2.1 Introduction

The present study is mainly based on the study of Reading Speed Ability of the students. In simple terms research is an art of scientific investigation of new facts in any and every field of knowledge. Therefore search for the related literature in the first step in research process so that researcher must be familiar with both previous research findings and theories.

Essentially, every research should be based on relevant thinking and researches that have preceded if only then, the researcher would be able to interpret and explain new facts. Consequently it would have become the part of accumulated knowledge in the studied field and in turn it would contribute to the thinking and researches, that would follow.

According to Miller (1965) “researcher must be aware of what is known with some degree of certainly, what is accepted as truth by some but not by others; and must have some idea of the nature of unexposed areas where additional research should be conducted”.

In order to study ‘Application of selected teaching techniques for language and knowledge achievement among High and Low reading speed achievers’ with an intentions to use them as remedial teaching techniques as experimental research has been planned.
The review of related literature contributes valuable information to any part of the research (Wiersma, 1986). The review is very essential for a scientific research, otherwise the investigation cannot have an insight into the problem to be investigated. The review of related literature serves many purposes in such researches. According to Good Barr and Scates they are as follows:

(i) To know whether the evidence, already available, solves the problem adequately without further investigation, thus duplication of work can be avoided.
(ii) To provide ideas, theories, explanations or hypotheses valuable in formulating the problem.
(iii) To suggest method of research appropriate to the problem.
(iv) To locate comparative data useful in the interpretation of results and
(v) To contribute to the general scholarship of the investigator.

All these purposes to be fulfilled, the review of related studies is being given as following.

2.2 Review of Indian and Foreign Studies

Frank et al. (1987) in a longitudinal and experimental study of phonological coding, phonological awareness and reading ability tried to provide correlational and experimental evidences for causal relationship between linguistic coding deficits and reading disability. The results showed that training in phonemic segmentation and alphabetic mapping had a salutary effect on a task simulating word identification and code acquisition.

They have also found that phonological coding deficits constitute a major source of reading difficulty in beginning readers.
Sumanagala (1990) studied standard IXth students’ language creativity in relation to their intelligence, teacher involvement and gender. The results of the study are that the higher intelligent students were higher in language creativity. Similarity higher teacher involvement also resulted in positive correlation with language creativity. Besides these results sex difference has also been found, as the boys were higher in language creativity scores than girls.

Pathanaik (1991) studied the role of knowledge representation and planning in reading and writing with an objective to identify expert and novice planning strategies therein. The results found are that expert readers use different strategies from those used by movies. The reading has been acknowledged/found as a problem solving process.

Salvi (1991) while studied the effectiveness of concept attainment model (CAM) in teaching concepts of English language found that this model was effective in concept attainment and modern standing of concepts in learning of English language.

Valsamma (1994) examined the development of reading ability in children with reference to English language, and found that reading ability is a initial trait consisting of vocabulary and verbal comprehension.

Yuch Shen (1994) studied collaborative action research for reading strategy instruction in Taiwan.

The objectives of the study were focused on how action research helps the teacher-researcher to seek solutions to the problem on the concepts of individual differences.

The findings indicate both changes to the teacher’s teaching and the students learning resulted from collaborative action research. The study had also suggested that collaborative action research can bring
about change in the classroom by giving teachers a greater breadth and depth in understanding their own pedagogical practice and can more meaningful learning environment for learners.

**Goel (1996)** in an attempt to identify the learning problems of UKG students in arithmetic and subsequent remedial teaching found that the performance of students at concrete level was better than their performance at abstract level. As a part of remedial measure the researcher has suggested alteration of mental structure and development of concepts.

**Nanda and Dash (1996)** studied cognitive profiles of poor readers in Oriya language and compared then with that of English readers. The results show that a poor readers in Oriya (as first language) is also a poor reader in English language (second language) because of problems with planning and attention.

**Prasad (1996)** investigated ‘STOP’ strategy of language using for learning disabled children. The objective of the study was to highlight the STOP:

S – Stop before you contact.
T-Think about this nature of task.
O- Organize the steps and
P- Proceed with the steps in the area of learning disabilities (LD)

This methodological approach is functionally linked to language cues in the development of language in appropriate manner. This approach has focused that a LD child has difficulties in knowing. The cues training may help to reduce this type of language behaviour (i.e. LD).

**Pradhan, D. et al. (1997)** studied effect of socio-economic status and intelligence on verbal fluency.
The study was undertaken to find out the effect of socio-economic status and intelligence on verbal fluency.

The sample consisted of 90 girls of 6th and 7th standard from different middle schools of Nagpur.

The findings revealed that socio-economic status does not have much impact on verbal fluency and the combined effect of SES and intelligence has some effect for better ‘verbal fluency’. Intelligence had been found to be more influential in almost all the verbal measures.

**Uma Devi** (1997) studied effectiveness of a remedial programme in improving word recognition skill and reading comprehension among dyslexic learners. The researcher concluded that the experimental group (treated with remedial programme) had performed better than their counterpart control group (without remedial programme).

**Koteswara and Reddy** (1998) studied reading achievement in relation to demographic variables. It was found regional impacts influence significantly reading achievement and girls were better than boys in reading achievement.

**Sharma and Agarwal’s** (1998) finding highlighted the need for viewing teacher competence as one of the main strategies in reading and writing development in Hindi for primary school children.

**Vorwork and Herbert** (1999) studied effect of two kinds of definition of the concept attainment of fourth and eight graders.

The objective of the study was to determine the effect of the amount and type of information supplied by a concept definition by IVth and VIIIth graders.
The findings had showed that fourth graders were found to perform significantly better on a classification task with the common usage definition, while eight graders performed better with technical than with common usage.

It was also concluded that for younger students it is more important to provide a definition written at an appropriate level than a definition which completely specifies the concept’s defining attributes.

**Balasubramaniam (2000)** studied the effect of computer based instruction on reading skills and found that it enhances learner’s ability to guess meaning of words and to understand and identify keywords and local listening comprehension.

**Pani et al. (2000)** while working on their NCERT project, studied cognitive information processing among high and low achievers. It was found that achievement had independent influence of majority of cognitive problem solving measures, and cognitive processing, itself is affected by grades, i.e. class V children were better on all the cognitive problem solving tasks as compared to class IVth.

**Samuelstuen (2000)** investigated the factors that influence oral and silent reading performance of 12 year old students. The results were that reading speed could be predicted by recognition spam fixation, duration and number of regressions. Since fixation and duration are longer when the word is not familiar and that building a larger reading vocabulary and increasing background knowledge should help to reduce the member of regressions.

**Srivastava (2000)** undertaken a study to find out the relationship between reading ability and in our important school factor. He concluded that reading ability in our important factor related to the different achievement patterns of school going pupils.
Leung (2002) studied extensive reading and language learning. The objective of the study was to find out the main effect of creativity and extensive reading on achievement in English for the total and sub samples. The study was conducted on a sample of 600 students of standard IX of secondary schools from three districts of Kerala.

The findings of the study had suggested that the language teacher can set interesting and exciting problems in the area of composition and grammar etc. Thus can get the best creative output from children reading sharpens insight and sight.

The research evidences show that extensive reading promotes the growth of vocabulary, verbal fluency and general information.

Talcott, Hansen and Richardson (2002) studied sensitivity to dynamic auditory and visual stimuli predicts nonword reading ability in both dyslexic and normal readers.

The objective of the study was to access reading ability of dyslexic and normal readers.

The results showed that dyslexic individuals are less sensitive both to particular rates of auditory frequency modulation. Nonword reading, a measure of phonological awareness believed crucial to reading development was also found to be related to these sensory measures.

High correlation was found for both dyslexic and normal readers, between their sensitivity to the dynamic auditory and visual stimuli.

Akhani et al. (2003) studied immediate memory spam, verbal fluency and intellectual ability. The results showed a good strength of association between verbal fluency and immediate memory spam.
Alderson (2003) studied the role of word recognition and vocabulary knowledge in reading fluency. The findings were that-

1. A lack of automaticity could consume the necessary resources required to engage in higher level reading processes, such as understanding the propositional value of a text, integrating new information with background knowledge or making inferences.
2. Such classroom activity intends to improve reading rate (fluency) while maintaining a high level of comprehension (accuracy) by developing automatic word recognition skills and consolidating knowledge of vocabulary.
3. Students who received speed reading instruction could improve their general reading comprehension were than students who do not receive such instructions.

Dillard’s (2003) objective was to develop interest in a variety of topics for reading faster. On the basis of this study following results have been found-

1. It was found that to help students to increase reading rates, encourage them to read wide and frequently easy materials and help students to build background knowledge, vocabulary and sight words.
2. Students should not be encouraged to expand their word perception spans.
3. Students should not be forced to avoid regressions and silent speech while reading.

Reddy et al. (2003) studied cognitive and meta cognitive strategies to overcome language learning difficulties. The study concludes by ascertaining that training of cognitive and metacognitive
strategies foster thinking and consequently language learning becomes a dynamic process.

Aiyavoo, Mony & Thangasamy (2005) studied teaching English through actions and oral practice in primary schools.

The objectives of the study were to find out whether students in primary schools can be taught to acquire speaking skills in English through ‘Oral Practice associated with actions using the body language.

The findings had showed that the group of std. V students taught through actions and oral practice was better in its oral comprehension.

It was also found that the performance of all the students in the two types of primary schools (English and Tamil medium) taught through action and oral practice was better in their instant comprehension.

Bentin, Deutsch and Liberman (2005) studied syntactic competence and reading ability in children.

The objectives of the study were to examine the effect of syntactic context on auditory word identification and on the ability to detect and correct syntactic errors in speech in severely reading disabled children and in good and poor readers selected from the normal distribution of fourth graders.

The results showed that the severely disabled readers were inferior to both good and poor readers in syntactic awareness and in ability to use syntactic rules while poor readers were equal to good readers in syntactic awareness but were relatively impaired in using syntactic knowledge productivity.

Panigrahi et al. (2005) studied academic achievement in relation to intelligence sex and SES of High school students. As a
result it has been found that academic achievement and intelligence have significant positive correlation i.e. high intelligence leads to better academic success, with regard to sex, no significant difference has been observed. However the girls of high SES have been found high achievers in academic performance in comparison to their counterpart low SES girls and boys irrespective of their SES.

**Pati & Saudamini (2005)** studied impact on visuals on the achievement of rural pupils.

The objectives of the study were to know whether the total group (Boys + Girls) taught history through extensive use of visual aids differ significantly in their achievement in history from their counterpart group (boys+Girls) taught history without the use of visual aids.

On the basis of the pre-test marks, 30 students of class VII from each group were chosen as sample for the study.

The findings of the study were found that extensive use of visual aids has a positive impact on the academic achievement of the rural pupils. While teaching in the class for qualitative improvement in education in general and achievement in particular.

**Kinghton et al. (2006)** studied educational outcomes at age 19 associated with reading ability at age 15. The findings of the study showed that educational outcomes were closely related with reading ability (at age 15), viz. it had an impact on high school and post secondary education.

**Rani et al. (2006)** studied gender difference in reading behaviour among children. It was found that male children as compared to female spend less than one hour in reading news papers and magazines.

The objective of the study was to achieve quality education by implement and study reading habits of primary school students.

The results of the study showed that good reading habits in children in sometimes that should be started on time in their early childhood days. So these children will grow with it.

Birsch (2007) studied automatic information processing model and suggested that assisted repeated reading is beneficial for reading fluency because it reduces the energy needed for decoding. The results indicate that such reading had a positive effect on raising the student’s words correct per minute.

Gaffoor & Sunnummel (2007) studied effect of private tuitions on achievement in science of secondary school pupils. The objectives of the study were:

- To find out the significant difference between achievement in science of the pupils belonging to tuition and non-tuition groups.

The results revealed that there was a significant difference found between the pupils on tuition and non-tuition groups.

Sharma (2007) studied problem solving ability and scientific attitude as determinants of academic achievement of higher secondary students. The findings show positive relationship among achievements problem solving and scientific attitude.

Shen, (2007) studied collaborative action research for reading strategy instruction: Case in Taiwan.

The objective of the study was to do a collaborative action research project involving a teacher-researcher, a teaching assistant, and forty-six students, focused to seek solutions to the problem and on
how the approach facilitates the learning of reading strategies by students.

The results revealed

1. The learner’s development in their use of reading strategies, better self-images and more positive attitudes toward learning.

2. Both changes to the teacher’s teaching and the student’s learning resulted from collaborative action research.

Li Jun (2008) explore and develop new method to help the non-English students to improve their reading ability.

The objective of the study was to access the reading problems of students and improve new methodology in order to facilitate students.

The findings of the study showed students read slowly and could not gain a good understanding of the material by using the reading skills they had learned in the previous term by the method used, the students can form and develop their own reading strategy.

Ponnalagappan et al. (2008) studied reading comprehension in Tamil and study habits of underachievers in IX standard.

The objectives of the study were to access the level of IX standard student’s reading comprehension in Tamil and study habits.

The sample of the study was 600 students belonging to Tamilnadu.

The findings of the study had showed that the teachers who are agents of transformations of the young generation, have to concentrate on accelerating the comprehension capabilities of young minds.

Singh and Khan (2008) studied intelligence and educational achievement in mathematics of the students of upper primary level. The results showed that educational achievement of boys and girls has
been affected by intelligence and some other factors such as: family and cultural status of family, educational facilities, study habits and aspiration level.

Angela et al. (2009) studied the effectiveness of repeated reading on students, reading fluency. The results showed that most of the students felt that they were able to read a passage faster, more accurately with more understanding and adequate comprehension. At this end of the study, students seemed more motivated and less frustrated about repeated reading and reading in general. Many of the students became more willing to learn and store to improve their reading ability. On average reading oriented self esteem and confidence also increased.

Meera & Remya (2010) studied effect of extensive reading and creativity on achievement in English language.

The objective of the study was to explore the effect of extensive reading and creativity on the achievement in English of secondary school students.

The results had indicated that there is a significant relation between extensive reading and achievement in English. A significant relationship was obtained between creativity and achievement in English.

Rosen (2011) studied poorer reading skills following changed computer habits of children.

Sweden and US are two countries in which the research was carried out the objective of the research was to analyse difference between countries overtime in order to explain change in reading achievement among 9-10 years old.
The finding of the study showed that Sweden and US are two countries in which increased leisure use of computers by children leads to poorer reading ability.

Lgbokwe et al. (2012) studied the influence of electronic media on reading ability of school children. The study aimed at identifying the followings:

1. The activities pupils engaged in at home.
2. The number of hours the pupils devote in reading books, magazines, playing games, watching T.V., chatting with friends and listening to music.
3. The influence of electronic media on the children’s reading hours.
4. The influence of electronic media in the homes and school libraries on the pupils’ reading ability.
5. The number of times children visit their school library.

It was found that television, internet facilities cell phones, musical gadgets and other electronic media in homes and schools did not influence the children’s reading ability and reading hours.

Myskow (2012) studied the effect of speed reading instruction (SRI) on English reading comprehension and vocabulary development on Japanese High School Students. A six months course in speed reading was introduced to see its effect on three areas of reading proficiency development i.e. general reading comprehension, knowledge of high frequency vocabulary and reading rate. The intervention of this program showed positive effect on improving oral reading rate of the students.
2.3 Review of remedial studies:

Omoegun (1990) studied the effect of remedial guidance on the academic achievement of Lagos State adolescents in English comprehension.

The main objective of the study was to determine if remedial guidance using Robinson’s SQ3R technique would significantly improve secondary school students’ academic achievement in English comprehension.

The result of the study is that Robinson’s SQ3R was effective in improving adolescent students’ academic achievement, especially in English comprehension.

Cheng Huang (1996) studied reading diagnosis instruction and remediation.

The main objective of the study is whether a diagnostic reading can help students who faced reading difficulty to solve reading problems.

The result of the study is that diagnostic reading test and diagnostic teaching can help students to overcome reading problems and improve their reading competence and potential.

Mack (2000) studied teacher behaviour and attitude and student writing apprehension.

The main objective of the study was to examine the continue reproducible instrument that predicts teachers’ behaviours in the classroom on a continuum from custodial to humanistic and second the relationship between teachers’ behaviours and students.

The result of the study is support the idea that willower’s PCI was a generally useful psychometric which predicts the likelihood of humanistic or custodial and direct or indirect behaviour by teachers.
Vishwanath (2002) studied effectiveness of models of teaching on the achievement of X standard students in environmental studies. The main objective is physical and natural sciences as well as Social studies being treated as a whole and referred to as environment studies overall school environment techniques and tools employed to transect the curriculum/models of teaching together contribute to meaning in science environment.

Sidhu and Jain (2004) studied reading comprehension and reading related abilities adolescents with reading disabilities and attention deficit/hyperactivity disorder.

The main objective was to examine reading comprehension in reading disability and/or ADHO using both oral and silent reading passage.

The result of the study is that comprehension is a complex activity and several important cognitive processes that can impact on reading comprehension.


The main objective of the study is to describe its definition and fluency instruction methods that have been found to be effective.

The result of the study is English language learners became more fluent using fluent reader then using traditional reading instruction.

Kinghton, Bussiere and Patrice (2006) studied educational outcomes at age 19 associated with reading ability at age 15.

1. The objective of the study was to examine educational outcomes at age 19 associated with reading ability at age 15.
2. Ability in reading at age 15 have any impact on subsequent high school completion and post-secondary participation? was also explored.

The finding of the study showed educational outcomes was closely related with reading ability and it also had an impact on high school completion and post secondary education.

**Melinda (2007)** studied teaching and learning strategies during primary school students swimming education, emphasis on interactions.

The main objective of the study is to examine the motor teaching process particular in swimming education that develops personality in complex with those teaching learning strategies and closely related methods that can be successfully applied on the special field of motor teaching.

The result of the study shows that the student involved in swimming their performance depend on the teachers attitude and teaching technique used.

**Sharma, Indira (2007)** studied Problem solving ability and scientific attitude as determent of academic achievement of higher secondary students.

Objectives of the study were:

i. To study the scientific attitude of higher sec. students in relation to sex and three levels of achievement.

ii. To study the relationship among academic achievement, scientific attitude and problem solving ability of higher sec. students.

Sample of the study consisted of 240 students of class XI of Govt. aided Hindi medium school.
Findings of the study showed:

The problem solving ability among higher sec. students was high and a positive relationship exists among achievement, problem solving ability and scientific attitude.

**Tracia (2007)** studied on developmental/remedial science at community colleges in five states in the central part of the united states.

The main objective of the study is to examine the characteristics of developmental/remedial science as in terms of organization, structure, instructional practices and to develop a set of guidelines for community college.

The result of the study is all students entering a public higher education, institution are assessed for remedial needs and taking placement exam prior to the courses.

**Seda (2008)** studied on classroom management approaches of primary school teachers.

The main objective of the study is investigating classroom management of primary school teacher and exploring if their management approaches are consistent with the constructive curriculum.

The result of the study is indicated that primary school teacher prefer to use student centered management approach rather than teacher centered approach.

**Yasar (2008)** studied classroom management approaches of primary school teachers.

The main objective of the study is to whether there is a consistency between the teachers classroom management approaches and constructivist approaches implemented in the or not, is the another
question to be explored in the present study result of the study showed a positive effect of the intervention.

**Mader (2009)** studied teaching of mathematics focused on computer supported exploration outline.

The main objective is to how experimental mathematics can be adopted to teaching mathematics.

The result of the study is with the help of the developed program make possible a computerized investigation.

**Edword and Mathew (2010)** studied on effectiveness of selected teaching strategies in the remediation of process errors committed by senior secondary school students in mathematics.

The main objective of the study is to determine the effectiveness of the direct instruction (DI) and the Wilson’s learning cycle in the remediation of the process errors committed by senior secondary school student in mathematics.

The result of the following study is that direct instruction appears to have more effective then the Wilson’s learning cycle.

**Hussain (2010)** studied effect of direct teaching method on the academic achievement in the subject of English at the secondary level.

The main objective of the study was to determine measuring the achievement by pre-test/post-test.

The result of the study is found that direct teaching method is more effective for low achievers as compared to the traditional method of teaching.

**Slavin (2010)** studied effective reading programs for the elementary grades.
The main objective was to study the achievement effects of the full range of reading approaches available to educators and policy maker and to summarize for researcher.

The result of the study showed that both alternative curricula and instructional technology generally produced small effect on reading measures at all good levels.

Ya-Ching Chang (2010) studies on students’ perceptions of teaching styles and use of learning strategies.

The main objective of the study was conducted to investigate Taiwanese junior high school students perceptions of their teachers teaching styles and the students own use of learning strategies.

The result of the following study is the students preferred to use learning strategies that enable them to use time well and choose environments conductive to learning moreover they preferred to seek assistance from their teachers.

Andreason (2011) studied on educational strategies for improving student’s behavior.

The main objective of the study is to explore the possible association between student’s behavior management strategies and teachers control beliefs.

The result of the study said that educational strategies of experience of the teacher improve their connection with student.

Park (2011) studied processing speed deficits in young adults with developmental dyslexia.
The main objective of the study whether the processing speed deficits in young adults with dyslexia are restricted to linguistic information processing only or also affect speed of nonlinguistic information processing.

The result of the study is that dyslexic reader were significantly slower than age matched control on both linguistic and nonlinguistic processing speed.

VIOREL (2011) studies on interactive teaching and learning in primary school.

The main objective is permissiveness of interactive pedagogy is facilitating actions focused around the student individual activities by which they acquire basic skills and develop their competences.

The result of the study shows that when the student is in the situation of activity participating to the teaching learning process school performance become evident.

Branton (2012) studied on the effects of teaching style on student learning of DNA.

The main objective of the study is to determine if inquiry based teaching methods would be more beneficial in learning biology concepts the traditional lecture instruction.

The result of the study is the students’ scores were significantly higher than the traditional lecture students.

Jiaying Wu (2012) studied the influence of extensive reading on junior high school students reading motivation and reading performance in Taiwan.
The main objective of the study were to find out the second language development in second language learners. This research is aimed at exploring and analyzing the influence of extensive reading on students reading motivation and performance of junior high school students in Taiwan.

The result of the study showed that extensive did not influence reading seven dimensions of reading motivation. However extensive reading increased avoidance of English with regard of the influence on reading performance.

**Somuel (2012)** studied Remediation of achievement students’ weakness for enhanced in chemistry.

The main objective of the study is to facilitate a transition in the use of scientific concepts and technique acquired in integrated science with chemistry.

The result of the study showed that DRT is more effective in curbing the students weakness in the regular chemistry classroom instruction.

**Gunga (2013)** studied effects of application of instructional methods on learner achievement in business studies in secondary school.

The main objective of the study is to bring about desirable learning in students in this regard, students are expected to develop appropriate knowledge and skills, which are necessary for solving problems.
The result of the study showed that learning achievement was significantly related to students’ personal attributes such as gender, learning consistency.

**Oyekan (2013)** studied effect of diagnostic remedial teaching strategy on students achievement in biology.

The main objective of the study was to diagnose and remedy identified students’ weaknesses in biology by comparing their performance in conventional teaching method and diagnostic remedial teaching strategy.

The result of the study is the use of DRT is more effective in improving the students achievement and retention then the CTM in Biology class room practices.

**Ranganathan and Kumar (2013)** studied on remedial writing instruction for primary school students with difficulties in Tamil language.

The main objective of the following study was promoting self management strategies for writing and use of technology assisted procedures for writing teaching the generic structure semantics grammar and organization of writing.

The result of the study was the process involving development of self awareness and incorporate teaching aids preferably the contemporary digital paraphernalia for fostering writing instruction help student to learn Tamil.
2.4 Conclusion:

On the basis of reviewed literature of the Indian and foreign investigators. It has been found that Valsamma (1994), Pathanaik (1991) and Uma Devi (1997) studied vocabulary and comprehension. Frank et al. (1987) studied phonological awareness and reading ability Valsamma (1994) studied development of reading ability. Salvi (1991) studied concept attainment model of students. The researcher come to know that concept attainment has been studied separately, not with reading speed ability. Uma Devi (1997) done a remedial programme for improvement of word recognition skill and reading comprehension. After doing a deep review of the studies already done it has been concluded that silent reading speed ability has not been studied in India till now. So the researcher has taken the variable for the study.

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