allowed to commit mistakes and the practices of teaching were characterized by modeling of the linguistic behavior on the part of the teacher. The writing instruction move form controlled practice to free practice, followed by work sheets and mechanical drills. Writing exercises typically focused on sentence level drills and paragraph level organization. It totally failed to recognize the generative and creative dimension of writing. This traditional approach to writing was sharply criticized in the Anglo-American seminar, commonly called Dartmouth Seminar in 1966. With the emergence of Cognitive science, there was a paradigm shift in the way the writing was looked at and it paved the way for Process oriented approaches in writing.

1.5.3 Process Oriented Approach to Writing Instruction

In the process oriented approach, the focus was on the process of how ideas are developed and formulated in writing. The process oriented instructional strategies focused at making students organize their thoughts and ideas before writing and revise their written texts. Its origin can be traced back to Rohman’s model, which argued that the composing process is not linear, but recursive. It doesn’t given much emphasis to the formal teaching of grammar, spelling and other skills. Instead children pass through – developing a topic, drafting, conferencing, revising, editing and possibly publishing their work (Stahl & Suttles, 1996). Here, writing is viewed as a process through which meaning is created. Emphasis in writing was on meaningful
authentic experience. Boscolo, P. (2008) lists out the following basic features of process approach. First, lectures are minimized and small-group work is valued, with emphasis on concrete materials, problems solving and students’ engagement in writing. Second, the students have the freedom to select the topic of writing as it had a motivating effect. Third, teacher’s role here is that of an audience, who give feedback, rather than an evaluator. Fourth, it emphasized the social dimension of writing, as students often work in small groups and the written product is available to other children. The process approach to writing gives a lot of emphasis on pre-writing and revising.

1.5.4 Writing as a Cognitive Process

In a cognitive process model, the major focus of analysis is mental process, such as the process of generating ideas. These processes have a hierarchical structure such that generation of ideas is a sub process of planning. The processes are not organized in a linear manner as these mental acts may occur at any time in the composing process (Flower & Hayes, 1981). In the later phase, the influence of Vygotsky’s social cognitive perspective could be seen in the cognitive process models. In the new cognitive approach to writing instruction, there is a blunting of cognitive and social cognitive perspectives. The model developed by Harris and Graham (1996) is a typical example of integration of different theoretical perspectives, wherein the initial previous knowledge activation by the students reflect the cognitive approach, emphasis on modeling by the teacher, scaffolding, and peer collaboration are the contribution of sociocognitive perspective. This sort of integration can be found in the studies of other writing researchers (e.g. Benton, 1997, Raphael & Englert, 1990).
The semantic mapping strategy is used in the study to foster written expression among students is also developed by drawing ideas from constructivist and social constructivist perspectives. The semantic mapping strategy designed for this study can be used at all phases of writing – Pre writing, while writing and revision. It also makes use of individual construction of ideas and collaboration among peers at various stages of writing.

1.6 SEMANTIC MAPPING

Semantic mapping is a technique developed by Johnson and Pearson (1978). A semantic map is a graphic arrangement of words and it shows how new words and ideas are related to each other within a text. Or it is been defined as “a graphic arrangement showing the major ideas and relationship in text or among word meanings (Sinatra, Stahl-Gemake & Berg, 1984, 22).

The normal procedure adopted in semantic mapping is given below:

1. **Introducing the topic.** The teacher studies the topic and determines lessons where semantic mapping strategy can be adopted. Then the teacher announces the topic and writes it on the chalkboard.

2. **Brainstorming.** The teacher asks students to think of ideas that might be related to this topic.

   This brainstorming allows students to make use of their prior knowledge or experience. The brainstorming phase of semantic mapping gives the teacher insight into the schemata of each of her/his students, thus revealing interests, level of readiness, gaps, misconceptions, and errors (Pearson & Johnson, 1978). Typically in brainstorming, ideas from one student will trigger ideas from other students “in chain reaction thought process” (Heimlich & Pileman, 1986, p. 34).
3. **Categorization.** Once the teacher completes the list of words on the black board, the words are grouped by category. Students discuss why certain words go together and category words are named.

4. **Class Map.** A class map of the words is created on the chalkboard by putting the information. The map is discussed. At this time, students are encouraged to add items to the categories or even to suggest new categories.

5. **Revision of Map.** As other new words that are related to the topic are discovered through the reading of the text, additions are made to the map.

### 1.6.1 Semantic Mapping Strategy Used in this Study

Semantic Mapping is a term, which “embraces a variety of strategies designed to display graphically information within categories related to central concept” (Johnson, in the forward to Heimlich & Pitleman). In other words categories and associations are indicated visually in a diagram or “map”.

While the Semantic mapping procedure may vary according to individual teacher objectives, the procedure generally includes a brainstorming session in which students verbalize association on a topic or key concept as the teacher writes them on the board. The teacher then facilitates the students’ discussion to organize or categorize the association into the form of a map. This phase of the semantic mapping procedure activates the students’ prior knowledge of the topic, and help them to focus on the relevant content schema, thereby better preparing them to understand, assimilate, and evaluate the information in the material to be read.

The Semantic Mapping Strategy used in this study is designed by following the constructivist and social constructivist paradigms. The steps used in the modified semantic mapping strategy used in this study were guided by these constructivist and Social constructivist principles.
1.6.2 Constructivism and Social Constructivism

In the present day educational practices, the focus is on a learner centered, activity oriented and experience based education. The Constructivist Paradigm is widely followed in the educational practices. The process of language acquisition is also been viewed as a constructive process. Here learners are viewed as the builders and creators of meaning and knowledge. Constructivism acknowledges the autonomy of learner, and learning is viewed as an active construction by the learner by fitting new information to what they already know. The experience, beliefs and attitudes that learner brings to the learning context are also very important.

In a traditional classroom, teacher dominates the class, most of the time, the only voice heard in the class is that of a teacher, and the child’s voice gets neglected. The emergence of constructivism marked a shift in the pedagogy from that of teacher-centered information transmission model to learner centered and knowledge centered approach. Constructivism in education is rooted in cognitive and social constructivism. The former has its basis in the work of Piaget and the later has its roots on the works of Vygotsky.

Vygotsky’s social constructivist theory emphasizes the influence of social and cultural contexts on learning and in the construction of knowledge. Vygotsky shares the view that children’s thinking and meaning making is socially constructed and emerges out of their social interaction with the environment. The parents, peers, teachers and others around them have a significant role in the learning process. He puts forward the idea of zone of proximal development (ZPD). It is the distance between the learners’ actual development level and the level of their potential development. A child can go beyond his/her actual development level to the potential level with the help of experienced parents, peers or others. So, social constructivist
pedagogy put a lot of emphasis on pair work, group work and scaffolding by teachers or peers.

Most of the time the knowledge needed for a complex task can reside in-group discussion. Group discussion provides room for negotiation of meaning, sharing of multiple views and changing the internal representation of external reality.

The above mentioned constructivists and social constructivist perspectives guided the Semantic Mapping Strategy used in the present study. It provides learners enormous opportunities to individually construct their own ideas based on their experience, beliefs and attitudes. A lot of group activities are also incorporated that helps the children to share their thoughts and ideas with others.

1.6.3 Steps Followed in the Construction of Semantic Map

A Semantic map can be used at three stages of a reading lesson. As a pre-reading strategy to activate students’ prior knowledge; as a while-reading strategy to allow students to record what they are learning as they are reading the text; and as a post-reading strategy to allow students to integrate or synthesis what they have read. It was followed by the writing activities.

The following steps are followed in Semantic Mapping Strategy used for fostering reading comprehension and written expression among students.

PRE-READING PHASE

1. Introducing the Topic

In this phase, teacher presents the topic through some activities like – showing pictures, using pre-narratives, arranging a discussion etc., to generate a need in the mind of student to explore further and to make the topic a construct of the student.

2. Individual Construction of Semantic Maps

Students’ by making use of their prior knowledge identifies and lists out words related to the topic. Then, the words will be classified into different categories and
category words are named based on their understanding and draws a graphical representation of it in the form of a Semantic Map.

3. **Brainstorming in Groups/Class as a Whole Group**

   In this phase, students discuss and share their map with other members. It is followed by a brainstorming session in groups where list out all the words/ideas that come to their mind related to the topic.

   **OR**

   The teacher as a facilitator carries out a brainstorming session in the class as a whole group, where students come out with new words/ideas that might be related to this topic. Teacher assigns students to list out the words suggested by the students on chalk board.

4. **Construction of Semantic Map in groups based on discussion**

   After the brainstorming session, the students in groups will discuss and try to analyze and to categorize the words/ideas presented. They label the categories and draw Semantic maps by incorporating ideas and suggestion from all the group members.

5. **Presentation of the Map by group members and refinement**

   One member from each group was given a chance to presents the map before the whole group and is followed by a whole class discussion. Necessary modifications and additions were made at this stage.

**WHILE READING PHASE**

6. **Additions are made to the Semantic Map while reading**

   The students add further more and more details to the map and enrich the map while they read the passage given for reading.
AFTER READING PHASE

7. Revision of Map after reading

Once the students finish reading the passage they add further categories or modify the existing map based on their new understanding.

WRITING ACTIVITY

8. Individual Writing task based on the Semantic Map

Students will be given various types of writing activities related to the topic. They were encouraged to use the ideas listed out in the map in the pre writing, while writing and revision stages of their writing.

9. Discussion in groups and modification of the writing task

Once they complete the writing task individually, students were given a chance to share their writing with peers, based on the discussion in the group they make necessary changes in the written product.

10. Presentation by a few students and Editing of the written work

Teacher allows a few students to present their writing before the whole class, followed by a discussion. Teacher as a scaffolder helps the students to edit their work. One or two editing will be done before the whole group. Then the students do the editing in groups.

11. Modification of the written work

In the light of editing and discussion, they make modifications and finalize the work.

Normally in a regular class both reading and writing activities are integrated. So the same steps mentioned above will be followed. If it is an exclusive lesson on reading instruction, the steps 1 to 7 are followed and if the class is exclusively for writing instruction, the steps mentioned above with the exception of the sixth and seventh steps are followed.
1.7 NEED AND SIGNIFICANCE OF THE STUDY

The teaching of English has got much significance in the present day context as never before. It is a window to the world and it opens up the vista of opportunities. The global spread of English in the last few decades is remarkable. The vehicular load this language contains is very high. It is the language of science and technology, and it is the language of trade and commerce. Today, the whole world has become a global village and it is moving away from an industrialized based society to an information based society. Information is sent and received at an amazing pace in this world of sophisticated technologies and English is the major language used. It opens up the treasure house of knowledge.

In a multilingual country like India, with a rich array of diversities, English act as a unifying language. India is unique not only with the number and variety of languages, but also in terms of the number and variety of language families that are represented in those languages. In today’s world multilingualism is a norm rather than exception. The learning of English has become a necessity and it is getting reflected in the popular demand for introducing English in the early days of education in India.

In this context, the question arise, Are we prepared enough to address this growing demand for learning English? A lot of paradigm shifts have occurred in the teaching of English. It has moved away from traditional teacher centered, structural oriented behaviouristic methods to child centered, meaning focused constructivists and social constructivist perspectives. But still, the situation is not very promising. The position paper of National Focus Group on teaching of English too shares this alarming view.

The children in our school, even today, struggle to attain mastery over English language. It gets reflected in their mastery of other subjects too, since the language is
the basis for learning other subject areas and in Indian context, English is one of the languages of higher education in India. So it makes the situation even worse for the children.

The National Curriculum Framework (NCF-2005) states that “The goals for a second language curriculum are twofold: attainment of a basic proficiency and the development of language into an instrument for abstract thought and knowledge acquisition through literacy.” (P.39). The NCF (2005) further highlights the need to put special attention on reading and writing in English, particularly in home language. In the case of second language, the focus is on mastery of all skills including communicative competence.

Reading and writing are the two areas where the children have a lot of difficulties. These are two vital skills that child should master, along with the other skills to creatively participate in this literal world. They make use of reading and writing widely in and out of schools. Apart from that reading gives a lot of pleasure and it gives access to the world of knowledge. Writing is also equally important. Writing is been viewed as a necessary skill for participation and success from primary level to higher education and it provides access to the powerful social, professional, and organizational roles. Writing is actually thought in the paper. But it is one of the highly neglected areas in school education. So there is still a lot to do in our school education to foster the reading comprehension and written expression of the children.

Improving reading comprehension is a top priority as well as an area of concern for the majority of teachers even today. The research on cognition, language acquisition, and information processing has contributed to a better understanding of the comprehension process. Much has been learned about how readers comprehend and how teachers can help to improve comprehension. In the light of this research,
comprehension can be viewed as an active process in which readers interpret what they read in accordance with what is already known about the topic, thus building bridges between the new and the known (Pearson & Johnson, 1978).

The cognitivists and constructivist view of reading comprehension emphasize the interactive nature of reading (Rumelhart & Ortony, 1977) and the constructive nature of comprehension (Anderson, Reynolds, Shallert & Goetz, 1977). The reader constructs meaning by making use of their prior knowledge. Thus, two important characteristics of readers - the knowledge that reader bring to the task and the strategies that they use to foster and maintain understanding – play an important role. The schema theory also shares this view.

There studies carried out by Carr and Thompson (1996); Holmes B.C. (1983); Jackson, Paul and Smith (1997); Langer and Nicholich (1981); Lipson (1982); Maria and MacGinitie (1980); Schmidt, et al. (1989); Spilich and Vesonder, Chiesi and Voss (1979) found that prior knowledge plays a major role in the comprhension process. So making use of prior knowledge is vital to enhance the reading comprehension of children.

Prior knowledge plays a significant role in students’ written expression too. The studies proved that prior knowledge that students bring to the act of writing contribute significantly in the writing process (Langer, 1984; Mosenthal, Conley, Colella & Davidson-Mosenthal, 1985; Voss, Vesonder & Spilich, 1980). The study by Chesky and Hiebert (1987) reported that the students who wrote with high-prior knowledge wrote quantitatively and qualitatively better.

The studies cited above clearly indicate that prior knowledge that the learner brings to the task of reading and writing is very important. In most cases a common problem students experience in reading classes is the feeling that they know
absolutely nothing about the subject they are reading about. However, this feeling may be more complex than generally thought. The problem may not be the lack of background knowledge, but rather the failure to activate that knowledge.

According to Chia (2001) many teaching techniques have been developed to activate students’ prior knowledge for effective top-down processing in order to facilitate reading comprehension. And one of the major activities that activate student’s appropriate background knowledge of a given topic is semantic map (Freeman, 1980; Heimlich & Pittleman, 1986). The map is an organized arrangement of vocabulary concepts which reveals what students already know about the topic and provides them with a base upon which they can construct the new information learned from the text. It is true with writing too.

There are other studies which show that graphical organizers like semantic mapping improve the reading comprehension of students. Kim, Wanzek and Wei (2004) synthesized the researches on the effects of graphic organizers on reading comprehension with students of learning disabilities. They conducted an extensive review of 21 studies carried out during 1963 and 2001 June. The review revealed that graphical organizers like semantic organizers, cognitive maps etc., were effective regardless whether they were implemented by teachers or researchers. There are several other studies also that were conducted on normal children, which have shown that, visual representations in the form of graphical organizers enhance students’ reading comprehension and writing ability (Berkowitz, 1986; Boyle, 1996; Davis, 1994; Peresich & Lee, 1990; Sadoski, Paivio & Goetz, 1991).

The studies cited above clearly depict that the activation of prior knowledge and the visual representation of information in the form of graphical organizers can be used effectively to promote reading comprehension and written expression among
students. The reviews in the area of strategy instruction also proved to be effective. The researches show that cognitive strategies can be taught to children, and when taught, they can lead to increased performance. From the review, the researcher felt that Semantic Mapping Strategy is one of the promising strategies that could be explored further to address the problems faced by children in reading comprehension and written expression. So an extensive review of Semantic mapping strategy has been carried out to see, how the strategy could be effectively integrated in to the English classroom where in it is used as a second language.

The literature review in the area provided a lot of insights in the use of Semantic Mapping. The review showed the positive effect of semantic mapping strategy in fostering reading comprehension. It was found effective in studies of (e.g., Antonacci & Patricia, 1991; Englert, Sue, Mariage & Troy, 1991; Goetz & Galarza, 1996). But there is contradicting evidence also that suggest semantic mapping strategy is not effective in fostering reading comprehension. De Fina (1999) based on the study reported that semantic mapping is not effective in improving the reading comprehension of text material. There are some other studies, that indicate semantic mapping strategy is not effective in developing comprehension at all levels (Lipson & Marcia, 1995). Their studies showed that the semantic mapping strategy was not effective in helping students to answer ‘scriptally implicit’ questions.

The studies were also conducted to understand the effect of semantic mapping strategy on written expression (Kalgren & Ann, 1992; Washington & Moss, 1989; Webster & Parker, 1998; Weisberg & Balajthy, 1986). It has reported that semantic mapping strategy has a positive effect on developing writing.

The review further showed that, the studies on the effect of semantic mapping on writing is very less as compared to that of reading comprehension. Another
observation was that in most of the time, the teacher played an upper role in the implementation of the strategy.

In the present day educational practices, emphasis is more on learner centered, activity oriented and experience based education. Knowledge is not viewed as something that can be given by the teacher in the classroom. Knowledge is constructed by students by fitting new information with what they already know and multiple representations of reality are accepted and appreciated. The child constructs knowledge in a social context. There is a lot of influence of peers, parents and others in the constructive process. The present constructive and social constructivist principles give a lot of importance to the autonomy of the learner, and learning through co-operation and collaboration. So the classroom activities are characterized by a lot individual work, pair work and group work etc. The teacher also assumes different roles as a facilitator, motivator, need analyst, scaffolder, etc. So the researcher felt a need to bring the semantic mapping strategy under constructivist paradigm. The semantic mapping strategy used in this study is designed by incorporating the principles of constructivism.

The review further revealed that, there are a few studies carried out in the secondary school level and most of the time the reading comprehension is assessed by retelling and recalling. Higher order cognitive process like critical reading comprehension was not given much emphasis. It is further noted that, the studies conducted in the area of writing were focused mainly on composition writing.

In the light of the review, the researcher made a few observations. The first one was, there are contradicting evidence on the effectiveness of semantic mapping as a strategy to improve students’ comprehension. While some studies suggest that semantic mapping is effective, there are some other that shows it is not effective in
promoting comprehension, so the investigator felt that there is a need to ascertain the effectiveness of the strategy through further study.

The second observation, based on the review was, though there are researches carried out in the area of semantic mapping; semantic mapping under constructivist paradigm is unexplored. So the researcher was keen in investigating the effect of a semantic mapping strategy that is designed by incorporating the principles of constructivism and social constructivism in promoting reading comprehension and written expression in English.

The review of the literature suggests that the types of text one read has got an impact on reading comprehension. So in the present study, an effort has been made to see the effect of semantic mapping strategy on two different types of texts – expository text, and argumentation and persuasive text, in finding the effect on reading comprehension. The effect of semantic mapping strategy was studied at different levels of comprehension in order to understand whether the strategy promote comprehension at all levels of reading comprehension, which was not properly addressed in the earlier studies. The three levels considered in this are literal, inferential and critical level of reading comprehension.

The review further reveal that, though there were studies carried to study the effect of semantic mapping strategy on writing, the effect of the strategy on improving various communicative purposes like – to persuade, to explain and to convey experience etc. were not studied. So that also has been included as a part of this study.

There are studies conducted on reading comprehension, that suggest that, sometimes it takes longer time to see the effect of a strategy instruction (Berkowitz, 1986; Heinze-Fry & Novak, 1990, and the investigator could not find studies that investigated the delayed effect of semantic mapping strategy on reading
comprehension. So an effort has been made in this study to see the delayed effect of semantic mapping strategy on reading comprehension.

In the light of all the observations, it was felt there is a need to study the effect of semantic mapping strategy on reading comprehension and written expression in English among secondary school students. The study helps to understand how a semantic mapping strategy that has incorporated the principles of constructivism and social constructivism will work out in the classroom and how far it helps in promoting the reading comprehension and written expression of students.

1.8 STATEMENT OF THE PROBLEM

The present study is entitled as “Effects of Semantic Mapping Strategy on Reading Comprehension and Written Expression in English among Secondary School Students”.

The semantic mapping strategy under constructive paradigm is used in this study. It is a modified version, designed by the researcher following the constructivist and social constructivist principles. This study intends to find out the effect of the semantic mapping strategy under constructivist paradigm on developing reading comprehension and written expression in English among secondary school students.

1.9 OPERATIONAL DEFINITION

a. Semantic Mapping

Semantic Mapping is defined as a categorical structuring of information in graphic form.

b. Strategy

Strategy is thought of as conscious, instantiated, and flexible plan a readers adapts to a variety of texts and tasks.
c. Reading Comprehension

The operational definition of Reading Comprehension, used in this study is a modified version of definition used by NAEP (Reading Framework, 2009, National Assessment of Educational Progress, 2008).

Reading comprehension is defined as the process of simultaneously *extracting* and *constructing* meaning through interaction and involvement with written language. It is an active and complex process that involves

- Understanding written text
- Developing and interpreting meaning

**Understanding written text:** Readers attend to ideas and content a text by locating and recalling information and by making inferences needed for literal comprehension of the text. In doing so, readers draw on their fundamental skills for decoding printed words and assessing their vocabulary knowledge.

**Developing and interpreting meaning:** Readers integrate the sense they have made of the text with their knowledge of other texts and with their outside experience. They use increasingly more complex inference skills to comprehend information implied by the text.

**Levels of reading comprehension**

1. **Literal Reading Comprehension**

   Literal reading comprehension refers to locating and recognizing information that is presented in a very straightforward manner. It covers facts and details and relationships between ideas (such as comparison, contrast, sequence of events, or cause and effect) that are stated directly in the passage.

2. **Inferential reading comprehension**

   Inferential reading comprehension is the ability of students to interpret and determine what is implied or meant rather than what is stated in the text, by tapping
one’s prior knowledge or experience, attaching new knowledge to old information and making logical leaps and educated guesses.

3. **Critical reading comprehension**

   Critical reading is defined as an active and purposeful process of comprehending, questioning and evaluating information presented in the text in order to react objectively and intelligently to the writer’s ideas.

4. **Written Expression**

   Written expression is the ability to express one’s thoughts, ideas and feelings, correctly and meaningfully in a systematically organized manner through writing. It is a complex, multifaceted and purposeful act of communication.

5. **Secondary School Students**

   The students who study in 8th, 9th and 10th standard of schooling are considered as secondary school students in this study.

1.10 **VARIABLES OF THE STUDY**

**Independent Variable**

Semantic Mapping Strategy.

**Dependent Variable**

- Reading Comprehension.
- Written Expression.

1.11 **OBJECTIVES OF THE STUDY**

The objectives of the study are to:

1. develop Semantic Mapping Strategy under Social Constructivist paradigm.

2. find out the effectiveness of the Semantic Mapping Strategy on Students Reading Comprehension at
   - literal level
   - inferential level
   - Critical level
3. to find out the effectiveness of the Semantic Mapping Strategy on the reading comprehension of various texts:
   - Expository and
   - Argumentation and Persuasive in English at three levels.
4. find out the delayed effectiveness of Semantic Mapping Strategy on Student’s Reading Comprehension at
   - literal level
   - inferential level
   - critical level
5. find out the effectiveness of the Semantic Mapping Strategy on Student’s Written Expression.
6. find out the effectiveness of the Semantic Mapping Strategy on Students’ ability to use writing for various communicate purposes like
   - to persuade
   - to explain
   - to convey experience

1.12 HYPOTHESES OF THE STUDY

The following hypotheses were formulated for the study.

1. Semantic Mapping Strategy is more effective than Conventional Teaching in enhancing Students’ Reading Comprehension in English at
   - literal level
   - inferential level
   - critical level
2. Semantic Mapping Strategy is more effective than Conventional Teaching in enhancing Students’ Reading Comprehension of
   - expository text
   - argumentation and persuasive text in English at three levels

3. Semantic Mapping Strategy is more effective than Conventional Teaching in enhancing Students’ Written Expression in English.

4. Semantic Mapping Strategy is more effective than Conventional Teaching in enhancing students’ ability to write in English for various communicative purposes:
   - to persuade
   - to explain
   - to convey experience

1.13 DELIMITATIONS OF THE STUDY

1. The study was restricted to IX standard students.

2. Only two language skills i.e., reading and writing were taken for this study.

1.14 CONCLUSION

In this chapter, the theoretical framework of the study is discussed. The context in which the study was taken up is presented. The objectives of the study are also given. In the next chapter, a review of the studies related to the variables considered is discussed.