CHAPTER – II

2.1. Introduction

As it is essential for a competent physician to keep abreast of the latest discoveries in the field of medicine, the research worker and investigator should be familiar with the location and sources of educational information. Study of related literatures implies locating, reading and evaluating reports of researches as well as reports of casual observations and opinions that are related to the investigator’s planned research project.

Related literature includes theoretic discussions, reviews of the status of knowledge by authorities, philosophical papers, description and evaluation of current practices and empirical researches. Review of related researches is indispensable to get a clear cut perspective of the problem.
In the words of Walter R. Borg (1965) the literature in any field forms the foundation upon which all future work will be built. Scanning of relevant research reports guides the researcher in the right direction, highlighting the pitfalls of the earlier studies showing him the landmarks achieved. Also, a synthesised collection of previous studies helps the researcher to identify the significant overlaps and gaps among the prior ones.

The investigator can probe into the neglected areas, which need more concentration. Further, the review of related research enables the investigator to get to the frontier in the field of the problem. Until the investigator has learnt what others have done and what still remains to be done in his areas, he cannot develop a research project that will contribute to furthering knowledge in his field. It makes the researcher aware of the research possibilities that have been overlooked. His focus on these areas may pave the way to break new grounds and come out successful with new theories and principles, which may be of permanent value in the field of teaching and learning.

The literature so far available from various sources shows that a good number of studies have been conducted on English education in formal and non-formal education both in India and abroad. On the other hand, only a few studies have been attempted with regard to metacognitive strategy. Though there are various studies attempted to verify the effectiveness of some instructional strategy or the other, adequate attempts have not been made to establish the effectiveness of metacognitive teaching learning strategy on the achievement of students in English. So the studies relevant to the current research are not elaborate and exhaustive. This still remains an area not explored adequately.
In this chapter, an attempt is made to present a summary of literature related to the research topic under the two broad categories such as; studies conducted in India and studies done abroad.

2.2. Studies Conducted in India

The studies conducted in India are further classified under different headings as given here:

2.2.1. Studies on Teaching and Learning of English

2.2.2. Studies on Metacognitive Teaching Learning Strategies.

2.2.1. Studies on Teaching and Learning of English

Quite a number of studies have been carried out with regard to teaching and learning of English in India. Such studies are enumerated under this subhead.

Abraham (1974) conducted a study on some factors relating to under achievement in English of secondary school pupils. The study attempted to identify factors leading to under achievement in English of secondary school pupils. The study revealed that i) The achievement level was associated with attitude towards English, personal adjustment, social adjustment and socio-economic status. ii) There was greater proportion of normal achievers among girls as against boys. iii) Under-achievement was more frequent in rural schools and over achievement in urban schools. iv) For the over-achievers only linguistic disposition and general adjustment were needed to account for total variance. v) For under-achievers group adjustment, socio personal adjustment and scholastic disposition were found to be the factors responsible for explaining total variance.

Ahuja and Ahuja (1978) conducted a study on demonstration of audio-visual and reading aids to school students and their reading speed in three languages – Kannada, Hindi and English. One of the main objectives of the study was the general evaluation of the audio – visual aids. The Major findings of the study were: i) The closed circuit programme was liked
by the students and was found to be very effective both from the language and comprehension point of view by more than 95 per cent of the students. ii) The students were not much benefited by the three films on reading purchased from an outside source. iii) More than 95 percent of the students found the film produced by CILL, Mysore very interesting and clear and could fully follow the message of the film.

The consultancy service of English Language Teachers' Association of India conducted a two week spoken English course in modern senior secondary school, Nanganallur in Madras in April 1993. Twenty teachers of the primary classes participated Dr.V. Saraswathy and Dr. K.M. Prabu conducted the course. The teachers were exposed not only to the theoretical aspects but also to the learning strategies in the communicative approach.

A seminar on Identification of difficulties in teaching and learning English among the high school students organised by the department of education (4th March 1989), Alagappa University underlined the need for improved and effective teaching or spoken English in high schools. Teachers expressed their lack of English pronunciation practice and demanded continuous inservice training in English Pronunciation.

Arul Krishnamurthy (1989) carried out a comparative study on the phonetic characteristics of the English of the first year degree students with reference to the medium of instruction. A sample of speech of the first year degree students was collected. The speech was transcribed and evolutinal reactions were obtained from three groups of listeners. It was found that the Tamil Medium students were more divergent from the received pronunciation and they were more deviant from the English medium students with regard to intonation, rhythm etc.,

Balasubramanian and Yoganandam (1994) conducted a comparative study of effectiveness in improving English pronunciation. The objectives of
the study were: i) To develop an audio package for improving the pronunciation of English vowels, diphthongs and consonants among std. V pupils. ii) To find out the relative effectiveness of the developed audio package over direct teaching by a trained teacher in the production of correct English sounds among std V pupils.

The study revealed that though the training given by the trained teacher and that given through pre-recorded audio cassette are almost similar in their effectiveness in improving the pronunciation of English sounds among Std V pupils, both the training fail to improve one or the other aspect of English sounds. While the training given by the teacher fails to improve the pronunciation of diphthongs, the training given through prerecorded audio cassette fails to improve that of vowels among std V pupils. Hence, it is concluded that the teacher and the technology should be complementary to each other in any scheme of education. Technology can be used effectively as an aid in the classroom and teachers involvement in it will make the teaching – learning process more effective.

Bhavani (2010) made a study on media role in spoken English is it slanting towards male gender? – A profile. The main objective of the study is to find out the significant difference between male and female UG students of Arts and Science Colleges regarding the level of impact of mass media on the acquisition of spoken English. The sample consists of 343 UG students of Arts and Science Colleges in Tuticorin District who have scored more than 75% of marks in their spoken English Viva-voce Exam conducted by M.S. University. A self made tool “Identifying factors inhibiting and facilitating the acquisition of Spoken English skill” has been used for collecting data. The major finding is that the role that the media plays on males and on females with regard to acquisition of spoken English is significantly different. Males enjoy better benefits than the females. The fact may be due to the reason that Indian women seldom get opportunities
to move out and watch English movies or buy English novels of their choice. As far as women students are considered, Mass media plays only a passive role in their acquisition of spoken English. The impact of Mass Media is in the right direction for male students and sure, it slants towards the male gender.

Deenamma (1979) studied the various barriers to scientific communications such as difficulties in pronunciation, difficulties due to ambiguity, confusion, artificiality and also difficulties in understanding a selected number of technical terms used. Her survey revealed that words which were judged most effective in scientific communication were mainly English words.

Denisia (2009) conducted a study on teaching English language education through computer assisted instruction. The study concludes that computer assisted instruction has proved to be more effective in teaching English language education than the traditional method. Computer assisted instruction followed by discussion has made English language education learning very effective and the achievement of the student teachers is very high. So the teacher educators have to make use of computer assisted instruction in their classroom practice. Further when the student teachers are exposed to the advantages of computer assisted instruction as well as the techniques involved, they will also be motivated to employ them in their classroom work.

Dewal (1974) explored the difficulties in teaching English and the effectiveness of programmed teaching. The study revealed that: i) The difficulties hampering effective teaching and learning of English were the shortage of trained teachers, lack of subject competence in teachers, dearth of good teaching – learning material, lack of individual attention, and poor socio-economic background. ii) Programmed teaching overcame some of the felt difficulties of the teachers and helped students to perform
significantly better than those who were taught by conventional method.

iii) The strategy proved useful in a situation where teachers were under-qualified and untrained in teaching English.

Gaikwad (1982) investigated the comparative efficiency of the direct method and the bilingual method of teaching English to lower classes of secondary schools in rural area of Maharastra State. His experiment arrived at the following major findings: i) The bilingual method was superior to the direct method in developing linguistic skills of understanding, speaking and writing. ii) Both the methods were equally effective as far as reading skills were concerned.

George (1966) made an enquiry into the scope and effectiveness of audio-visual instruction in improving English teaching in Kerala state in the first three years of school course. The study revealed that (i) Teachers did not use audio-visual aids because of heavy cost, heavy syllabus, insufficient number of material aids and lack of skill and special training. (ii) Pupils taught by using audio-visual aids achieved higher than those taught by the usual method and the use of audio-visual aids did not require more time when compared to those of ordinary teaching.

Ghosh (1977) undertook a study of backwardness in English in the secondary schools of West Bengal. The main objectives of the study were: i) To carry out a survey of the attainment of pupils in English. ii) To diagnose the backwardness in specific areas of English.

The findings of the study were: i) Backwardness in different aspects of English taken in order of their intensity were – use of capital letters, and punctuation, comprehension, usage, spelling, vocabulary and sentence construction. ii) Causes of backwardness were unscientific curriculum, lack of attention at home, unsuitable teaching method, poverty, maladjustment, absenteeism, bad company, want of necessary books and teaching aids,
congestion at home, lack of proper place to study, poor health, and substandard attainment in English at primary stage.

Gill (1984) probed into the impact of teach-English, learn-English’ (TELE) radio programme on listeners’, teachers and pupils’ English in Gujarat. The revealings of the investigation were: i) The impact of the TELE series on the teacher’s own English was positive. The listener-teachers clearly gained from the broadcast. ii) The teachers did gain in the specific area viz., listening, comprehension, pronunciation, vocabulary and grammar. iii) The listener pupils gained well from the series. iv) The TELE series helped the teachers and learners of English in the schools of rural area. v) TELE was found to be a useful source for teachers and learners regarding the natural and appropriate use of English.

Girija Nirmala (1983) undertook a comparative study of English spoken by teachers of English and teachers of other subject. The main objectives of the study were: i) To describe the spoken English of the degree college teachers from the different university areas of Andhra Pradesh. ii) To find out the educated listeners response to the spoken English of the college teachers. iii) To detect ‘Best” and “Worst” speakers.

The findings of the study were: i) Atleast a rudimentary knowledge of phonetics and spoken English was very essential to all teachers who teach subjects, other than English in English medium. ii) Out of 5 best speakers, four were English teachers and out of nine “Worst” speakers seven were teachers of other subjects.

Govinda Reddy (2008) undertook a study to assess effectiveness of drill on the part of high school students to improve their grammatical skills in English. The findings are as follows in the post test the experimental group students scored more marks than the other group i.e. the control group.
Drill significantly influenced the experimental group students to score more marks in the post test.

Hemamalini (2011) made a study on second language learning: a theoretical background. She states second language learning is a process of enormous complexity in which a variety of factors are at work description. There are a number of theories which have received considerable attention in second language research. These theories seek to account for the interaction of those sets of factors which affect the process and success of second language learning. They describe the conditions under which efficient learning can take place. In the present study an attempt has been made to give a comprehensive theoretical basis for the process of second language learning.

Iqbal (2008) conducted an experimental study to assess the effectiveness of remedial packages in teaching English grammar to slow learners at higher secondary level. The study arrived at the following conclusions. 1) Remedial packages were more effective than the traditional lecture method in teaching English grammar to the slow learners at higher secondary level. 2) The strategy enabled the slow learners to cope with normal students to a considerable extent. 3) The applied strategy was also very effective in promoting auto learning among the slow learners to some extent.

Jagannath K. Dange (2011) attempted a study to verify the effectiveness of peer-tutoring on English language achievement and nurturing effects. This study aimed at investigating the effectiveness of peer tutoring on the English language achievement and nurturing effects of secondary school students. A pre-test post-test parallel group experimental design was applied. Qualitative and quantitative data were collected. A self-developed achievement test and observation schedule was used to collect the data. The data gathered were analysed statistically. The results
showed that peer tutoring was more effective over the conventional method of teaching in terms of enhancement of achievement in English language and helped in the development of nurturing effects in students. It was shown that peer tutoring would contribute to the development of language achievement as well as nurturing effects like self esteem, team spirit, socialization, mental horizon, social interaction, communication skills etc.

Jayanthi and Padmanathan (2007) undertook a study on a study of spelling errors in English among the boys of XI standard. The findings of the study indicate that rural boys and urban boys are at par as far as their spelling errors in English language are concerned. Family income has significant influence on the spelling ability of the boys. There is also significant influence of the educational status of the family on the spelling ability of the boys.

Julu Sen (1986) developed a course for an oral communication component in the plus two English syllabus in West Bengal. The objectives of the study were: i) To identify the “need” of the students in the plus two stage. ii) To modify the present syllabus and its objective so as to incorporate some real communication components in them. Field work was carried out in three phases. In the first phase present syllabus materials were collected. It was analysed in the second phase and a new course design was formulated. In the third phase it was tried on a sample. It was found that the student, who worked on these task types improved considerably as far as oral communication skills were concerned.

Karpagakumaravel (1988) evolved A video assisted instruction programme in English and compared its effectiveness over the conventional method of teaching English. The main objectives of the study were: i) To develop a software programme in English for video assisted instruction to XI standard students. ii) To analyse the development of cognitive abilities namely knowledge, comprehension and application
through ‘video – aided instruction’ over traditional approaches in learning of English.

The study established the advantage of video assisted instruction over the conventional method of teaching English.

Karpagakumaravel (1994) explored the development and validation of a computer assisted instruction programme in English. The objectives of the study were i) To develop a computer software programme in English grammar for XI standard students. ii) To validate the developed software programme in English grammar for XI standard students. The major findings of the study were: The English lesson developed by the investigator in the computer was found valid. The immediate achievement of the pupils in the standardised criterion test was found satisfactory.

Kasinathan (1992) investigated the effectiveness of audio – cassette developed by CIEFL in teaching word accent and rhythm in English for higher secondary students. The study established that CIEFL audio-cassette was more effective than the traditional lecture method in teaching stress and rhythm to higher secondary students.

Kamalesh Sadanand’s (1973) a work is commendable one on course in spoken English for use in India. The course is meant for college entrants with 2000 words vocabulary. The study aims at 1) Teaching students spoken English 2) Making them familiar with the spoken ideas of English 3) Training students to speak English fluently 4) To make them comprehend different kinds of spoken English. It contains four sections:

Section I contains materials for teaching of segmental and supra segmental features of English. The supra segmental features include the teaching of words accent, sentence stress, rhythm and intonation.

Section II tries to familiarise students with the use of certain formulae in particular situations. An attempt is made to teach them the distinction between formal and informal use of language.
Section III provides passages on varied topics to give students, practice not only in understanding English spoken in different situations but being able to take part in discussion and debates.

Section IV has plays, speeches, poems and prose passages for practice.

Kudchedkar (1981) developed a course in spoken English at the college level and studied its effectiveness. It was an experimental study that aimed: i) To develop a course in spoken English, and study its effectiveness. ii) To determine the principles on which the course in spoken English should be designed. iii) To determine whether greater attention to speech in the language resulted in improving proficiency in other language skills. The major findings revealed by the study were: i) The experimental group scored higher marks, than the control group in the subjects in writing. ii) Traditional methods failed to gain mastery over the language as a system. iii) The course designed must aim at communicative competence using simple natural dialogues confined to the presented language items. iv) Students’ attitude and motivation affected the results. v) Aptitude appeared to be even more important factor than motivation or methodology.

Malaikkani (1992) carried out an experimental study of the effectiveness of teaching English consonants using a remedial package at the higher secondary level. The objective of the study was to prepare a remedial package comprising English consonants and measure the effectiveness of it by teaching the same to an experimental group at the higher secondary level. The study revealed that teaching consonant sounds using a remedial package helped students to improve their accuracy in pronouncing consonants. Teaching consonant sounds using a remedial package helped students to listen, understand and produce consonant sounds easily.
Manimegalai (2009) made a study on effectiveness of modular instruction on achievement of various categories of students in English at higher secondary level. The study concluded that modular instruction was very effective in teaching English to various categories of students at higher secondary level. The applied strategy was more effective than the traditional lecture method in enhancing the achievement of the students in English at higher secondary level. Further, the study pointed out that the formative evaluation incorporated in the modular instruction was very effective and it provided for acquisition and retention of concepts to a considerable extent.

Meganathan (1988) made a comparative study between the direct and the bilingual methods of teaching English as a second language at the secondary level. Major findings of the study revealed that the Bilingual method was found to be superior to direct method with reference to i) Developing the four basic skills in learning English. ii) The frequency of contact with English per pupil per lesson. iii) The rate and amount of learning in the classroom. iv) The promotion of inter-communication between the pupils and the teacher. v) The achievement of students. vi) Combining the best elements of the direct method and other method. vii) The developing of linguistic skills. viii) The suitability of the method both for the teacher as well as the taught.

Misra (1968) investigated the problems and difficulties of language teaching at secondary level. His survey revealed the following: i) More than 50 percent teachers preferred to use translation method and only 25 percent of them used the direct method. ii) Only 32 percent teachers encouraged students in developing reading ability, one-third of them also instructed the students about the techniques of improving reading. iii) About 80 percent teachers felt the need for loud reading, only 60 percent actually practised it. iv) Most teachers attached importance to proper volume,
rhythm and speed when reading while some teachers attached importance only to pronunciation. v) In teaching pronunciation, teachers, considered poor training in the previous class (due to a large number of students) as one of the reasons, other difficulties were silent letters in certain words, the home background of the students, visual and auditory capabilities, carelessness of teachers and students and so on. vi) In teaching spelling, very few teachers used complete words, still fewer used flash cards, most teachers used separate letters. vii) Carelessness, short-lived and weak memory and wrong pronunciation were considered to be the causes of weakness in spelling. viii) About 65 percent teachers felt irregularity (phonetic) as the problem of spelling in English. ix) In teaching Grammar, 50 percent teachers perceived the teaching of formal grammar useful, 25 per cent teachers perceived functional and applied grammar more useful. x) The difficulties faced by students were construction of sentences, proper expression etc., xi) A majority of the teachers wanted to include questions and answers as part of oral training. xii) More than 60 percent teachers did not use drilling though they believed it to be necessary. xiii) The present examination system tested only knowledge and memory of students.

Mitra (1974) evolved a method of “teaching English as a second language for higher secondary classes in Delhi schools”. The study aimed at guiding Delhi teachers through the publicity problems of English language teaching. The findings of the study were as follows: i) No steps were taken to help students to develop proper attitude towards English. ii) By far the majority of the teachers were found dissatisfied with the existing methodology of teaching English. iii) Oral instruction was found to be essentially important and the teacher had to be active model in the English class. iv) The results of the experiments also established the effectiveness and superiority of the evolved methodology.
Monika Uppal (2011) conducted a study to verify the effectiveness of concept attainment model in relation to the conventional teaching of English language to VIII grade students. The main objective of the study was to find out if there is any effect of concept attainment model on English language teaching. The experimental method was adopted for the present study. A sample of 50 students from two English medium schools in Jamshedpur were selected randomly according to their grades in their terminal exam. Achievement tests in English for pre-test and post-test were prepared by the investigator. ‘t’ test was used for analyzing the data. The study arrived at the following conclusion 1) There is no difference between the mean scores of the pre-test in English language taken by the Experimental group and the control group. 2) There is significant difference between the mean scores of the post-test in English language taken by the experimental group and the control group. 3) There is only a slight difference between the mean scores of the pre-test and the post-test in English language of the control group. 4) There is significant difference between the mean scores of the pre-test and the post-test in English language of the experimental group.

Ramila Salvi and Smita Trivedi (1990) investigated the influence of intelligence, socio-economic status and attitude towards English on achievement in English. The objective of the study was: To study the influence of intelligence, socio-economic status, attitude towards English and their various interactions on achievement in English. The investigation concluded: i) Intelligence or SES did not have significant influence on achievement in English. ii) The interaction between any two variables from intelligence, SES and attitude towards English did not influence achievement in English significantly, but when all the three variables interacted with one another, they had a significant influence on achievement in English. iii) Attitude, except in the case of high intelligence
group with lower SES, had a significant and positive influence on achievement in English.

Ramkumar (1982) assessed the entering behaviour in English of pupils of standard VIII. The main revealings of his study were: i) Proficiency was low in the use of five component skills, viz., use of phrases, prepositions, degrees of comparison, plurals and combining sentences. ii) Proficiency was average in the use of articles, opposites, and the "ing" forms. iii) The vocabulary attainment of standard VIII pupils was very low.

Reddy and Ramar (1997) made a study on the effectiveness of multimedia based modular approach in teaching English to slow learners. The study revealed that modular instruction was very effective in teaching English to slow learners at upper primary level. The applied strategy enabled the slow learners to reduce gap that existed earlier between them and the normal students. Further, the study established that the multimedia based modular instruction was very effective both in terms instructions and in terms of retention.

Saraswathy (1982) investigated the nature of communicative competence in relation to learning a language for specific purposes and suggested guidelines to design a course in English for official purposes for under graduates in Tamil Nadu.

Sasikala (1994) undertook an experimental study for improving oral communication in English among Tamil medium students at higher secondary level. The major objectives of the study were: i) To develop a course package for improving the fluency and accuracy in oral communication in English among Tamil medium higher secondary students. ii) To improve oral communication in English among Tamil medium students applying Packages developed by the investigator. The major findings of the investigation were: iv) There was significant improvement in oral communication in English among the study group after being subjected
to the packages. v) There was significant improvement in the performance of the Tamil medium students in functional English used in oral communication and in reading skill.

Satyasree (2009) in her paper *journalistic English in India*, states that journalists should play a more responsible role in using English language as it instructs, influence and entertains the intellectual growth of readers. She stresses that journalists directly influence the young minds; hence they should play a more responsible role in using English language as a medium that instructs, influences, impresses, educates, entertains and aids the intellectual growth of readers.

Sethi (1976) studied a programme in English spelling in relation to visual and auditory presentation with the following objectives. i) To find out the relative merits of demerits of visual and auditory models of presentation for learning programmed materials. ii) To verify the comparative effects of visual and auditory models of programmed materials between boys and girls. The major findings of the study were: i) auditory mode was found superior to visual mode. ii) Girls performed better than boys. iii) There was significant relation between auditory model and sex. The relation between interaction auditory model and time factors were not found significant. iv) Boys seemed to perform better on delayed tests.

Shobana Chakravarthy (1985) analysed the English spoken by a group of students of Varanasi and identified their difficulties in pronunciation. She suggested a remedial course for improving their spoken English.

Singh and Srivastava (1960) studied common errors in written English their prevention and cure. The purpose of the study was to develop effective remedial and preventive techniques for spelling mistakes committed by pupils and verify which could easily be applied by average teachers in Indian conditions. The investigation revealed that: i) Pupils...
were drilled too soon into the use of the pattern, the significance of which they did not understand. ii) The teacher was not aware of the point of difference between the foreign language he was teaching and the native language of the pupils. iii) Pupils were constantly influenced by the familiar pattern of their native language which caused mistakes in the use of the foreign language.

Sivaram (2006) has listed out the problems faced by the slow learners in English at primary level. He enumerates the difficulties encountered by the slow learners in the acquisition of four languages skills. Further he lays down the techniques and strategies to circumvent the deficiency of the slow learners in the four language skills. He also highlights the non instruction factors that are to be applied to develop the language skills of the slow learners at primary as well as secondary level.

Sivaram (2008) conducted an experimental study to assess the effectiveness of active learning methodology in teaching English to slow learners at secondary level. The study revealed that active learning methodology was very effective in teaching English to slow learners at secondary level to a considerable extent. Further, the applied strategy enabled the slow learners of the experimental group to cope with the normal students to a great extent. The applied strategy was very effective in promoting collaborative work among the slow learners which is an essential element in active learning methodology.

Sivaram (2009) carried out an experimental study to assess the efficacy of active learning methodology in teaching English to LD students at higher secondary level. The study arrived at the following conclusions 1) The applied strategy was very effective in teaching English to language learning disabled students. 2) It was more effective than the traditional lecture method in enhancing the achievement of the learning disabled students in English at higher secondary level. 3) The technique of group
work in the active learning methodology provided for an effective collaboration among the LD students for mutual benefit and better achievement. 4) The applied strategy enabled the learning disabled students to reduce the vast gulf of difference that existed earlier between them and the normal students.

Soumini (1984) studied the effectiveness of a course design based on communicative approach for English language teaching in regional medium high schools. The major objective of the investigation was to design a course based on communicative approach for the teaching of English for regional medium class IX and X students using science as the content.

Some of the major findings were: i) Majority of the students found that the course design was useful to improve both science and English. ii) Most of the English teachers considered that they had to be more active in the classrooms and most of the students also sought guidance from them. The teachers felt that this type of course developed vocabulary, structures, science concepts as well as the language skills. Teachers felt that they needed special training to teach English through communicative approach. Such a course was difficult to be introduced in our schools, they felt.

Srinivasan (2007) made a study on dynamic approaches to language processing the study reveals symbolic rule-based approaches have been a preferred way to study language and cognition. Dissatisfaction with rule-based approaches in the 1980s lead to alternative approaches to study language, the most notable being the dynamic approaches to language processing. Dynamic approaches provide a significant alternative by not being rule-based and address performance/implementational issues in language processing. They also incorporate the temporal dimension into modelling and explaining language. Connectionist models which are a
subset of dynamical models of cognition have become very popular with work spanning language acquisition, comprehension and production. For example, connectionist models have been proposed for learning past tense of verbs and generation of sentences. Researchers trying to incorporate dynamics have based arguments ranging from temporal phenomena, non-discreteness of phonemes and statistical information available in input data for opting for a dynamic approach. Valuable criticisms against connectionist and other dynamic approaches emphasize the need for further studies focusing on the fundamental challenges facing these approaches. While dynamical models show promise, further work is needed on new mathematical techniques in dynamical systems and application of those techniques to understand language.

Subramanian (1982) studied the effectiveness of two different methods of teaching reading in primary schools. Standard III with 81 pupils was divided into three groups – Each group was given different instructional treatment using.

a) Flash cards
b) Collateral reading
c) Control group

The results showed that the group subjected to flash cards performed better than the other two groups. It was, therefore, concluded that flash cards are more effective than collateral reading method at primary school level.

Thejovathi (1994) studied the environmental factors affecting the acquisition of English language skills at the high school stage in Guntur district. The study intended to find out i) The relationship between the environment including (a) Linguistic, (b) Home (c) Social and (d) Cultural environments and acquisition of comprehension skills in English. ii) The influence of (a) rural/urban residence (b) sex of a child and (c) S.E.S. of the
family on the acquisition of comprehension skills, on both and on each one separately.

The major findings were: i) The environmental factors and the students acquisition of comprehension skills are significantly related and the relationship is positive. ii) Rural/Urban residence, and the S.E.S. of their parents influence significantly the acquisition of comprehension skills whereas the other variable i.e. sex, has no significant influence on the acquisition of comprehension skills in English in the urban area, but it has significant influence in the rural area.

Vinodhkumar (2007) made an experimental study on activity based teaching of English. The study arrived at the following conclusions 1) There is significant difference in the performance of the experimental group in the reading skill after the treatment. 2) There is significant difference in the performance of the control group in the reading skill to the students taught under conventional method. 3) There is significant difference in achievement in the writing skill of the students taught under the activity centred approach. 4) There is significant difference in achievement in the writing skill of the students taught under the conventional method. 5) There is no significant difference in the achievement of the reading skill of the students taught under conventional and activity centred approaches. 6) There is no significant difference in the achievement of the writing skill of the students taught under conventional and activity centred approaches.

Critique of the Studies under this Subhead

Most of the studies conducted in India related to English teaching tend to be survey studies which highlight the problems encountered in teaching and learning of English. These studies are only trend reports. These studies give an overall view but they don’t provide evidence to how each factor causes problem and what serves as the background of the factor. Moreover, such studies don’t provide any tangible scientific
solution to overcome such problems, especially process-related problems. Very few experimental studies have been carried out in India. These studies try to establish the efficacy of a specific strategy in teaching and learning of English (Sasikala 1994, Malaikkani 1992, Manimegalai 2009). These studies have been made selecting students from a single school or two schools. So viability of the strategy in wider schools remains to be verified yet. Moreover, all these studies make only macro level group comparison and they have not made any attempt to make individual comparison at micro level. Besides, the studies are silent over the cost effectiveness and time effectiveness and how the strategy can be integrated into normal classroom programme and how the entire syllabus can be covered through the strategy. These studies have been undertaken with reference to specific skill either speaking or writing. English achievement refers to development of four skills, both receptive skills and expressive skills. None of the studies reviewed has measured all the four skills i.e. LSRW in the experimental treatment. Hence, there seems to exist a lacuna in the research studies. There is a greater need to address these inadequacies in future research.

2.2.2. Studies on Metacognitive Teaching Learning Strategies

Various strategies have been applied to strengthen the teaching learning process with special reference to English in India. Some of the strategies that have been successfully applied are listed out under the subheading.

Amutha Sree and Krishnamurthy (2010) carried out a study on academic achievement of commerce students in relation to their study habits. The authors state that higher secondary is a stage of transition in a student’s life, both academically and psychologically. Globalization is sweeping the doors with opportunities for commerce students at the higher
secondary level. Everyone looks for, academic proficiency to combat the challenging and competitive business world. In order to succeed in this world, systematic study habits are indispensable. Hence the investigation is mainly focused on comparing the higher secondary students’ achievement in commerce and their study habits. For the present study, the investigators randomly selected 500 higher secondary school students from ten schools in Cuddalore district. After framing necessary objectives and hypotheses appropriate analysis was carried out for the collected data. From the analysis it was found that the higher secondary school students have higher achievement and average study habits. There is significant relationship between achievement in commerce and the study habits of higher secondary school students.

Antony Raj and Amalraj (2011) analysed the cognitive style and academic achievement of outgoing undergraduate history students. The present study deals with what may well turn out to be the missing elements in the study of individual differences in cognitive style. This research attempts to find out the relationship between cognitive style and academic achievement of outgoing undergraduate history students in colleges affiliated to Manonmaniam Sundaranar University, Tirunelveli. For the present study the investigator randomly selected 760 final year undergraduate history students from the colleges affiliated to Manonmaniam Sundaranar University, in Tirunelveli, Tuticorin and Kanyakumari districts. After framing the objectives and hypotheses, appropriate analysis was carried out on the collected data. From the analysis, it was found that the outgoing undergraduate history students differed in their cognitive style and academic achievement. This study revealed that there was significant relationship between cognitive style and academic achievement of outgoing undergraduate history students with reference to certain background variables.
Iqbal (2001) carried out an experimental study to assess the effectiveness of multimedia instructional strategy in teaching English grammar to various categories of students at higher secondary level. The study established that the applied strategy of multimedia instructional strategy was very effective in teaching English to the various categories of students in the classroom. The experimental treatment totally changed the learning style and the learning rate of the students. It enabled them to self regulate their study. After the experimental treatment the various categories of students selected for the study felt that they could plan strategy, regulate strategy and modify the strategy whenever necessary. The applied metacognitive instructional strategy promoted learning to learn among the experimental group students to a great extent.

Jahitha Begam (2007) examined the role of metacognitive and self regulatory strategies in developing the life skills among the students of higher education. In her paper the author stresses that metacognitive strategies are actions which go beyond purely cognitive devices, and which provide a way for learners to coordinate their own learning process. Meta Cognitive strategies include three strategy sets. Centering learning, Planning learning and evaluating learning. Meta Cognition is essential for successful learning. Language learners are often overwhelmed by too much, “newness”, unfamiliar vocabulary, confusing rules, different writing systems, seemingly inexplicable social customers, and nontraditional instructional approaches. With all these novelties, many learners lose their focus, which can only be regained by the conscious use of metacognitive strategies such as paying attention and overviewing, linking with already familiar material.

Kamali (2011) undertook a study to assess the effectiveness of cognitive, metacognitive and behavioural approaches in overcoming specific learning difficulties in ADHD children. The study concludes that
the applied approaches have been effective in overcoming the specific learning difficulties in ADHD children to a considerable extent.

Madhu Sahni (2010) probed into cognitive and affective domain integrated aspects of human learning. This article discusses the need to incorporate affective domain consideration in the teaching, learning process. This paper reveals that it is difficult to achieve even the highest levels in the cognitive domain if we don’t teach and develop those complementary skills in the affective domain. To effectively utilize and integrate the skills mastered, students must become critical thinkers. Although we relate cognitive development to critical thinking, we can only reach those higher levels if we concurrently address the affective domain.

The author consulted many knowledgeable educators. They all knew that students should be taught in the three domains: cognitive, psychomotor and affective. Still they focus only on skills, and knowledge domains. So, knowing that cognitive, psychomotor and affective are tightly integrated aspects of human learning, and utilizing the knowledge are two different things. Although they are to have an understanding of the needs of the diverse learners, they seldom look at the diverse needs of each child they teach.

Mallika (2012) undertook an experimental study to examine the effectiveness of metacognitive teaching learning strategies on the achievement of various categories of students in economics at higher secondary level. The study arrived at the following conclusions 1) The applied strategy was very conducive to learn economics at higher secondary level. It enabled the experimental group students to enhance their achievement in economics after the experimental treatment. Further, the strategy enabled them to develop a learning plan, monitor the plan and to self evaluating plan. The students developed remarkable skills in monitoring the strategy and in modify the strategy during the experimental
period. The study pointed out that proper application of metacognitive teaching learning strategy will enable the students to stand on their own reducing the teacher effort to a considerable extent. Metacognitive teaching learning strategy enabled the students to account for their own learning to a great extent.

Rajkumar (2010) made a study on analysing the role of metacognitive skills involved in the process of problem solving in physics among higher secondary students. This paper provides an overview of research into metacognitive skills that are involved in physics problem solving and how these skills affect the performance of problem solvers. Based on an analysis of 12th standard public examination problems (Tamil Nadu state board exam) with 150 students, this paper presents how students learn to solve problems at higher secondary level. This paper stresses that the skill in problem solving depends on the effective implementation of metacognitive variables. In order to improve problem solving skills, the approach is to look at the metacognitive variables and processes involved in skilled problem solving performance and then to give instructions to assist the students.

Reddy and Santhakumari (2003) highlighted the role of cognitive and metacognitive strategies as promoters of thinking and analyzed how they were helpful of intervention Service Delivery to overcome Language Learning Difficulties (LLD). It is stressed the need for process as well as product-oriented teaching for which both cognitive and metacognitive strategies were imperative. An intervention useful for promotion (Metacognitive) strategic behaviour among the LLD caseloads are also presented. The article is based on the proposition that the linguistic competence is directly proportional to strategic competence. In this regard, a strong conceptual framework of the findings of the research studies provides scaffolding. They conclude by
ascertaining that training of cognitive and metacognitive strategies foster writing and language learning becomes dynamic process amidst LLD children, and the training provides for self-monitoring and self-regulation.

Rema Devi (2009) in her paper brain-based learning: An active processing of information stresses that learning is best accomplished when the learning environment is connected directly to physical experience. We remember best when facts and skills are embedded in natural spatial memory, in real life activity, and in experiential learning. We learn by doing. Learning can be facilitated in an environment of total immersion in a multitude of complex interactive experiences which could include traditional instructional methods of lecture and analysis as part of this larger experience.

Designers of educational tools must be artistic in their creation of brain-friendly environment. Instructors need to realize that the best way to learn is not through lecture, but by participation in realistic environments that let learners try new things safely.

Shareeja Ali (2010) in her paper metacognition: concept and its development points out that the study of metacognition has provided educational psychologists with insight about the cognitive processes involved in learning and what differentiates successful students from their less successful peers. It also holds several implications for instructional interventions such as teaching students how to be more aware of their learning processes and products as well as how to regulate those processes for more effective learning. As students become more skilled at using metacognitive strategies, they gain confidence and become more independent as learners. Independence leads to ownership as students realize they can pursue their own intellectual needs and discover a world of information at their fingertips.
In this rapidly changing world, the challenge of teaching is to help students develop skills which will not become obsolete. Metacognitive strategies are essential for the twenty-first century. They will enable students to successfully cope with new situations. Teachers and school library media specialists capitalize on their talents as well as access a wealth of resources that will create a metacognitive environment which fosters the development of good thinkers who are successful problem solvers and lifelong learners.

Simon Philip & Nellaiyapen (2009) made a study on teacher trainee’s meta-cognitive awareness in relation to their attitude towards teaching. The main objectives of the study is to find out if there exists any difference in teacher trainees’ metacognitive awareness and attitude towards teaching in respect of their gender, age, and medium of study. A sample of 200 B.Ed., trainees was selected by using purposive sampling technique for the investigation. It is found that teacher trainees have low metacognitive awareness and have a favourable attitude towards teaching. Further it is found that there is significant difference in respect of gender, age and medium of study in respect of metacognitive awareness and attitude towards teaching. The study also indicates that there exists low and negligible relationship between metacognitive awareness and attitude towards teaching.

Vetriselvi (2012) probed into the effectiveness of three mode of instruction (modular instruction, computer assisted instruction and cognitive strategy instruction) on the achievement of the students in mathematics at higher secondary level. The study established that the applied strategy was very effective in teaching maths to various categories of students at secondary level. Also the study revealed that the cognitive strategy instruction was more effective than the traditional lecture method in
teaching maths at secondary level. All the experimental strategy were equally effective in teaching maths to various categories students at secondary level. Finally, it was found that cognitive strategy instruction provided for auto learning and self reliance to a considerable extent.

Vijay Amirtharaj & Jesudoss (2010) conducted a study on learning styles and academic achievement of X std students. The study arrived at the following conclusion 1) The level of learning styles and their dimensions in X standard students with regard to sex is average. 2) There is no significant difference between boys and girls in their musical and interpersonal learning styles. But there is significant difference between boys and girls in their linguistic, logical, spatial, bodily and intrapersonal dimensions. Girls (M = 37.20, 32.59, 20.82, 16.43, 39.72) are better than boys (M = 34.94, 30.44, 19.84,15.34, 32.72) in their linguistic, logical, spatial, bodily and intrapersonal dimensions. 3) There is no significant difference between rural and urban students in their learning styles in dimensions such as linguistic, logical, spatial, bodily, interpersonal and intrapersonal. But there is significant difference between rural and urban students in their learning style in the dimension: musical. That is rural students (M = 26.05) are better than urban students (M = 24.99). 4) The level of academic achievement of X standard students with respect to sex is average. 5) There is no significant difference between X standard boys and girls in their academic achievement. 6) There is a significant difference between rural and urban X standard students in their academic achievement. That is, the urban students (M = 71.98) are better than rural students (M = 59.21) in their academic achievement.

Critique of the Studies under the Subhead

Though there are quite a number of studies in western context, only a few attempts have been made in Indian setting. This field has been receiving the attention of the elite scholars and researchers for the
last ten years or so. Some survey studies have been carried out to establish the significant relationship between metacognitive strategy and academic achievement and life skills (Antony Raj and Amal Raj, 2011; Jahitha Begam, 2007, Rajkumar 2010; Shareeja Ali, 2011; Simon Philip, 2011). But these studies don’t substantiate how the strategy accounts for the achievement, how it brings about the change in the process and how the product is developed or modified. They are silent over what ignites the learning readiness and learning to learn. A few experimental studies have been conducted to establish the efficacy of metacognitive teaching learning strategies in teaching specific subjects at secondary as well as at higher secondary levels. (Stanislaus, 2011; Vetriselvi, 2011; Mallika 2011). The effectiveness of metacognitive strategies has been established with special reference to ADHD children and UD students in some studies (Kamali, 2011; Reddy and Shanthakumari, 2003). These studies measure the achievement only. In all these studies, strategy has been applied to a specific category of students. No study has been made applying the strategy to all the categories of students. What motivated and activated the students to perform better has not been highlighted. Any highlight on how the process becomes better and how it enhances achievement can be of much use to the educational practitioners. Such focus is found missing in the studies reviewed.

2.3. Studies Conducted Abroad

Studies conducted abroad are further classified under the subheadings mentioned below.

2.3.1. Studies Related to Teaching and Learning of English.

2.3.2. Studies on metacognitive Strategies

Finally, an overview of research review has been presented.

2.3.1. Studies Related to Teaching and Learning of English

Quite number of studies have been attempted related to teaching and learning of English. Some of the studies are enumerated under this sub-head.

Edmundson (1992) probed into the evidence for native speaker notions of apologising and accepting apologies in American English. The
study aimed to look for patterns of interpretation with regard to the function of given semantic formula as they occur within the discourse of social television programmes. The data from the survey indicate that the rules used to interpret and choose apologies must allow for much flexibility in their application to various circumstances. It was found that subjects differed in their ideas of what it means to apologise and what it means to accept an apology.

Grieg (1991) made a multicultural study of self-report on initiating and maintaining conversation. This study was an inquiry into attitudes towards social talk with strangers in four different countries, Coasta – Rica, Finland, Hong-Kong and the U.S.A. It was found that culture was the most influential variable in the reported willingness of informants to engage in social talk with strangers in a travel situation. The American, Coasta-Rica and Finnish informants cite a majority of personal topics while the Chinese cite a majority of non-personal topics.

Han (1993) investigated the effects of reading strategy use and metacognitive awareness of eleventh-grade Chinese students in English language development. The general problem of this research explored the effects of flexibility in adapting strategies, reading materials of familiarity, reading materials of levels of readability and the time devoted to learning English on 11\textsuperscript{th} grade Chinese students in English reading development after interacting with a table and a story written in English.

The 11\textsuperscript{th} grade Chinese students used six basic reading shafts strategies such as 1) Context Clues, (2) Prior knowledge (3) Picture Clues (4) repeated reading (5) Parts of Speech, and (6) intuition Context Clues.

The factors that caused reading problems were: (1) Lack of knowledge of English Vocabulary (2) Lack of Knowledge of idioms (3) Lack of Knowledge of semantic meaning (4) Lack of Knowledge of English Grammar (5) Lack of knowledge of cultures (6) difficulty in defining topical
concepts (7) difficulty in keeping motivation and (8) anxiety. Lack of knowledge of English vocabulary was the most frequently reported cause of reading problems.

Hatfield (1986) studied the language variation in her study based on the sociolinguistic approach. She analysed the variable past-tense marking in the spoken English of Vietnamese refugees residing in the United States. The investigation dwelt upon the influence of linguistic, social, psychological and historical factors on sense marking and statistical analysis was used to assist in the interpretation of the quantitative data.

Ito’s (1987) study aimed at an understanding of the thinking process involved in the production of spontaneous English speech made by native Japanese speakers from the view point of hesitation pause phenomena’ and to investigate the patterns of hesitation pauses that native Japanese speakers manipulate in their speech. The study concluded that pausing was as much a part of the English Speech.

Joanna’s (1990) investigation was related to the development of the speech, the writing and the relationship between the two of children of primary school age. The study was both cross sectional and longitudinal. The findings were that children’s speech continues to develop throughout the primary school years, but the rate of increase slows down after the age of eight. The relationship between speech and writing appears to be changing between the age of 7 and 10. The youngest children showed greater maturity in their speech than in their writing.

Reyes – Bonilla (1991) sought to determine the instructional effects of the natural approach (NA) on the English oral communication skills of third-grade learning disabled students. The instructional strategy stated that in order to learn a second language, students need a rich acquisition environment in which they are receiving ‘comprehensible input’ in low-anxiety environments.
This investigation revealed that learning disabled students can learn English with an instructional methodology like the Natural Approach. The Natural Approach Treatment (NAT) and the Audiolingual Approach Treatment showed instructional strengths for the acquisition of English as second language in learning disabled students.

Smith (1992) undertook an experimental study to investigate the differences in the oral proficiency of international teaching assistants from the field of mathematics, chemistry and physics. At the end, no differences were found for the group as a whole. The study revealed that the oral proficiency of international teaching assistants varied significantly across some topic areas.

Wung (1988) investigated into the syntactic errors made by a Mandarin-speaking woman acquiring English. The findings revealed that Chinese elementary learners of English depend heavily on their native language structures.

**Critique of the Studies under this Subhead**

Quite a number of studies have been carried out in the western countries with special reference to development of four language skills namely listening, speaking, reading and writing at pre-primary, primary and secondary levels. (Dickson, Randi, Costigan, 2011; Bekleyen, 2011; Crane, et al., 2011; Han, 1993) There are studies which focus on the pronunciation of the students. These studies deal with pronunciation problems and suggest ways and means to overcome the problems. (Edmundson, 1992; Crane et. al., 2011; Ito, 2007; Hartfield, 1986; Reyes, 1991; Tokumoto and Shibata, 2011). Some studies concentrate on learning styles and achievement of the students (Hsieh, et. al., 2011; Reyes, 1991; Scott, 2011) Some studies have made error analysis. They have elaborated the common errors committed by the students and they have suggested useful strategies to overcome this deficiency. (Wang, 1988; Ztlin, et. al., 2011). *Most of the studies are indepth in nature. These micro studies are*
applicable to English setting only. But the viability of the strategies in such setting where the students learn English as second language is questionable. Universal applicability of the strategy needs greater attention of the researchers. Further researches can be undertaken in this regard.

2.3.2. Studies on Metacognitive Strategies

There are quite a number of studies on various strategies of teaching English at various levels of education. Adequate studies have been made one MTLS be in Western context. Some of the related studies are given under this sub-head.

Abdelhafez, Ahmed (2006) probed into the effect of a suggested training program in some metacognitive language learning strategies on developing listening and reading comprehension of university EFL students. The study adopted a pre-post experimental and control groups design. The experimental group was trained in some metacognitive language learning strategies embodied in listening and reading comprehension tasks, while the control group completed the tasks without any metacognitive training. Research Design: Experimental. Control or Comparison Condition: Subjects were divided into two equal groups: one as experimental (forty students) and the other as control (forty students). Data Collection and Analysis: A listening comprehension test, a reading comprehension test and an English Proficiency Examination were used to measure the effects of the programme. Data was analysed using t-test. Findings: The analysis of data using T-test revealed that the experimental group surpassed the control group in post-measurement of the listening comprehension test, the reading comprehension test and the English Proficiency Examination. Conclusion: It was concluded that training in metacognitive language learning strategies helped develop EFL learners’ listening and reading skills and raise their language proficiency levels. Discussion of these findings, recommendations and suggestions for further research were made.
Anthony, Robert (1999) undertook an option research to examine the *use of metacognitive teaching to enhance English language literacy of deaf and hard of hearing adult learners action research monograph*. This study focused on the problem of deaf and hard of hearing learners who have very low English literacy levels compared to their ability levels. Participants in the study were deaf and hard of hearing adult learners in the Adult Basic Education Program of the Center on Deafness in Pittsburgh, Pennsylvania. This mixed urban-rural population had some students from Pittsburgh and others from small towns in southwest Pennsylvania. The Test of Adult Basic Education (TABE) was used. Reading pre-test scores of participants ranged from a high of 2.6 to a low of 1.9. Language pre-test scores ranged from a high of 2.8 to a low of 1.1. The intervention used for the study was a metacognitive teaching-learning process, pioneered by Donald Meichenbaum, that focuses on assisting students to use their knowledge and apply it to new learning or tasks, e.g., reading and comprehending a story or article. Data were collected using pre-test and post-test scores of students on the TABE, samples of student writing, and observations of student learning during instruction. TABE results showed less than one grade level gain from pre-test to post-test. Writing samples showed growth in content organization and elaboration, but not in grammar use. Learning clearly became more student-directed.

Berkowitz, Ester; Cicchelli, Terry (2004) investigated *metacognitive strategy use in reading of gifted high achieving and gifted underachieving middle school students in new york city*. In this study high achieving and underachieving gifted New York City adolescent students were compared in their use of metacognitive reading strategies. A stratified sample was used to identify extreme groups of achievers, 5 consistent high achievers and 5 consistent underachievers. Data were collected from three sources: (a) the Metacognitive Awareness of Reading Strategies Inventory (MARSI; Mokhtari & Reichard, 2002), (b) think-aloud protocols, and (c) interviews.
While no significant differences were noted, frequency of strategy use, particularly in monitoring, made clear that the gifted high achievers were more homogeneous and the gifted underachievers were more heterogeneous strategy users.

Billingsley, Bennie; Wildman Terry (1990) conducted a study on facilitating reading comprehension in Learning disabled students: metacognitive goals and instructional strategies. This article addresses the planning of metacognitive instruction in reading, including such elements of metacognitive theory as metacognitive knowledge, self-regulation, comprehension monitoring and regulation. Metacognitive goals for instruction, selected research in improving reading comprehension and specific instructional implications for facilitating and increasing readers' control of comprehension processes are also discussed.

Boulware-Gooden, Regina; Carrenker, Suzanne; Thornhill, Ann; Joshi, Malatesha (2007) attempted a study to access whether instruction of metacognitive strategies enhances reading comprehension and vocabulary achievement of third-grade students the study concluded that the metacognitive reading comprehension instruction significantly improved the academic achievement of third-grade students in the domains of reading comprehension and vocabulary over the other instruction that was offered to the students in the comparison school. The intensity of the study and the systematic instruction of metacognitive strategies led to positive effects for understanding written text, which is the reason for reading.

Bruce, Merle; Robinson, Gregory (1999) developed a metacognitive program for improving the word identification and reading comprehension skills of upper primary poor readers. This paper reports on a series of three studies designed to assess the effectiveness of a metacognitive approach to teaching word identification and reading comprehension skills to upper primary poor readers and to investigate effective methods for implementing the metacognitive program in the regular classroom. Results of repeated measures analysis of variance showed significant improvements in most measures for all conditions. However, there were significantly greater
improvements for subjects in the experimental conditions. Also, a model of implementation in which teachers were entirely responsible for implementation was more effective than one in which the experimenter initially set up the program and the teachers gradually took over responsibility for its implementation. The implications of these findings for classroom practice are discussed in the light of current research.

Cardelle-Elawar, Maria (1995) examine the effects of metacognitive instruction on low achievers in mathematics problems. The study investigated the effects of metacognitive instruction in mathematics on low achieving, predominantly Hispanic, elementary school students (grades 3-8). Students were randomly assigned to either experimental (metacognitive) or traditional instruction. Results on learning outcomes showed significant effects favoring students who received metacognitive instruction, independent of grade level.

Camahalan, Faye Marsha (2006) examined the effects of a metacognitive reading program on the reading achievement and metacognitive strategies of students with cases of dyslexia. The conceptual framework of the study was based on the theories of cognitive processes stating that metacognition helps regulate the flow of information through working memory and thus improve learning performance. Subjects chosen were 2 incoming grade two students and 2 incoming grade three students diagnosed as dyslexics. They were referred to reading works, a learning center, where they attended a Metacognitive Reading Program. The findings suggest that the use of metacognitive strategies in learning how to read positively improves the subject's reading achievement. Implications to reading instruction metacognitive learning and metacognitive strategy instruction are discussed.

Chiu, Chris (1998) attempted a study on synthesizing metacognitive interventions: what training characteristics can improve reading performance. In this paper, meta-analysis is used to identify components
that are associated with effective metacognitive training programs in reading research. Forty-three studies, with an average of 81 students per study, were synthesized. It was found that metacognitive training could be more effectively implemented by using small-group instruction, as opposed to large-group instruction or one-to-one instruction. Less intensive programs were more effective than intensive programs. Program intensity was defined as the average number of days in a week that instruction was provided to students. Students in higher grades were more receptive to the intervention. Measurement artifacts namely teaching to the test and use of nonstandardized tests and the quality of the studies synthesized played a significant role in the evaluation of the effectiveness of the metacognitive reading intervention.

Dermody, Margaret (1988) designed *metacognitive strategies for development of reading comprehension for younger children*. The study investigated the development of metacognitive strategy instruction on standardized reading comprehension measures with fourth grade students. Forty-one subjects were assigned to one of three criterion reading groups, based on pre-test scores using the Stanford Diagnostic Reading Test (SDRT) and the Wide Range Achievement Test: (1) "good/good" (students with above average reading comprehension and above average word recognition), (2) "good/poor" (students with below average reading comprehension but above average word recognition), and (3) "poor/poor" (students with below average reading comprehension and word recognition). The subjects were involved in three phases of instruction using the direct teaching method: (1) students were first taught individual strategies of prediction, clarification, question generating and summarizing; (2) the researcher then used the direct teaching model with the reciprocal teaching methodology; and (3) finally, reciprocal teaching methods were applied within the content area of social studies. Results indicated that for
the "good/poor" group, metacognitive strategy training with reciprocal teaching significantly influenced reading comprehension, suggesting that for this type of reader direct instruction of needed strategies can improve reading comprehension.

Eilers, Linda; Pinkley, Christine (2006) investigated how for metacognitive strategies help students to comprehend all text. Reading comprehension instruction in many classrooms focuses on teacher-generated questions which actually measure comprehension of specific text rather than developing metacognitive strategies for comprehending all text. Explicit instruction in the metacognitive strategies of making text connections, predicting and sequencing was evaluated for its usefulness in improving reading comprehension in a first-grade classroom. Results showed a significant difference in students' awareness of comprehension strategies and comprehension of text as measured by the Index of Reading Awareness and the Beaver Developmental Reading Assessment before and after the intervention. These findings suggest that students in primary grades may benefit from explicit instruction in reading comprehension strategies at the same time they are learning to decode words.

Fisher, Robert (1998) made a study on thinking about thinking developing metacognition in children. This study explores the nature, importance and development of child metacognition, arguing for the assisted development of metacognitive awareness in young children. It identifies factors that enhance metacognitive development and thus assist the transfer of learning. The study conclude that metateaching strategies can help mediate the metacognitive strategies of children and help to stimulate children's metacognitive thinking.

Goh, Christine; Taib, Yusnita (2006) designed metacognitive instruction in listening for young learners. This article outlines a small-scale study of metacognitive instruction for young second language listeners and discusses the value of lessons that highlight the listening process. Ten
primary school pupils participated in eight specially designed listening lessons that included traditional listening exercises, individual post-listening reflections on their listening experience and teacher-facilitated discussions that focused on specific aspects of metacognitive knowledge about listening. During the eight lessons, the learners demonstrated some knowledge about factors that influenced their listening and strategy use. After the eight lessons, all the students reported a deeper understanding of the nature and the demands of listening, increased confidence in completing listening tasks and better strategic knowledge for coping with comprehension difficulties. On the whole, the weaker learners have benefited the most from such a process-based approach to listening instruction.

Higgins, Barbara Ann (2000) made an analysis of the effects of integrated instruction of metacognitive and study skills upon the self-efficacy and achievement of male and female students. The impact of using integrated metacognitive instruction on high school students’ achievement, self-efficacy, and test anxiety was studied. Forty students in 2 advanced geography classes in a large suburban high school participated. The level of metacognitive strategies students used at the beginning of the semester was assessed and compared to that of the end of the semester, and these levels were compared to those of a control group. The Motivated Strategies for Learning Questionnaire (MSLQ) was used to measure metacognitive strategy use, self-efficacy for learning, and test anxiety. It was hypothesized that the treatment group would have higher scores on an achievement test, that they would report higher self-efficacy scores, and that they would also report lower test anxiety scores. Treatment effects were in the direction that was hypothesized, but there were no significant differences between the two groups, a result that may be attributed to the small sample size. Significant interactions were found between gender and achievement, metacognitive self-regulation, and test anxiety. Males had higher
achievement scores, and females reported higher levels of metacognitive strategy use and higher levels of test anxiety. Attachments include lesson plans, the MSLQ, and forms used to conduct the study.

Houtveen, A.A.NM. Van de Grift (2007) studied the effects of metacognitive strategy instruction and instruction time on reading comprehension. Ten-year-old students in an experimental group and a control group were tested for metacognitive abilities in reading comprehension before and after implementation of treatment in the experimental group. The teachers of the students in the experimental group were trained in metacognitive strategy instruction and in optimizing instruction time for reading comprehension. The learning gains made by the students in the experimental group in metacognitive abilities for reading comprehension turned out to be significantly greater than those made by the students in the control group. In the next school year the students in the former experimental group and the former control group were tested for reading comprehension. It turned out that the students in the former experimental group had significantly better results on reading comprehension than the students in the former control group.

Kaniel, Shlomjo; Licht, Perach; Peled, Bracha (2000) studied the influence of metacognitive instruction of reading and writing strategies on positive transfer. Results of the study support the contention that teaching metacognitive strategies with the aid of software packages can enhance positive transfer of reading comprehension and writing skills in very able fifth (n=140) and seventh (n=136) grade learners in Israel. Students receiving metacognitive instruction and using writing-skills software showed greater improvement.

Kauffman, Douglas (2004) undertook a study on self-regulated learning in Web-based environments instructional tools designed to facilitate cognitive strategy use, metacognitive processing, and motivational
beliefs. This study investigated strategies teachers can use to improve students' use of self-regulated learning strategies in a Web-based setting. SRL is defined as a learner's intentional efforts to manage and direct complex learning activities and is composed of three primary components including cognitive strategy use, metacognitive processing, and motivational beliefs. These three components are defined relative to note-taking methods (cognitive component), self-monitoring prompts (metacognitive component) and self-efficacy building feedback (motivation component). One hundred nineteen students were assigned randomly to one cell in a 2x2x2 design. Students took notes in a matrix or a free form method from a Web site about educational measurement and either received or did not receive self-monitoring prompts and self-efficacy building feedback. Results indicated note-taking method had the strongest influence on both the amount of information gathered and achievement. Additionally, both academic self-efficacy building feedback and self-monitoring prompts demonstrated modest effects on achievement.

Kelley, Michella Clausen Grace, Nicki (2008) undertook a study on ensuring transfer of strategies by using a metacognitive teaching framework. In this study the Metacognitive Teaching Framework (MTF) is explained from the initial teacher-directed think-aloud through to students' independent use of cognitive strategies. The four stages of the MTF are described and tips for implementation are offered. Using questioning as an example, the authors work through what this looks like from stage 1 through stage 4 in order to scaffold implementation of this framework in the classroom. Educators should be able to replicate this model, ensuring students' growth toward independent application of strategies. Student data related to the authors' collaborative work with middle level students is shared to provide evidence of the success of this framework.

Kincannon, Joyce; Gleber, Conrad; Kim, Jaehyun (1999) examined the effects of metacognitive training on performance and use of metacognitive skills in self-directed learning situations. This research
examined the effects of teaching metacognitive strategies on performance in a self-directed learning situation. All participants, 60 university students enrolled in a beginning photography course for non-art majors, were subject to the same conditions. The treatment was embedded instruction and practice in reflection, planning, and evaluation. Metacognitive awareness was measured prior to and after the treatment. The use of metacognitive strategies was measured by a self-reflection survey, following the first and last assignment. These assignments were identical and provided for the assessment of performance. Results indicated that the treatment had a positive effect on learning. The change in metacognitive awareness led the researchers to conclude that instructional strategies that teach students to practice metacognitive skills while learning course content improves the use and awareness of these skills as well as performance.

Kramarski, Bracha; Mizrachi, Nava (2004) Conducted a study on enhancing Mathematical Literacy with the use of metacognitive guidance in forum discussion. The purpose of the study was to investigate the effects of forum discussion embedded within metacognitive guidance on mathematical literacy. In particular the study compares two learning environments: (a) Forum discussion with metacognitive guidance (FORUM+META); and (b) Forum discussion without metacognitive guidance (FORUM). Participants were 43 seventh-grade students (boys and girls) who practised online problem solving in two classes. It was found that students who were exposed to FORUM+META discussion outperformed students that were not exposed to metacognitive guidance (FORUM discussion) on mathematical literacy. The effects were observed on various aspects of solving real-life tasks: (a) Understanding the task; (b) Using mathematical strategies; (c) Processing information and (d) Using mathematical reasoning. A section entitled The Pizza Task is appended.

Kuhns, Madeline Fisher (1989) developed a metacognitive approach to written language instruction for primary learning disabled students. A metacognitive approach to written language instruction was implemented to ameliorate the severe deficits in written language exhibited by five learning-
disabled third and fourth graders. The 10-week program contained two basic elements: sustained writing practice and strategy training for revision of written projects. The sustained writing practice involved engaging in a daily written dialogue with another student partner. The strategy for monitoring their written product involved having students evaluate whether their story made sense, was interesting, used proper punctuation, used proper spelling, and used proper capitalization. The results indicated that students benefited from the program by exhibiting improved cognitive ability, improved attitudes toward writing and improved metacognitive awareness.

Lee, La Vonne (1990) made a study on teaching metacognitive strategies to first graders. This study investigated whether first grade students could be taught metacognitive strategies to solve analogies. Subjects, 34 first grade students randomly assigned to two groups with adjustments made to make the groups equal in gender, ability, and urban or rural geographic location were pre-tested for their ability to solve analogies. The experimental group spent 30 minutes per day for 10 days in direct instruction in analogy-solving strategies. An integrated curriculum (webbings) was used throughout the year. Students were taught to verbalize the general rule that before we learn something new, we must find out what we already know. Various brainstorming techniques were used to accomplish this. The first day of the webbing students were asked, What do we know about eggs? or What do we know about mice? and responses were recorded on chart paper. These were then categorized according to levels of Bloom's taxonomy and saved to be compared with responses at the end of the webbing. Post-tests were administered 2 weeks after the pre-test. Results indicated that students in the experimental group were significantly more adept at finding the special relationships involved in the analogy as well as in utilizing a common language to help in its solution.
Results also indicated an increased use of metacognitive strategies by students.

Lopez, Pamela (1992) conducted a study on *metacognitive strategies for teaching reading to elementary students*. The study reveals conflicting results. The controversy has not been resolved, but specific strategies (including activating prior knowledge, self-questioning and teacher modeling) have been developed on the basis of positive experimental results.

Loper, Stephan (1989) probed into *increasing spelling performance with learning disabled students by teaching metacognitive strategies*. This study was designed to improve spelling performance of 17 mainstreamed elementary special education students by developing self-regulatory mechanisms and by training the regular classroom teacher and parents in ways to meet the handicapped student's learning needs. A variety of intervention techniques was employed including homework strategies, motivational techniques, parental encouragement and peer tutoring. Findings indicated improved spelling performance which was further improved by monitoring cognitive strategies. Two ancillary findings indicated that same-age tutoring was most effective with primary children and that well structured activities were most effective in improving spelling performance. Students lost skills over summer recess but quickly regained proficiency following remedial instruction. Data also suggested that learning disabled students' cognitive ability influenced spelling and metacognitive gains.

Lubliner, Shira; Smetana, Linda (2005) studied *the effects of comprehensive vocabulary instruction on Title I students' metacognitive Word-Learning Skills and reading Comprehension*. This study examined the effects of a multifaceted, metacognitive vocabulary intervention on the reading comprehension and vocabulary achievement of fifth-grade children in one of California's lowest performing Title I schools. Instruction was
comprehensive, designed to facilitate encoding of student-selected words, mastery of clarifying strategies and executive control of strategies that maximize word-learning proficiency. Strong gains in reading comprehension and vocabulary achievement and increased metacognitive skills were documented following the 12-week vocabulary intervention. Comparisons of Title I students' scores and those of students in an above-average-performing school revealed large, significant differences before the intervention and small nonsignificant differences following the intervention, suggesting a narrowing of the achievement gap.

Maqsud, (1997) studied the effects of metacognitive skills and nonverbal ability on academic achievement of high school pupils. The study concludes that teaching metacognitive strategies to students who lack such skills can improve their academic performance.

Martin, Leisa (2005) investigated the use of cognitive strategies by high school social studies students. This research study used grounded theory in an attempt to explain how 10th-grade public school students in average and advanced classes used strategies to learn material in their high school social studies classes. This study sought to understand the strategies that students used to learn information, the frequency of their strategy use and the students' method of acquiring these strategies. The results suggested that cognitive strategy use involves the students' knowledge of cognitive strategies, a need to use the strategies, and a motivation by the students to use the strategies. Furthermore, it suggested that teachers need to stress the relevance of cognitive strategies to students and require more high-level thinking on class work and on exams.

McKeown, Regina G. Gentilucci, (2007) carried out a study to examine metacognitive development and monitoring Twenty-seven middle school English learners participated in a study to determine the efficacy of the Think-Aloud Strategy, one of several metacognitive strategies created
to help students strategically negotiate appropriate meaning from text. Students were grouped by level of English-language proficiency and were administered a reading comprehension pre-test. They were then taught how to use the Think-Aloud Strategy and were administered a post-test to assess the strategy's effect on their reading comprehension. Use of the Think-Aloud Strategy was expected to improve comprehension of expository text among all three groups. However, each group presented different results with only the intermediate group exhibiting benefits from using the strategy. The findings suggest English learners with varying levels of native-language proficiency have unique instructional needs in reading. No single reading strategy may exist that will improve comprehension in all English learners.

Yore, Larry (1993) conducted a study on Middle school students’ metacognitive awareness of science reading science text and science reading strategies. This study attempted to verify a strategic metacognition model of an efficient, successful science reader based on an analytical induction of reading research results; develop a valid objective assessment instrument and provide a profile of middle school students' metacognitive knowledge about science reading, science test and text reading strategies. A 63-item test was developed and given to 532 students in British Columbia (Canada). Interviews also provided data. Results indicate that middle school students have limited knowledge about science reading, science text and text reading strategies. High ability readers had significantly different scores on the metacognitive test than did low ability readers. It appears that grade level does not increase metacognitive awareness of science reading and science text.

Serran, Guerlene (2002) probed into improving reading comprehension a comparative study of metacognitive strategies. The purpose of this study was to equip a group of urban eighth graders with
metacognitive strategies that would improve their reading comprehension, and to compare the relative effectiveness of each strategy. Three different classes were each taught a different metacognitive approach: reciprocal teaching, buddy journals and the think aloud strategy. Students were provided pre- and post-tests in order to determine the effectiveness of the strategies for improving reading comprehension. Although no statistical differences in test scores were found between the effectiveness of the three strategies, the combined use of all of the reading strategies significantly improved reading comprehension.

Smith, Steven (1992) examined the effects of a metacognitive strategy on aggressive acts and anger behavior of elementary and secondary-aged students. This report investigates the effectiveness of a metacognitive strategy in reducing anger behavior and/or aggressive acts in elementary and secondary-aged students placed in special education classes. Three separate studies were conducted with three elementary, three middle, and three high school students who were placed in special education resource or self-contained classrooms. The metacognitive strategy consisted of interviews with individual students concerning the consequences of the student's behaviors, student commitment to participate in the strategy, teaching of the ZIPPER strategy (zip your mouth, identify the problem, pause, put yourself in charge, explore choices and reset), role play, verbal rehearsal and practice and commitment to generalize. Overall results indicated that students used the metacognitive strategies taught to reduce anger acts and aggressive behaviour.

Critique of the Studies under this Subhead

As for metacognitive strategies, quite a number of studies have been carried out in the foreign countries. But only a few studies have been carried out in Indian context. They happen to be the pioneer studies. Most of the studies focus on how the metacognitive strategies

There are a few studies which verify the relative effectiveness of metacognitive strategies with reference to low achievers, under achievers and high achievers. (Cardelle, 1995; Berkowitz, et al. 2004). There are various studies which try to highlight the efficacy of metacognitive strategies in developing listening, reading and writing skills among the primary school students. (Lopez et al 1992; Boulware et al 2007; Houtveen et al 2007; Bruce, 1999; Lee, 1990). *These studies are silent over how far these techniques will be successful in such overcrowded classes as in oriental countries. The viability of the strategy in wider population and in large classes needs scientific verification.*

2.4. An Overview of Research Reviewed

The foreign research works related to English teaching and achievement factors have revealed the findings that have emanated from atmospheres and backgrounds which cannot be said to have close resemblance to the Indian school settings. A researcher in India cannot rely too much on the findings of the foreign studies which are applicable to their environment to a large extent. One can emulate the effective techniques they adopt in language teaching having in mind the immediate environmental factors that have contributed to the current state of affairs. That is why foreign findings can be considered for research works in India to a limited extent only.
The studies conducted in India related to English teaching generally tend to be survey reports. Very few studies are experimental in nature. (Sasikala, 1994, Malaikkani, 1992; Kasinathan, 1992). All the other studies related to different achievers-Low, high over-dwell upon the personality factors, social factors and home atmosphere and the role such factors play in causing low, high or over achievement. Most of the studies are related to general academic achievement and factors involved in making or marring the achievement. (Ramila Salvi and Smita Trivedi, 1990; Deenamma, 1979; Subramanyam and Ramadevi, 1991; Singh, 1995; Sontakey, 1986; Singh, 1984).

Studies related to English teaching are concerned with the effectiveness of programmed teaching, direct method, bilingual method, radio lessons, spoken English courses, audio cassettes for word accent and rhythm in English, and remedial package for effective teaching of English consonants. (Ahuja and Ahuja, 1978; Balasubramanian and Yoganandam, 1994; Dewal, 1974; George, 1966; Julu Sen, 1986; Karpagakumaravel, 1988; Kasinathan, 1992; Malaikkani, 1992; Sasikala, 1994). Other studies are only trend reports based on surveys. They talk about factors causing under achievement in learning English, backwardness in English in the secondary schools, problems and difficulties of language teaching at secondary level, influence of intelligence, SES, and attitude towards English on achievement in English, entering behaviour in English, common errors in written English, environmental factors affecting the acquisition of English language skills etc. (Gosh, 1977; Girija Nirmala, 1983; Misra, 1968; Thejovathi, 1994).

There has been hardly any research at M.Phil level which pertains to the effectiveness of instructional strategy, curriculum designing or evaluation procedures in relation to academic achievement in English. As for backward students, only a few studies have been carried out on backward students. These studies are primarily experimental studies carried out to establish the effectiveness of an instructional strategy or the

As for metacognitive strategies, quite a number of studies have been carried out in the foreign countries. But only a few studies have been carried out in Indian context. They happen to be the pioneer studies. Most of the studies focus on how the metacognitive strategies are effective in developing the monitoring and the comprehension skills of the students. (Mckeown, et al 2007); Lopez Pamela, 1992; Boulware-Gooden et al. 2007; Houtveen, A.A.M et al 2007); Some studies have established the effectiveness of metacognitive strategies with special reference to disabled students, poor students etc (Camahalan, et al, 2006; Kuhns, et. al 1989; Billingsley et al 1990).

There are some metacognitive studies which concentrate on gender differences in comprehension, self-efficacy and achievements. (Higgins, et al 2000). There are a few studies which verify the relative effectiveness of metacognitive strategies with reference to low achievers, under achievers and high achievers (Cardelle, 1995; Berkowitz, et al 2004). There are various studies which try to highlight the efficacy of metacognitive strategies in developing listening, reading and writing skills among the primary school students (Lopez et al 1992; Boulware et al 2007; Houtveen et al 2007; Bruce, 1999; Lee, 1990; Kuhns, 1989; Dermody, 1998).

The effectiveness of metacognitive strategies in teaching various subjects and particularly in developing language skills at middle school level as well as at high school level has been established by many researches (Mckeown, 2007; Higgins, 2000; Yore, 1993; Bruce, 1989; Smith, 1992; Martin, 2005; Eilers, 2006). There are researchers who have successfully applied the metacognitive strategies at university level also. They have verified that the metacognitive strategy is very useful in language learning (Abdelhafiz, 2006).

From the above it is clear that metacognitive strategy is effective in teaching of English. It’s effectiveness has been established in special education. These studies affirm that MTLS makes the students think
about thinking. It makes the learners accountable for their own learning. This provides for learning to learn. So there is greater need to verify the efficacy of the strategy in inclusive setting. Further, in Indian setting no metacognitive study has been attempted in teaching and learning of English. Hence, an attempt has been made in this study to apply MTSL to rural and urban students and to verify its efficacy on the achievement of Xth standard students in English.

The statement of the problem of the study is presented in the succeeding chapter.