EFFECT OF STUDENT TEAMS ACHIEVEMENT DIVISIONS STRATEGY AND TECHNOLOGY ENRICHED TASK BASED LANGUAGE TEACHING ON ACHIEVEMENT IN ENGLISH AND SELF REGULATION OF STANDARD VIII STUDENTS

Thesis
Submitted for the Degree of

DOCTOR OF PHILOSOPHY IN EDUCATION

by

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2017

DECLARATION

I, **SABNA E.P,** do hereby declare that this thesis, entitled **EFFECT OF STUDENT TEAMS ACHIEVEMENT DIVISIONS STRATEGY AND TECHNOLOGY ENRICHED TASK BASED LANGUAGE TEACHING ON ACHIEVEMENT IN ENGLISH AND SELF REGULATION OF STANDARD VIII STUDENTS** is a genuine record of the research work done by me under the supervision of **Dr. A.Hameed**, Assistant Professor, Department of Education, University of Calicut, and that no part of the thesis has been presented earlier for the award of any other Degree, Diploma , Title or Recognition in any other University.

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The thesis is revised as per modification and recommendation reported by the adjudicators and re-submitted.

Calicut University   **Dr. A. Hameed**

.08. 2018   (Supervising Teacher)

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Education is, in fact, a process by which individuals are brought into the desired direction by developing certain skills, specific understandings, interests, attitudes, etc., supplementing their knowledge and ultimately transforming the individual to be joyous, productive and socially acceptable. It develops confidence and helps to build a developed personality. School education plays a major role in everyone's life. The knowledge gained throughout the period of education allows individuals to have confidence in their life. It provides multifaceted opportunities for better prospects in life in order to promote career growth. Education elevates the thoughts of individuals at a high level and helps to remove disparities in the society. It enables individuals to become good learners and to understand every aspect of life. Education offers a unique standard in life and well-being.

The role of the teacher is very important in every child's development process. Teachers must consider the different learning skills, cultural backgrounds, personalities and individual differences of students in the teaching and learning processes. During the last two decades education has witnessed a gradual but significant shift resulting in less stress on teachers and teaching, and greater emphasis on students and learning. The educator's role in learning is to be a facilitator, or a guide, rather than a classroom manager. Teacher must create an engaging method where learners involve actively in the learning process in order to foster effective learning.

The world is changing, and our mandate is to prepare students for their lives in the future. Every day, teachers make a wide variety of instructional decisions that directly affect students' learning. These decision ranges from the choice of materials, pacing and sequencing of activities, ways of reinforcing students learning and means of assessing whatever the students have learned. Different types of learning require different learning

experiences and hence different types of objectives. For the realisation of the objectives, a variety of Instructional Strategies can be utilised.

Instructional Strategies are techniques used by teachers in order to enable students to become independent and strategic learners. In the context of English language teaching also, the teacher utilises several Instructional Strategies and techniques so as to enhance English language learning which in turn fosters English language achievement. The effective utilisation of such Instructional Strategies paves the way for the development of affective domains of learners specifically, the Self Regulation of learners. The changing demands of English language teaching have made it imperative to infuse modern techniques and strategies in classrooms. In order to overcome the inherent problems of existing Instructional Strategies of English language classroom, some new Instructional Strategies have been developed and tried out in the western countries. Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning and Technology Enriched Task Based Language Teaching (TETBLT) are among them.

The teaching of English continuously seeks and develops to find the best ways to learn English successfully. It aims to improve students' competence in dealing with the English language skills like listening, speaking, reading, and writing as well as developing competence in using English language components like vocabulary, structure or grammar, and pronunciation. A traditional English classroom provides a teacher centered instruction and probably did not contribute to students' motivation and communication in English language learning. This low level of communication and interaction between students and teachers in the classroom made it difficult to improve the students' language skills. In order to provide students with rich learning experience, innovative teaching strategies, and practical training; the existing system need to be changed with

a practical, lively and interesting atmosphere. Hence teaching English is not be merely considered as transmitting information to the learners, rather it must enable students to speak, read and write fluently (Patil, 2008).This calls for implementation of innovative Instructional Strategies and techniques to transform the teaching of English in the classroom context of secondary schools.

Cooperative Learning(CL) has become one of the main stream instructions used in the language learning classroom to promote student motivation, and student to student interaction. Cooperative Learning emerged as an efficient way that facilitates students' interaction (Slavin, 1978). As reported by Slavin (1991), Cooperative Learning has been viewed as the solution for educational problems: it can promote students' academic achievement and thinking skills, enhance positive learning attitudes and learning motivation, increase higher-order learning, serve as an alternative to grouping, remediation, or special education, improve interpersonal relations, and prepare students for collaborative work.

The most extensively researched and widely used Cooperative Learning techniques are the Student Team Learning Methods developed by Robert Slavin, David de Vries and Keith Edwards at John Hopkins University(Slavin, 1980)which includes Student Teams Achievement Divisions(STAD), Teams-Games Tournament (TGT)and Jigsaw I & II. Cooperative Learning encourages the use of language by communication through social interaction. Positive social interaction can help students perceive the classroom as a comfortable and friendly place, where they feel safe using their new language skills and may find intrinsic motivation for communicating in English. In STAD, students are assigned to a team consisting of four to five members learning teams that are mixed in performance level, gender, and ethnicity. STAD has five major components

that include class presentation, team study, quizzes, individual improving scores, and team recognition(Slavin, 1995).The healthy competitions that persist among the teams motivate the students to contribute exuberantly towards achieving the objectives of English language learning which in turn develops Self Regulation among secondary school students.

In the field of English teaching, there have also been some innovative changes in the form of technology applications that have been introduced to support the process of teaching and learning (Wong, 2004; Prapinwong&Puthikanon, 2008). The instructional strategy of Technology Enriched Task Based Language Teaching (TETBLT) is an important innovative instructional strategy that is very popular in English language teaching. Task Based Language Teaching (TBLT) has been strongly advocated and promoted by many world-leading linguists (Long, 1985; Prabhu, 1987;Nunan, 1989, Willis, 1996;Skehan, 1998;Bygate& Ellis, 2001) since early 1980s. TBLT is an educational framework for the theory and practice of teaching second or foreign languages. A number of studies have been conducted to investigate how the integration of technology into the curriculum may enhance language teaching and learning (Wong, 2004; Miner, 2004; Brodskaya& Thiele, 2004; Timucin, 2006; Eugene, 2006; Hixon, 2008). The technical advances of information technology have had a great impact on English Language learning and they boost students' motivation(Mansor,2007).Chu (2006) found that the variations in the teachers' integration of technology were related to the differences in their teaching domains.

In TBLT, a classroom task is defined as an activity that is goal-oriented, content-focused, has a real outcome, and reflects real-life language use and language need (Shehadeh, 2005). The syllabus in TBLT is organized around activities and tasks rather than in terms of grammar or vocabulary

(Richards, 2003).The interest in TBLT is based on the strong belief that it facilitates Second Language Acquisition (SLA) and makes English learning and teaching more principled and momre effective. This interest arose from a collection of ideas arising from philosophy of education, theories of SLA,empiricalfindingsoneffectiveinstructionaltechniques,andtheexigenciesof language learning in modern society (Van den Branden, Bygate&Norris, 2009). TBLT is rooted in Second Language Acquisition theoryand research findings (Doughty, 2001; Doughty & Long, 2003; Long, 1996;Long & Robinson, 1998; Robinson, 2001; Schmidt, 2001; Skehan, 1998).

Technology Enriched Task-based Language Teaching (TETBLT) is an effective way of learning a language with the support of technology since it provides a purpose for the use and learning of a language other than simply learning language items for their own sake. TETBLT is student-centered instructional strategy that is opposed to mechanical exercises of linguistic form. It recommends that the task be centered on a problem to be communicated which is closely related to the real life and the learning experience of students. This will motivate the students to interact and actively participate in the classroom activities. During the evaluation of the task, learners' differences can be easily found out and teachers can extend help to the learners who need a hand at different stages of learning.

TETBLT is a fascinating and stimulating means of teaching English. Empirical evidences show that TETBLT can produce better results (Li&Ni, 2014).It is high time that teachers changed their roles of providing learners with forms of language into ones of designing tasks. Such tasks must stimulate learners to respond in a real world and keep pace with the development of TETBLT contributing to pedagogical reforms in language teaching and learning. TETBLT functions in a technology-mediated environment to cope with the intensive demands of technology and the learner

which in turn imposes much more demands on the teachers (Wang, 2006). With both TBLT and technology-enhanced language teaching being gradually adopted by language teachers, new envisioning in technology and TBLT can be seen becoming part and parcel of each other due to their elective theoretical and practical affinities (Ortega, 2009).

Technology provides a natural and authentic venue for the realisation of the methodological principles of TBLT, that provides a rationale and pedagogical framework for the selection and use of technology (Doughty & Long,2003). Technology and TBLT theoretically emphasises on "doing language" and experiential learning. It enhances motivation and authenticity in language learning by offering students with choices and providing feedback, thereby fostering community of learning (Ortega, 2009).Taking in to account the multitude benefits of TETBLT in English language teaching, the researcher selected TETBLT as one of the Instructional Strategies for the present study.

Apart from Instructional Strategies there are other factors also that influences teaching and learning of English language. Metacognitive Awareness is such a factor. Flavell(1979) suggested that awareness of cognitive processes consisted of both Meta Cognitive Knowledge and Metacognitive Experiences. Researchers have affirmed that students with high cognitive awareness behave more strategic in learning and show better performances (Brown, 1987; Flavell, 1979;Ganz&Ganz, 1990; Schraw& Dennison, 1994; Livingston, 1997; Schunk, 2008; Zulkiply,2008; Downing, 2009; Goh& Burns, 2012). Metacognitive awareness, therefore, serves a regulatory function and is essential to effective learning because it allows students to regulate numerous cognitive skills (Howard, McGee, Shia, & Hong, 2000).Apart from this, Metacognitive Awareness also allows learners

to plan, sequence, and regulate their learning in a way that improve performance (Schraw, 1994).

Studies have demonstrated that cognitive as well as affective domain skills play a significant role in instructional environments for the academic achievement of the student (Duit&Treagust, 2003; Lee, &Brophy, 1996; Thompson &Mintzes, 2002; Weaver, 1998). Self Regulation, which comes under the affective domain, is the ability to develop knowledge, skills and attitudes that can be transferred from one learning environment to another as well as to a leisure and work environment (Boekaerts, 1999). Students who are aware of their learning strengths and weaknesses are said to be self-regulated(Benmimoun&Trigano, 2009).

Self Regulation is seen as an important affective outcome of learning. Researchers have found positive relationship between Self Regulation and success (Zimmerman& Martinez-Pons, 1986; Pintrich& De Groot, 1990; Zimmerman & Bandura, 1994; Purdie & Hattie, 1996; Perry & Van de Kamp, 2000; Dignath&Buttner, 2008; Zimmerman &Schunk, 2008; Denham, Bassett, Way, Mincic, Zinsser &Graling, 2012, Cleary &Platten, 2013).Hence the present study focuses on Instructional Strategies like STAD and TETBLT that are at par with the modern requirements of English language teaching which is expected to revolutionize the teaching and learning process in the secondary education scenario. The present study also sheds light on the effect of Metacognitive Awareness in inducing English language achievement and self regulation of Secondary School students.

Need and Significance of the Study

In the Indian scenario, English is a symbol of people's aspirations for quality in education and fuller participation in national and international life (NCERT, 2006).English plays an important role in the domains of education,

administration, business and political relations, judiciary,industry and similar areas. It is therefore a passport to social mobility, higher education, and better job opportunities. It vents itself into the abyss of knowledge, acting as a window to the world. English will continue to be the principal medium of education at the university stage, and the language of administration at the Central Government and in many of the states. English being an international language, a link language and a library to the world, learning English become a necessity. Various Education Commissions appointed by Indian Government recommended English to be included in school curriculum for realizing the worth of this language. Even though the regional languages remain a medium in higher education, a working knowledge of English is considered as a valuable asset for all students and a reasonable proficiency in the language would be an asset for those who proceed to the university level.

Language learning is essentially a matter of acquiring the important skills of listening, speaking, reading and writing in an integrated manner, and harnessing these skills to the performance of formal as well as informal communication tasks. Without the integration of these four skills, English will be clueless. By the end of secondary school education, every child is expected to acquire the whole range of skills and abilities subsumed under the continuum ranging from the Basic Interpersonal Communicative Skills (BICS) to Cognitively Advanced Language Proficiency (CALP).

Teaching English to secondary students presents a challenge for teachers whose primary objective is to provide a fresh approach to existing teaching strategies. Teachers should develop student-centered, writing enriched and literature focused classrooms that promote literacy. Teaching strategies should be designed to allow for the vast diversity in student abilities while addressing the needs of all students. The English language teachers can adopt innovative strategies with technology enriched teaching and learning

modes such as STAD which is a Cooperative Learning Strategy and TETBLT for aiming better language development leading to student achievement. Teachers should more carefully design what students need to learn before they apply those learning activities into their teaching (Lightbown&Spada, 1993). A teacher in the cooperative learning plays a role as a supporter, facilitator, observer, change agent, and adviser (McDonell, 1992). Teacher's role is to arrange the students in heterogeneous groups, to provide students with proper materials, and to design structural systematic teaching strategy (Chen, 1999).

Several studies were conducted on Cooperative learning. Nichols (2006) reported significantly greater gains in persistence, self-regulation, and efforts to please their parents and teachers. Several researchers have reviewed studies and literature that support the positive impact cooperative learning on student achievement (Gabriele & Montecinos, 2001; Kewley, 1998; Onwuegbuzie, 2001; Persons, 1998; Phipps, Phipps, Kask, & Higgins, 2001; Rama, 2003; Slavin, 1996). Among them, Slavin's (1995) Student Team Achievement Divisions (STAD) is found to be more effective for improving students' learning of clear objectives in language rules and skills.Nikou, Bonyadi and Ebrahimi (2014) reported that STAD was more effective instructional paradigm for English as compared to the traditional method of teaching.

STAD is effective on improving speaking skill (Syaifullah, 2015),Reading Skills (Wichadee, 2005), listening Skills (Khansir & Alipour, 2015), and Achievement in Writing (Mardhiah & Ownie, 2015; Wandari, Aruan, & Sumbayak, 2015). However, the researcher has seen some studies showing a negative relationship between the STAD and the English reading achievement Thupapong (1996), Speaking Pinkeaw (1993).Cooperative learning has been associated to the development of cognitive, metacognitive

and motivational skills in students, which can promote self-regulated learning (Efklides, 2008; Järvelä et al., 2008; Arjanggi and Setiowati, 2014). The findings of studies show a mixed result with studies revealing positive effect of cooperative learning on English language achievement with a few studies showing negligible effect of cooperative learning on English language teaching. Hence the researcher finds it vital to understand the effect of cooperative learning strategy like STAD on achievement in English and Self Regulation of secondary school students.

Teachers are using different methodologies to teach their students in a better way. There are a number of techniques and methodologies for diverse situations in the classrooms, embedding technology in English language teaching. By using technology, students gain understanding about their world, and enhance their learning and work by increasing their connections with resources outside school walls. Prensky (2001) points out that students have changed radically. Today's students are very proficient in the digital language of computers, video games and the Internet. Learners are now more technologically oriented and able to utilize new technologies for their own learning. Students are more intensive and open their eyes to complete their task integrating with technology.

The use of information technology in language classes has changed dramatically. The variety of technological devices has taken an important place in foreign language learning (Dudeney, 2000; Teeler& Gray, 2000; Mithchell, 2009). A new platform, which includes sounds, images, animation, social interaction, and various multimedia channels are available in the modern education scenario. This new platform, which has given rise to online learning also constitutes a ground for English language learning and teaching (Preston, 2004; Brenton, 2009; Rudestam & Schoenholtz-Read, 2010).

The technical advances of information technology have had a great impact on English language learning and they boost students" motivation, according to Mansor (2007). Technology-enhanced education is becoming an increasingly important part of higher and professional education (Wernet, Olliges & Delicath, 2000). Technology not only gives learners the opportunity to control their own learning process, but also provides them with ready access to a vast amount of information over which the teacher has no power or control (Lam & Lawrence, 2002). However, in schools, teachers are seen to be active agents in the process of changes and implementation of new ideas as their beliefs and attitudes may support or impede the success of any educational reform such as the utilisation of an innovative technology (Woodrow, 1991; Levin & Wadmany, 2006).

Task-based instruction with technology is considered to be potentially suitable for learners of all ages, which is particularly effective when the learners are engaged in relatively similar real-life tasks. As such, task-based language instruction has been employed by many researchers, and it has proved to be highly effective in enhancing the learning of English language(Li and Ni (2013).Task-Based Instruction with enriched technology is different from other more traditional methods of language teaching. Lessons are constructed according to the language required to perform specific tasks rather than according to the aspects of language such as structures and vocabulary. According to Ramirez (1995), solving these tasks means learning the target language will be the means to an end rather than the goal itself. Students' interaction during the tasks facilitates transfer of information they have previously learned and incorporates it with new information they receive as they perform the task. Connecting tasks to real-life situations contextualizes language in a meaningful way and provides large amounts of input and feedback (Krahnke, 1987). This assumes that students

will learn the language structures through induction as they focus on task completion and meaning.

Task Based Language Teaching (TBLT) is a method of language teaching inwhich meaning is primary, there are real world problems to solve, and priority is placed on the completion of the tasks, which are assessed in terms of the outcome (Brown, 2007; Willis & Willis, 2007). TBLT results in higher reading comprehension score (Padmadewi & Suarnajaya, 2013) technical vocabularies (Sarani & Sahebi, 2012) academic listening (Jafarigohar & Khanjani ,2015), speaking skill (Murad, 2009), and writing skills (Ahmed & Bidin, 2016).

Many Researches have examined the relation between metacognition and academic achievement. They show that students with high academic achievement demonstrate high level of metacognitive awareness (Shraw, 1997; Martini &Shore, 2007; Coutinho, 2007; Turan & Demirel, 2010). Metacognitive Awareness and achievement focused motivation are seen as important predictors of the learning (Yeşilyurt, 2013). Since TETBLT focuses on the cognitive aspect of learning it is important to evaluate the role of Metacognitive Awareness on English language achievement among students.

Over the last several years psychologists have become increasingly interested in students' Metacognition or Awareness of cognitive processes (Veenman, Van Hout-Wolters, &Afflerbach, 2006) and its role in learning. Research examining the relationship between Metacognitive knowledge and achievement indicated that children who are aware of why, when, and how strategies should be used are more likely to be able to use those strategies successfully (Pressley, 1994). Metacognitive knowledge helps students in reflecting on what they are thinking or what they already know. Awareness of knowledge also helps the students to understand what they do not know (Cohen, 2014). Hence, the present study aims to assert effect of STAD,

centered on social constructivism and TETBLT, centered on cognitive constructivism. It is essential to assess the contribution of Metacognitive Awareness on English language achievement among secondary school students.

Metacognition generally refers to knowledge of cognition and the regulation of cognition, which includes planning, monitoring, and evaluating cognitive processes often through reflective strategies (Kuiper, 2002, 2005; Kuiper & Pesut, 2004; Schraw, 1998; Schraw, Crippen, & Hartley, 2006; Schraw & Dennison, 1994; Schraw&Moshman, 1995; Tanner, 2012; Tarricone, 2011; Worrell, 1990). Sawhney and Bansal (2015) reported significant differences between high and low Metacognitive Awareness groups of undergraduate students on their academic achievement. Students with high Metacognition achieved more than students with low Metacognition. Yanyan (2010) investigated the role of Metacognitive Awareness in the English writing of EFL learners which showed that a good command of metacognitive knowledge empowered English writing and learning.

Research findings have reported that metacognition had positive effect on learning (Kruger & Dunning, 1999; Schraw & Dennison, 1994). Several studies confirmed that learners who are metacognitively aware perform better than unaware learners (Pressley & Ghatala, 1990, Schraw & Dennison, 1994). Metacognitive Awareness was also found to be necessary due to the drastic changes and innovation in knowledge (Cihanoglu, 2012). Metacognition has an important role in the improvement of student's autonomy and self-regulation (Kim, 2013). Studies have evaluated the relationship of self-regulated learning (SRL) to academic success but the impact of Meta cognition in this process has not been thoroughly examined. In the light of these findings it is evident that there are quite a few studies that specifically

focus on the influence of Metacognitive Awareness on English language achievement and Self Regulation of secondary school students.

Self-Regulation refers to a complex of acquired, intentional skills involved in controlling, directing, and planning one's cognitions, emotions, and behavior (Schunk & Zimmerman, 1997). It is an essential ability of children to cope with various developmental challenges. An individual's degree of Self-Regulation affects how he interacts with external area, because Self-Regulation occurs as a result of reciprocal interaction between personal (covert), environmental and behavioral determinants (Bandura, 1977).

Self-regulated students organise, manage and adapttheir thoughts into skills that are required for learning(Shannon, 2008). Students need to be aware of their own thought processes and monitor the effectiveness of their learning strategies to develop an ability to Self Regulate(Zimmerman, 2008).Aspects of Self-Regulation such as attention, persistence, flexibility, motivation and confidence can all be improved as a result of effective teaching and learning practices (Diamond et al.,2007). The present study explores the effectiveness of Instructional Strategies (TETBLT and STAD) on Achievement in English and Self Regulation of Secondary School Students.

The investigator could not find sufficient number of studies which examined the interaction effects of Instructional Strategies (STAD and TETBLT) and Metacognitive Awareness on students' Achievement in English and Self Regulation. Although several studies have been conducted in foreign countries, there is dearth of studies in the Indian context that explores the effect of STAD and TETBLT on Achievement in English and Self Regulation among students. Hence the present study attempts to comprehend the Effect of Student Teams Achievement Divisions Strategy and Technology Enriched Task Based Language Teaching on Achievement in English and Self Regulation of Standard VIII Students.

Statement of the Problem

Student Teams Achievement Divisions (STAD) strategy, and Technology Enriched Task Based Language Teaching (TETBLT) are expected to contribute to the contemporary English language teaching. However, studies in the Kerala context on the effect of these Instructional Strategies in improving students' English language achievement and Self Regulation are very rare. The present study is to experiment Student Teams Achievement Divisions Strategy (STAD), and Technology Enriched Task Based Language Teaching (TETBLT) in enhancing Achievement in English and Self Regulation of Secondary School Students. Hence, the present study is entitled as the **Effect of Student Teams Achievement Divisions Strategy and Technology Enriched Task Based Language Teaching on Achievement in English and Self Regulation of Standard VIII Students.**

Definition of Key Terms

The definition of key terms used in the statement of the problem is given below.

Effect

The term effect as used in the study stands for the condition resulting when the effect of one factor is dependent on the presence or absence of another factor or condition (Good, 1973).

In the present study effect is the, effect stands for the outcome of the treatment of independent variables on dependent variables. That is the investigator has made an effort to find the influence of certain Instructional Strategies (STAD Strategy, TETBLT Strategy and Control-AOMT) and Metacognitive Awareness on Achievement in English (Total and Skill wise Scores) and Self Regulation of Standard VIII Students.

Student Teams Achievement Divisions (STAD) Strategy

Student Teams Achievement Divisions (STAD) strategy of Cooperative Learning involves small groups of learners with different levels of ability who work together to accomplish a shared learning goal. The important components of STAD include class presentation, team study, quizzes, individual improving scores, and team recognition (Slavin, 1995).

In the present study, Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning is utilised for the achievement   of the objectives in instructional pedagogy of English in which, small group of learners with different levels of abilities come together to accomplish a shared learning goal.

Technology Enriched Task Based Language Teaching (TETBLT)

TETBLT is an instructional strategy in language teaching that provides opportunities for students to engage in the authentic use of the target language through tasks along with the incorporation of technology. As the principal component in TETBLT, the task provides the main context and focus for learning, and it encourages use of language similar to the way it is used outside the classroom. Students learn language and develop skills as they work toward completing the task, which motivates them to stretch their available language resources (Ellis, 2003).

In the present study, Technology Enriched Task Based Language Teaching (TETBLT) is used as a new method of Process-Oriented Language Teaching Strategy that incorporates technology enrichment in Task Based Language Teaching (TBLT) for English language teaching, encompassing three phases of TETBLT frame work such as Pre-Task Phase, Task Cycle and Language Focus.

Achievement in English

Achievement is accomplishment or proficiency of performance in a given skill or body of knowledge (Good,1973).

In the present study Achievement in English is the level of performance of an individual in English Language, measured in terms of Standardised Testsfor assessing Achievement in English (Total) and Skill wise Scores for measuring the four basic skills in English such as Listening, Speaking, Reading and Writing.

Self Regulation

Self Regulation is defined as the capacity to plan, guide, and monitor one's behavior flexibly in the face of changing circumstances (Brown,1998).

In the present study, Self Regulation is the ability to organise, plan, direct and observe one's behavior flexibly according to changing conditions in order to achieve the predetermined goals, as measured by a standardized scale of Self Regulation.

Standard VIII students

The term standard VIII students denote students attending standard VIII in any of the recognised schools of Kerala State.

Variables of the Study

The study is designed in the form of an experiment that includes independent, dependent and control variables. The description of the variables used in the present study is given in the following sections.

Independent Variables

Independent variables of the study include Instructional Strategies (Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning, Technology Enriched Task Based Language Teaching (TETBLT) and Activity Oriented Method of Teaching)and Metacognitive Awareness.

Metacognitive Awareness is "knowledge about what factors act and interact in what ways to affect the course and outcome of cognitive enterprises". In other words, the individual's beliefs about oneself and about others as learners and of the requirements involved in the learning process relate to Metacognitive Knowledge/Awareness acquired through both conscious and unconscious means, and in formal and informal settings (Flavell, 1999).

For the present study Metacognitive Awareness is defined as individual awareness about how they prepare and plan for learning, select and use various learning strategies, monitoring and evaluating strategy use and their English language learning as measured by a Standardized Tool on Self Regulation.

Dependent Variables

The present study uses two Dependent variables such as Achievement in English (Total and Skill-wise Scores) and Self Regulation. The effect of Instructional Strategies (STAD, TETBLT and Control- AOMT) on Achievement in English (Total and Skill-wise Scores) and Self Regulation is examined.

Control Variables

The present study is conducted using experimental design. In the process of experimentation, certain variables are controlled in order to find

out the effect of independent variables on dependent variables by nullifying the effect of control variables or covariates. The control variables used for the present study are as follows.

- Pre- experimental status in terms of Achievement in English (Total and Skill-wise Scores)

- Pre- experimental status in terms of Self Regulation

- Verbal Intelligence

- Non-verbal Intelligence

- Classroom Environment

Objectives of the Study

Objectives formulated for the present Experimental study are described in the following sections.

Two major objectives were formulated for the present study. The first objective was to investigate the effectiveness of Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning and Technology Enriched Task Based Language Teaching (TETBLT) over Activity Oriented Method of Teaching, in case of Achievement in English (Total and Skill wise Scores) and Self Regulation of Standard VIII Students.

Examination of the main and interaction effects of Instructional Strategies (Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning, Technology Enriched Task Based Language Teaching (TETBLT) and Activity Oriented Method of Teaching) and Metacognitive Awareness on Achievement in English (Total and Skill wise Scores) and Self-Regulation of standard VIII Students was the second major objective of the study.

The specific objectives formulated are presented to get an idea regarding the nature and scope of the experiment. They are as follows:

1. To explore the attitude of Secondary School English teachers towards Instructional Strategies in general and Cooperative Learning strategies and Task Based Language teaching in particular.

2. To study whether there exists any significant difference in the mean Achievement in English (Total and Skill wise scores) of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) for the Total Sample, Boys and Girls.

3. To study whether there exists any significant difference in the mean Gain score of Achievement in English (Total and Skill wise Scores) of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) for the Total Sample, Boys and Girls.

4. To study whether there exists any significant difference in the mean Self-Regulation scores of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) for the Total Sample, Boys and Girls.

5. To study whether there exists any significant difference in the mean Gain Score of Self-Regulation of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) for the Total Sample, Boys and Girls.

6. To study the effectiveness of Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning over Activity Oriented Method of Teaching (AOMT), if any, in terms of Achievement in English (Total and Skill wise scores) of standard VIII Students.

7. To study the effectiveness of Technology Enriched Task Based Language Teaching (TETBLT) over Activity Oriented Method of Teaching (AOMT), if any, in terms of Achievement in English (Total and Skill wise scores) of standard VIII Students.

8. To study the effectiveness of Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning over Technology Enriched Task Based Language Teaching (TETBLT), if any, in terms of Achievement in English (Total and Skill wise scores) of standard VIII Students.

9. To study the effectiveness of Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning over Activity Oriented Method of Teaching (AOMT), if any, in terms of Self-Regulation of standard VIII Students.

10. To study the effectiveness of Technology Enriched Task Based Language Teaching (TETBLT) over Activity Oriented Method of Teaching (AOMT), if any, in terms of Self-Regulation of standard VIII Students.

11. To study the effectiveness of Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning over Technology Enriched Task Based Language Teaching (TETBLT), if any, in terms of Self-Regulation of standard VIII Students.

12. To study the main effect of Independent Variables (Instructional Strategies and Metacognitive Awareness) on Achievement in English (Total and Skill wise Scores) of standard VIII Students for the Total Sample, Boys and Girls.

13. To study the interaction effect of Independent Variables (Instructional Strategies and Metacognitive Awareness) on Achievement in English (Total and Skill wise Scores) of standard VIII Students for the Total Sample, Boys and Girls.

14. To study the main effect of Independent Variables (Instructional Strategies and Metacognitive Awareness) on Self-Regulation of standard VIII Students for the Total Sample, Boys and Girls.

15. To study the interaction effect of Independent Variables (Instructional Strategies and Metacognitive Awareness) on Self-Regulation of standard VIII Students for the Total Sample, Boys and Girls.

Hypotheses of the Study

For the experiment it, was necessary to formulate some assumptions or intelligent guesses regarding the expected outcomes of the study. In research methodology these assumptions are called hypotheses. Hypotheses provide a clear path to the investigator and delimit the study into some relevant issues of the problem under consideration. The hypotheses always keep the investigator in touch with the main objectives of the study.

On the basis of the review of literature, the experiment was designed to test the following hypotheses.

1. There will be no significant difference in the mean Achievement in English (Total and Skill wise Scores) of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) for the Total Sample, Boys and Girls.

2. There will be no significant difference in the mean Gain score of Achievement in English (Total and Skill wise Scores) of the

Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) for the Total Sample, Boys and Girls.

3. There will be no significant difference in the mean Self-Regulation scores of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) for the Total Sample, Boys and Girls.

4. There will be no significant difference in the mean Gain score of Self-Regulation of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) for the Total Sample, Boys and Girls.

5. Students taught through Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning will not differ significantly than students taught through Activity Oriented Method of Teaching (AOMT), if any, in terms of Achievement in English (Total and Skill wise scores) of standard VIII Students.

6. Students taught through Technology Enriched Task Based Language Teaching (TETBLT) will not differ significantly than students taught through Activity Oriented Method of Teaching (AOMT), if any, in terms of Achievement in English (Total and Skill wise scores) of standard VIII Students.

7. Students taught through Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning will not differ significantly than students taught through Technology Enriched Task Based Language Teaching (TETBLT), if any, in terms of Achievement in English (Total and Skill wise scores) of standard VIII Students.

8. Students taught through Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning will not differ significantly than students taught through Activity Oriented Method of Teaching (AOMT), if any, in terms of Self-Regulation of standard VIII Students.

9. Students taught through Technology Enriched Task Based Language Teaching (TETBLT) will not differ significantly than students taught through Activity Oriented Method of Teaching (AOMT), if any, in terms of Self-Regulation of standard VIII Students.

10. Students taught through Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning will not differ significantly than students taught through Technology Enriched Task Based Language Teaching (TETBLT), if any, in terms of Self-Regulation of Standard VIII Students.

11. There will be no significant main effects of Independent Variables (Instructional Strategies and Metacognitive Awareness) on Achievement in English (Total and Skill wise Scores) of Standard VIII Students for the Total Sample, Boys and Girls.

12. There will be no significant interaction effect of Independent Variables (Instructional Strategies and Metacognitive Awareness) on Achievement in English (Total and Skill wise Scores) of standard VIII Students for the Total Sample, Boys and Girls.

13. There will be no significant main effects of Independent Variables (Instructional Strategies and Metacognitive Awareness) on Self-Regulation of standard VIII Students for the Total Sample, Boys and Girls.

14. There will be no significant interaction effect of Independent Variables (Instructional Strategies and Metacognitive Awareness) on Self-Regulation of standard VIII Students for the Total Sample, Boys and Girls.

Methodology

The present study was conducted in two phases. The first phase includes the Survey Phase and the second phase includes the Experimental phase.

Phase 1- Preliminary Survey

A preliminary survey was carried out to explore the Secondary School English Teachers' Attitude towards Instructional Strategies and also to find out the various strategies used in teaching English. The survey was conducted by using a Scale of Attitude towards Instructional Strategies in teaching English (Hameed & Sabna, 2014). Items of the scales were prepared to assess the general attitude of teachers towards Instructional Strategies, Cooperative Learning Strategies and Task Based Language Teaching on the basis of the review of literature. The survey was conducted by selecting a representative sample of 50 Secondary School English teachers of Malappuram District.

Phase II- -The Experiment

The procedure followed in the Experimental phase of the study is outlined in the following sections.

Design of the Study.

The present study was conducted by employing the Quasi-Experimental design. The particular design used for the study was the Non-equivalent Groups Pre-test – Post-test Control and Comparison Groups

Design. The study included two experimental groups and one Control group. The Experimental Group I was taught through the Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning, Experimental Group II was taught through the Technology Enriched Task Based Language Teaching (TETBLT) and the Control Group was taught through the Activity Oriented Method Teaching (AOMT).

Sample for the Study.

The sample for the study consisted of three intact class groups of 45 students each (Total 135 students) in the Experimental Group I, Experimental Group II and the Control Group. The sample for the Experimental Group I (STAD) and the Control Group were drawn from Devadar Government Higher Secondary School, Tanur, Malappuram and the sample for the Experimental Group II (TETBLT) was drawn from GHSS Niramarathur, Malappuram. The Experimental Group I, Experimental Group II, and the Control Group were selected at random by giving equal representation to efficiency level and Socio Economic Status of the students. Both schools are situated in rural area.

Learning Materials and Tools Used for the Study.

The following tools and other learning materials were used to collect data from the Experimental Groups and the Control Group.

Scale of Attitude Towards Instructional Strategies in Teaching English

(Hameed & Sabna,2014)

Scale of Attitude towards Instructional Strategies in Teaching English composed of three sections,I, II and III. In the first section in items to assess the attitude of Secondary School Teacher towards Instructional Strategies used in teaching English. Section II comprises items to assess the attitude of

teachers towards Cooperative Learning Strategies. Section III consists of items to assess the attitude of teachers towards Task Based Language Teaching. In total, the final tool consists of 80 items in which positive and negative items.

Lesson Transcripts for Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning (Hameed & Sabna, 2014).

The investigator prepared Lesson Transcripts for Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning on the basis of the five major components identified by Slavin (1995). The components are Class Presentation, Team Study, Quizzes, Individual Improving Scores, and Team Recognition. These lesson transcripts were used for treatment in the Experimental Group I.

Lesson Transcripts for Technology Enriched Task Based Language Teaching TETBLT (Hameed & Sabna, 2014).

The investigator prepared Lesson Transcripts for Technology Enriched Task Based Language Teaching (TETBLT) following the three phases such as Pre Task, Task Cycle and Language Focus (Willis, 1996). The lesson Transcripts were used for the treatment in the Experimental Group II.

Lesson Transcripts for Activity Oriented Method Teaching(AOMT)- (Hameed & Sabna, 2014).

Lesson Transcripts for Activity Oriented Method Teaching(AOMT) prepared by the investigator for teaching in the Control Group, were prepared on the basis of Activity Oriented Curriculum existing in Kerala. The steps used in the preparation of the Lesson Transcripts included Identification of curriculum statements, Formulation of curriculum competencies, Presentation of suitable activities, Recording the responses of the students and Recapitulation and assignments.

Achievement Test in English -ATE (Hameed & Sabna, 2014)

Achievement Test in English was prepared by the investigator based on the two units 'As we shall we reap' and "Within and without' from the English Text book for Standard VIII students. This test was used as Pretest and Post-test on the selected units for treatment. The test consists of objective type items for assessing achievement of students in English of the selected topics.

Test of Listening Skill in English-TLSE (Hameed & Sabna, 2014).

Test of Listening Skill in English was prepared by the investigator. The test included stories, newspaper reports, announcement and picture based statements which were read out by the teacher. Based on these activities, objective type items were used to assess the Listening Skill of students.

Test of Speaking Skill in English-TSSE (Hameed & Sabna, 2014).

The test of Speaking Skill in English is intended to assess the skill of students in speaking English. The test includes items for speech construction and picture description.

Speaking Evaluation Rubrics –SER (Hameed & Sabna, 2014).

The Skill of Speaking was evaluated using Speaking Test Rubrics which included evaluation criteria based on oraganisation, fluency, pronunciation, accuracy/grammar and vocabulary.

Test of Reading Comprehension in English -TRCE (Hameed & Sabna, 2014).

Test of Reading Comprehension in English is used to evaluate the reading comprehension in English among Secondary School Students. The test includes objective type items for evaluating comprehension, grammar and vocabulary. The test also include descriptive type item for summarizing passage.

Test of Writing Skill in English -TWSE (Hameed &Sabna, 2014).

Test of Writing Skill in English evaluates the writing skill of students in English. The test includes descriptive items encompassing notice writing, poster preparation, formal and informal letter writing, proverb expansion, essay writing, preparing biography, diary writing and newspaper report writing.

The Self - Regulation Questionnaire -SRQ (Miller & Brown, 1991).

In the present study, Self-Regulation Questionnaire -SRQ (Miller & Brown, 1991) is adapted to assess the Self-regulation among VIII standard students and was used as pretest and posttest of Self-regulation, before and after the experimentation respectively. The researcher used the seven step process in the original tool.

Scale of Metacognitive Awarenes -SMA (Hameed, Sabna & Meharunnisa, 2014).

Scale of Metacognitive Awareness developed by Hameed, Sabna and Meharunnisa (2014) was employed to measure the Metacognitive Awareness of Standard VIII Students. This scale was prepared in Malayalam language and the draft scale consists of sixty six items, both positive and negative, belonging to five components namely; Declarative Knowledge, Procedural Knowledge, Conditional Knowledge, Monitoring and Evaluating.

Verbal Group Test of Intelligence - VGTI (Kumar, Hameed & Prasanna 1997).

For the present experimental study, the Confounding Variable, Verbal Intelligence was measured using the Verbal Group Test of Intelligence (VGTI) developed and standardised by Kumar, Hameed & Prasanna (1997). The test consists of five sub tests, namely Test I - Verbal Analogy; Test II - Verbal Classification; Test III - Numerical Reasoning; Test IV - Verbal Reasoning; and Test V -Comprehension.

Standard Progressive Matrices Test - SPMT (Raven, 1958).

In the present experimental study, the Confounding Variable, Nonverbal Intelligence was measured using the Standard Progressive Matrices Test, developed by Raven (1958). The test consists of five subtests of twelve items each.

Classroom Environment Inventory - CEI (Aruna & Sureshan, Unnikrishnan, 1998).

This inventory is meant for measuring the Classroom Environment in standard VIII Students was developed and standardized by Aruna, Sureshan, and Unnikrishnan in 1998.The Classroom Environment Inventory was based on the dimensions classroom environment and instrument, developed by Frazer *et al* (1982).

General Data Sheet for Assessing Socio-Economic Status (SES).

To assess the Socio-Economic Status of the Students of Experimental Groups and the Control Group, this General Data Sheet was used. To collect the information regarding Income, Education and Occupation of parents, nine columns each for father and mother, are included in the General Data Sheet.

Statistical Techniques Used for Analysis

The following statistical techniques were used in the study for the analysis of the data.

Percentage Analysis.

Percentage Analysis was used to find the attitude of Secondary School English language towards Instructional Strategies used in Classrooms.

Basic Descriptive Statistics.

Basic Descriptive Statistics such as Mean, Median, Mode, Standard Deviation, Skewness and Kurtosis of each variable were calculated for Total

Sample and separately for Boys and Girls. Nature of the distribution was identified using the measured descriptive statistics.

One Way Analysis of Variance (ANOVA).

One Way ANOVA was used to compare the relevant variables between the Experimental group I (STAD) Experimental group II (TETBLT) and the Control group (AOMT). This statistical technique was mainly used to test whether the Experimental groups and Control group differ in Achievement in English (Total and Skill Wise scores) and Self Regulation, Gain scores of Achievement in English (Total and Skill Wise Scores) and Self Regulation without controlling the effects of the Covariates. This technique was also used establish the equivalence of Experimental group I, Experimental group II and the Control group in the study. In the present study assessed to after One Way ANOVA Procedure.

Effect size.

Effect Size is simply a way of quantifying the effectiveness of a particular intervention, relative to some comparison, and may therefore be said to be a true measure of the significance of the difference. It is an important tool in reporting and interpreting effectiveness (Coe, 2000). Effect size was used to used to know how much is the effect of STAD strategy and TETBLT in Achievement in English (Total and Skill wise tests) and Srlf Regulation.

Two-way Factorial Analysis of Covariance (ANCOVA).

In the study ,Two-way Factorial Analysis of Covariance (ANCOVA) was employed to remove statistically the effect of four Confounding Variables or Covariates namely Pre-experimental Status in terms of Achievement in English and Self Regulation, Verbal Intelligence, Non-verbal Intelligence and Classroom Environment singly and in combination of the four at a time. This statistical technique was employed to confirm the

effectiveness of Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning and Technology Enriched Task Based Language Teaching (TETBLT) over the Activity Oriented Method of Teaching (AOMT).

Two way Analysis of Variance (ANOVA) with 3x3 Factorial Design.

Two-way ANOVA was employed to examine the main and interaction effects of Independent Variables (Instructional Strategies and Metacognitive Awareness) on Dependent Variables (Achievement in English Total and Skill-wise scores and Self Regulation). In the study, 3x3 Factorial ANOVA consists of three levels of Instructional Strategies and three levels of Metacognitive Awareness.

Scheffe' Test of Post-hoc Comparison.

Scheffe' Test of Post-hoc Comparison was used to compare the adjusted criterion means of the Experimental and Control groups to determine the advantageous groups in Covariance Analysis. In One-Way ANOVA and Two-Way ANOVA also, Scheffe' Test was used to study the group difference.

Scope and Limitations of the Study

The present experimental study was designed to find out the relative effectiveness of STAD and TETBLT over Activity Oriented Method of Teaching in case of Achievement in English and Self Regulation of standard VIII Students. The study also examined the main and interaction effects of Instructional Strategies (STAD, TETBLT and AOMT) and Metacognitive Awareness on Achievement English Language and Self Regulation of standard VIII Students. The quasi-experimental, Pre-test Post test Non-equivalent Control and Comparison Groups design was chosen for the present study. Appropriate tools were used for collecting the data from the Experimental Groups and the Control cum comparison Groups design was

chosen for the present study. The investigator is confident that the results obtained from the study will be helpful to teachers, educationists and the entire school as a system, to modify the Instructional Strategies in the regular classrooms. It is expected that the study will make it easy to reach at valid generalizations and assumptions. The investigator believe that, even though precautions were taken to make the study objective, certain limitations are crept into the study. The limitations of the study are as follows.

1. The study was limited to the sample of Secondary School Students only.

2. As the investigator herself has an academic orientation in English Language, the study is focused on English language only.

3. The study is confined to a small sample of 3 groups as the representative sample of standard VIII Students of Kerala.

4. There are lot of factors affecting the achievement the subject and Self Regulation of students. Among those factors the study examined to two Independent Variables only, namely Instructional Strategies and Metacognitive Awareness of standard VIII students.

5. The study was confined to only two schools due to limitation of available time.

6. A plethora of innovative instructional strategies are available for the teacher, among them the investigator selected STAD and TETBLT only.

7. From the review of Literature, selected strategies has different outcomes in different areas. Among them the investigator has selected achievement in the subject and Self Regulation only.

8. Literature opens different elements of Metacognition. Among them the researcher has selected Metacoganitive Awareness only.

Organization of the Report

The report of the present study is presented in five chapters viz; Introduction, Review of Related Literature, Methodology, Analysis, Findings, Conclusions and Suggestions. The present research report is organised in the following order. Each chapter is explained in relevant sub units.

Chapter I includes Need and Significance, Statement of the Problem, Definition of Key Terms, Objectives of the study, Hypotheses of the study and Scope and limitation of the study.

Chapter II. Review of literature is classified into two major sections, Theoretical frame work of the variables and Review of Related Studies. Theoretical framework of the variables deals with the theory based on the description of the variables. Related studies provide a survey of the already conducted research work in the concerned field of study.

Chapter III. Methodology, the third chapter gives an account of Sample of the Study, Tools Used for the Study, Data Collection Procedure and Statistical Techniques Used for the Study.

Chapter IV. Analysis, the fourth chapter, deals with the statistical treatments carried out to test the hypotheses in order to realize the objectives.

Chapter V Includes summary, Major Findings of the Study,Tenability of Hypotheses, and Educational Implications Derived of the study and Suggestions for Further Research.

CHAPTER **TWO**

REVIEW OF RELATED LITERATURE

- Theoretical Framework of the Variables
  - Instructional Strategies
  - Metacognitive Awareness
- Review of Related Studies
  - Studies on STAD Strategy and Achievement
  - Studies on STAD Strategy and Self Regulation
  - Studies on TETBLT and Achievement
  - Studies on TETBLT and Self Regulation
  - Studies on Metacognitive Awareness and Achievement
  - Studies on Metacognitive Awareness and Self Regulation

Theoretical frame work of the variables includes relevant concepts, theories and principles related to the topic. It covers the ideas and information critical to the topic. The purpose of the theoretical literature is to assess critically the overall state of knowledge on the topic, and the state of research, thinking and theorizing on the topic. Theoretical overview therefore guides the investigator in areas like origins and definitions of the topic, the key concepts, theories and ideas, and organization of knowledge on the topic. The present study was experimented to find the effectiveness of Student Teams Achievement Divisions Strategy and Technology Enriched Task Based Language Teaching over activity oriented method of teaching in terms of Achievement in English and Self Regulation. Researcher has made an intense attempt to conduct the review on the available sources concerning the selected variables up to the year 2017. This chapter presents a conceptual review of the literature which is expected to help the investigator in enriching the theoretical framework of the study. It is explained under the following headings:

Theoretical Framework of the Variables

Instructional Strategies

Metacognitive Awareness

Review of Related Studies

Studies on STAD Strategy and Achievement

Studies on STAD Strategy and Self Regulation

Studies on TETBLT and Achievement

Studies on TETBLT and Self Regulation

Studies on Metacognitive Awareness and Achievement

Studies on Metacognitive Awareness and Self Regulation

Theoretical Framework of the Variables

This section details mainly about the major theoretical aspects of the independent variables of the present Study. They are Instructional Strategies and Metacognitive Awareness.

Theoretical overview of the independent variables for the present study is Instructional Strategies (Student Teams Achievement Divisions (STAD) Strategy and Technology Enriched Task Based Language Teaching(TETBLT) and Metacognitive Awareness are detailed as follows.

Instructional Strategies

Instructional Strategies are the techniques or methods that a teacher can get to meet the various learning objectives. These strategies help students to walk on the path of independent learning and become strategic learners. They equip teachers to make learning enjoyable and help students to stimulate their desire to learn. Instructional Strategies focus on not only the educational content but also on the method and environment of the teaching process.

Stones and Morris (1977) defined Instructional Learning Strategies as a generalized plan for a lesson which includes structure, desired learner behaviour in terms of goals of instruction and in outline of planned tactics necessary to implement the strategy. In effective teaching, the teacher utilizes certain approaches and tools to enable the student to learn and flourish. The development level of the students, interests and experiences are considered when selecting a teaching strategy so that they can achieve their own goals.

Instructional Strategies enable students to focus their attention, organize their learning material for better understanding and help teachers to provide a suitable platform for strategic learning. There are various teaching methods with different advantages and disadvantages. Therefore, the selection of a strategy is important and must be done with greatest concern by teachers in coordination with their students. The underlying determinants in the selection of the Instructional Strategies and their use in the instructional process include the instructional approach, the instructional theory, and the related models adopted by the teacher (Joyce & Marsha 2000; Richardson, 2001). Instructional Strategies incorporate activities that contribute to the classroom environment for a good learning experience occur. Effective teachers choose from a variety of Instructional Strategies for students (Marzano, 2003; Lim, 2002). Marzano (2003) states that Instructional Strategies influence learners' achievement and allow teachers to diversify the instructional applications. The instructional process should be structured, applied and evaluated in a purposeful, planned, and systematic way.

Modern understandings regarding Instructional Strategies recognize that instructional goals are complex and difficult and that instructors are supposed to have a variety of approaches to the educational needs of students from different socio-cultural environments and to help them achieve effective learning. In this respect, it could be stated that today, instructors should prefer among various Instructional Strategies to help learners gain active learning experiences in cognitive, affective and kinesthetic fields (Williams, 2004). Research indicates that quality education is usually necessarily student-oriented. It strives to help the best and best for all students. Therefore, the focus should be not only pedagogical skills, but also learning environments that meet the personal needs of the students. Students should also be aware as to why they are working so that they are able to relate to other students and

receive help if required. Instructional Strategies are mostly used to apply learning theories in a useful way and to obtain the target learning outcomes.

In addition, one of the related questions discussed in academic contexts in recent years is the question of which learning theory can be effectively used with which Instructional Strategies (Miller & Veatch 2010). Contemporary approaches in teaching strategies say that the purpose of the teaching is done in schools that are complex and multi-faceted, and, moreover, for practical learning, the instructors should be able to provide a wide variety of teaching approaches for students from various socio-economic environments.

Instructional Strategies are proven to benefit the students with their powerful features such as:

- Involves step-by-step learning process with a series of innovative approaches

- Supports the students with guided and independent practice, modeling and handling of real situations

- Gives stage to students to show their aptitudes, thoughts and their current information on a specific subject

- Encourages students to monitor and evaluate their own learning

- Provide effective strategies available for students across grade levels, different subjects etc.

Types of Instructional Strategies

The key aspect in the theory and practice of modern education is to make teaching as effective and productive as possible. There are many instructional learning strategies in the field of education. At a time these

strategies are helpful for the teacher and the students. For the teacher it helps to teach effectively and productively and for the student it helps to learn how to learn. These strategies are used to achieve the teaching objectives. Instructional learning strategies can be generally divided into two types:

Autocratic Strategies

These are traditional strategies of instruction, content oriented and teachers centered. The teacher is the supreme authority in the class and he/she enjoys the freedom to take decisions against any issues and to implement. Students are passive learners. Imposing knowledge forcefully is done by the teacher while using the autocratic strategies. The strategy itself suppresses the learner's interest, attitudes and needs.

Democratic Strategies

As the name indicates, the strategies come under this category will have democratic characteristics. The teacher is not dominated. Teacher and students have equal importance. The strategies are pupil oriented and exclusively designated for the cognitive, affective and psychomotor development of the learner. The role of the teacher and the learner is more specified and highlighted in most of the democratic strategies. Development of the constructive social capacity is the added quality of these type of strategies.

Components of Instructional Process.

The successful implementation of the various components of instruction at the most suitable time leads to the effectiveness of teaching. The necessary components of instruction include the following.

Setting the Instructional Goals.

This includes the formulation of objectives of instruction further leading to the outcomes of instruction. This may be cognitive, affective and psychomotor outcomes. The culminated effects of the changes in the three dimensions of the student personality lead to the all-round development of the personality. This is undoubtedly considered as the aim of education. The achievement of this aim starts from the formulation of instructional objectives by the teachers.

Implementing the Instructional Goals.

Teachers are entitled to implement the instructional goals formulated for the appropriate process of instruction. Depending on the nature and type of the instructional goals, the procedures used by the teachers to implement such goals become different. The skill of the teacher to select appropriate procedures for implementing instructional goals is having prime importance in the classroom process. This is because, these procedures are the ways to tackle the instructional goals.

Preparation of Instructional Materials and Resources.

Students need different types of materials and resources to complete the learning tasks specified in the procedures for implementing the goals. Teachers may design different strategies of instruction to implement. This implementation requires the development of instructional learning materials such as lesson plans, work books, hand books, textbooks, reference materials and the like.

Creating a Conducive Learning Climate.

It is highly important for implementing the goals and the development of instructional materials and resources for instruction. A learning climate is

the perception of the physical and non-physical elements of the class by the members. This perception has the crucial bearing with the process of instruction and its desired outcomes. The effectiveness of instruction and the outcomes directly related with the type of learning climate prevailing in the classrooms. Teachers are expected to create, maintain such classroom climate which will be conducive for effective learning and achievement.

The Class room Environment.

Effective teachers must create and maintain an environment in which learning can take place. Danielson (1996) found, planning classroom environments that allow for positive student learning experiences requires skill at

- *creating an environment of respect and rapport (Create caring teacher-student and peer relationships).*

- *establishing a culture for learning (Create an environment in which learning is valued and meaningful experiences occur).*

- *managing the classroom (Success at management of the business of the classroom).*

- *managing student behavior (Effectively responding to appropriate and inappropriate student behavior) and*

- *organizing physical space (Positive use of classroom space).*

Instructional Techniques.

Instructional techniques should be planned, which captivate the interest of the students and motivate them to learn. Techniques would include skills as questioning, using student ideas and contributions, and reinforcing. Danielson (1996) found that effective teachers plan and use instructional techniques that

- *communicate clearly and accurately (Use strong verbal and written communication skills)*

- *use effective questioning and discussion techniques (Use different types of questions and responses)*

- *engage students in learning (Actively involve students in learning)*

- *provide feedback to students (Provide information on progress) and*

- *are flexible and responsive (Spontaneously modify lessons based on feedback).*

Rationale of Instructional Strategies in English Classroom.

The teacher usually observes students' interaction and encourages all groups to work together effectively during the classroom activities. All students, but English language learners, need many and varied opportunities to practice their skills with assistance from the teacher as well as independently (Grabe, 1991; McLaughlin, 1987).Effective teachers have several ways to give students to enhance language skills. During the instruction, they ensure that there are enough exercises so that students have multiple chances of using the skill and receiving feedback as needed. English language learners face the double challenge of learning the academic content and the language in which they are presented.

Teachers have traditionally treated language learning as a process of imparting words and structures or rules for students, separated from the process of teaching content knowledge. Teachers must therefore provide opportunities to help students achieve their English language development by incorporating a variety of Instructional Strategies. English language learner in Cooperative Learning atmosphere is particularly successful when students of differing abilities work together in groups. Students learn to depend on each

other to complete a task who is advanced in level. The students are individually responsible for their tasks and work together to create a finished product in the group by contributing their pieces.

Cooperative Learning Strategies.

Cooperative Learning is an instructional strategy based on the human instinct of cooperation. It is the utilization of the psychological aspects of cooperation and competition for curricular transaction and student learning. The concept of Cooperative Learning refers to instructional methods and techniques in which students work in small groups and are rewarded in some way for performance as a group. The idea behind the Cooperative Learning method is that when group rather than individuals are rewarded, students will be motivated to help one another to master academic materials.

Cooperative Learning is a methodology that employs a variety of learning activities to improve students' understanding of a subject by using a structured approach which involves a series of steps, requiring students to create, analyze and apply concepts (Kagan, 1990). In all levels of education students taught by the Cooperative Learning pedagogy achieved greater academic, social and psychological benefits (Kohler & Strain, 1999; Ross, Seaborn, & Wilson, 2002; Whicker & Nunnery,1997).

Cooperative Learning utilizes ideas of Vygotsky, Piaget, and Kohlberg in that both the individual and the social setting are active dynamics in the learning process as students attempt to imitate real-life learning. By combining teamwork and individual accountability, students work toward acquiring both knowledge and social skills. It is a teaching strategy which allows students to work together in small groups with individuals of various talents, abilities and backgrounds to accomplish a common goal. Each individual team member is accountable for learning the material and for

helping the other members of the team learn. Students work until each group member successfully understands and completes the assignment, thus creating an "atmosphere of achievement" (Panitz, 1996).Slavin (1986) emphasized the applicability of Cooperative Learning to planning instruction on school subjects and formation of heterogeneous groups. Cooperative Learning is that Cooperative Learning methods are structured, systematic, and Instructional Strategies which are used at any grade level and in most school subjects.

Cooperative Learning(CL) refers to a set of highly structured, psychologically and sociologically based techniques that lead to learning and obtaining a learning goal (Oxford, 1997). CL has been proclaimed as an effective instructional method in promoting linguistic development of learners of English as a social language(Kagan, 1994).The effectiveness of Cooperative Learning has received more universal attention because many positive research findings on Cooperative Learning are illustrated in the literature. Many different researchers in different academic fields undertook experimental studies to compare the effects of the Cooperative Learning pedagogy and the traditional learning pedagogy on student learning and other outcomes.

Types of Cooperative Learning Strategies

Cooperative Learning can be used in various ways, including formal Cooperative Learning, informal Cooperative Learning, cooperative base groups, and cooperative structures.

Formal Cooperative Learning

In Formal Cooperative Learning, students working together, from one class period to several weeks to achieve shared learning goals by ensuring that they and their groupmates successfully complete the learning task assigned.

Any learning task in any subject area with any curriculum can be structured cooperatively. In formal Cooperative Learning groups, teachers

(a)   specify the objectives for the lesson.

(b)   make many pre-instructional decisions.

(c)   explain the task and the positive interdependence.

(d)   monitor students' learning and intervene within the groups to provide task assistance or to increase students' interpersonal and group skills, and

(e)   evaluate students' learning and help students process how well their groups functioned.

Informal Cooperative Learning

Lectures, demonstrations, films, and videotapes may be used effectively with informal Cooperative Learning groups in which students work together to achieve a joint learning goal in temporary, ad-hoc groups that last from a few minutes to one class period. During a lecture, demonstration, or film, quick informal cooperative groupings can be used to focus student attention on the material to be learned, to set a mood conducive to learning, to help set expectations as to what will be covered in a class session, to ensure that students cognitively process the material being taught, and to provide closure to the instruction session. Informal Cooperative Learning helps teachers ensure that students do the intellectual work of organizing, explaining, summarizing, and integrating material into existing conceptual structures during direct teaching.

Cooperative Base Groups

Cooperative base groups are long-term, heterogeneous Cooperative Learning groups with stable membership that last for at least a year and perhaps until all members are graduated. These groups provide students with permanent, committed relationships that allow group members to give each other the needed support, help, encouragement, and assistance to consistently work hard in school, make academic progress (attend class, complete all assignments, learn), and develop in cognitively and socially healthy ways (Johnson, Johnson, &Holubec, 1992; Johnson, Johnson, & Smith, 1991).

Cooperative Structures

To use Cooperative Learning,the majority of the time teachers must identify and cooperatively structure generic lessons and repetitive course routines. Cooperative Learning scripts are standard, content-free cooperative procedures, which proscribe student actions step-by-step, for either (a) conducting generic, repetitive lessons (such as writing reports or giving presentations) or (b) managing classroom routines (such as checking homework and reviewing tests). Scripted, repetitive cooperative lessons and classroom routines provide a base on which the cooperative classroom can be built. Once planned and conducted several times, they become automatic activities in the classroom. They can also be used in combination to form an overall lesson.

As teachers use formal, informal and cooperative base groups and generic cooperative structures such as learning scripts, they gain expertise and begin to automatically use Cooperative Learning as needed. When teachers achieve the routine-use level of teacher competence they can structure Cooperative Learning situations automatically without conscious thought or planning using various types of Cooperative Learning.

Essential components of Cooperative Learning

There are five fundamental elements involved in Cooperative Learning. The five basic elements of Cooperative Learning are:

- Positive interdependence

- Individual and group accountability

- Interpersonal and small group skills

- Face-to-face promotive interaction and

- Group processing

Positive interdependence

This is the first essential component of Cooperative Learning. Students need to be aware of the responsibility of learning and ensuring that other group members learn the assigned material. They need to be conscious that their success depends on the success of the others and vice versa. As Johnson, 1994) rightly pointed out, it is a "we sink or swim together" situation.

Johnson, et al.(1994) mention four ways in which positive interdependence can be established within a group:

i.   Positive goal interdependence

The teacher structures a clear group goal in his lesson which makes students feel they will achieve their learning goal only when all group members attain their goals.

ii.   Positive reward/ celebration interdependence

The same reward is given to each group member when the group goal is achieved. Alternately, when assessments on the lesson are done

individually, all members of a group may be awarded bonus marks if all members of the group attain a predetermined score.

iii.   Positive resource interdependence

The teacher may distribute the resources necessary for an assignment in such a way that it is necessary for members to pool the resources together to be able to work. For example, only one copy of the assignment task given to the group or giving the reading material to one member and the writing material to another.

iv.   Positive role interdependence

Each member is assigned complementary and interconnected roles. Such roles may be as reader, recorder, editor, checker of understanding or even group coordinator.

Face to face promotive interaction

As positive interdependence is established, it brings a second essential component of Cooperative Learning: promotive interaction. This refers to students helping each other to succeed thus fostering a caring and committed relationship towards others. They may even go beyond helping and where the need arises encourage and accompany other members towards success.

According to Johnson,et al.(1994), face to face promotive interaction results in individuals:

- Providing efficient and effective help and assistance to each other

- Exchanging needed resources such as information and materials

- Processing information efficiently and effectively

- Providing feedback to subsequently improve performance

- Challenging each other's conclusion to promote higher quality decision making

- Encouraging each other to achieve mutual goals

- Acting in trustworthy ways

- Striving for mutual benefit and

- Supplying a moderate level of arousal with low levels of anxiety and stress.

Individual accountability/ Personal responsibility

The purpose of Cooperative Learning is to enhance the learning both for the group and for the individual. This purpose is achieved when each member, as an individual, does his fair share of the work. Therefore, it is essential to assess not only the group but also the individual and his personal contribution to learning both for the group and for himself.

According to Johnson,et al. (1994), common ways to structure individual accountability include:

- Keeping the size of the group small for greater individual accountability

- Give individual assessment to students after having learnt in group

- Randomly calling a student to present the group's work orally

- Observe and record frequency with which each member contributes to the group's work

Interpersonal and group skills.

Cooperative Learning requires students to interact with each other. However, they might not know instinctively how to interact with each other correctly. Johnson and Johnson (1991), as quoted by Johnson, et al. (1994), rightly stated that teachers giving more importance to teaching and rewarding the use of social skills leads to higher achievement in Cooperative Learning.

Use of social skills can easily be assessed while assessing individual accountability. Simple rewards may be in the form of bonus marks when, for example, all members of the group use at least 4 of 6 social skills that the teacher taught. Johnson, et al. (1994) listed the following social skills that are essentials for Cooperative Learning to be efficient:

- Students must get to know and trust each other

- Students must communicate accurately and unambiguously

- Students must accept and support each other

- Conflicts to be resolved constructively

Group processing

It is important for teachers to allocate some time for groups to have a reflection on how well they have functioned. This will allow students to assess each other's actions in the groups and make decisions about whether to maintain current working relationships which are effective or to change certain behaviours to improve efficiency and effectiveness of the group in achieving its goal. This reflection also allows members to:

- Assess the participation of the other members in the group's work

- Receive feedback on their own participation

• Maintain their involvement in the reflection process

• Communicate clear expectations about the group work

Theoretical foundations of Cooperative Learning

The theories of Cooperative Learning consist of : Social Interdependence Theory, Cognitive Development Theory, and Behavioural Learning Theory(Johnson & Johnson, 1999).

Social Interdependence Theory

According to Johnson, Johnson, and Holubec (1998), the premise of Social Interdependence Theory is that "the way in which social interdependence is structured determines how individuals interact with and determines outcomes" .In short, the Social Interdependence Theory (Johnson & Johnson, 1999) puts emphasis on learning within a social context. Social Interdependence Theory states that intrinsic motivation and interpersonal drives are the foundation of CL(Johnson & Johnson, 1999). Vygotsky (1978) states: "Every function in the child's cultural development appears twice: first, on the social level, and later, on the individual level; second, between people (inter psychological) and then inside the child (intra psychological)" .Vygotsky further indicates that people can learn through interaction with parents, teachers, peers, and their environment; thus, group activities can achieve the best learning development for individuals. As a result, one of the responsibilities for teachers is to design social and interactive activities in their curriculum to enhance students' maximum learning.

Cognitive Development Theory

The premise of the Cognitive Development Theory is "when individuals cooperate with the environment, socio-cognitive conflict occurs, thus creating cognitive disequilibrium, which in turn stimulates perspective-

taking ability and cognitive development" The assumptions of the theory focus on "what happens within a single person" (Johnson, Johnson, &Holubec, 1998,) In addition, the theories of Piaget and Vygotsky are the center of Cognitive Development Theory (Johnson & Johnson, 1999).

In a few words, the Cognitive Development Theory point out that learning is associated with cognitive development(Johnson & Johnson, 1999). Learning will be meaningful if the students can actively participate in the learning process instead of just passively absorbing material. Learning involves perception, acquisition, organization, and storage of knowledge. One of the tasks of CL in Piaget's theory is to facilitate students' intellectual development through discussion and negotiation with their peers to reach a consensus in their group. Thus, in Piaget's theory, not unlike Social Interdependence Theory, active participation is crucial to the learning process.

Vygotsky (1978) believes that learning can be produced from the correlation between social interactions and cognitive development. According to Vygotsky, only when children interact and cooperate with their peers and other people in their environment, can learning work in the internal developmental processes (Johnson & Johnson, 1999). In other words, in Vygotsky's theory, social interaction is important to increase cognitive development.

Behavioural Learning Theory

Johnson, Johnson, and Holubec (1998) note that the assumption of the Behavioural Learning Theory is "actions followed by extrinsic rewards are repeated" .The foundation of this theory is that "cooperative efforts are powered by extrinsic motivation to achieve group rewards" .

In brief, in the Behavioural Learning Theory, extrinsic motivation drives cooperative efforts through mutual concern, collaboration, and

encouragement (Johnson & Johnson, 1999). Behaviourist theory considers that language and knowledge develops from learning experience. CL tends to provide learners with better conditions for learning (Osgood, 1957).

Cooperative Learning Methods

Research on Cooperative Learning is one of the greatest success stories in the history of educational research (Slavin, 1992). Cooperative Learning Methods may be quite informal, as when students are simply allowed to do their individual work together or they might be structured, with specific ways of forming teams, team structures and team assessment. There are different Cooperative Learning methods which used different learning strategies.

Learning Together (LT)

The Learning Together model of Cooperative Learning was developed by David Johnson and Roger Johnson (1975) at the University of Minnesota. This is the most widely used and evaluated of all Cooperative Learning methods. The Cooperative methods they have researched involves students working in four or five members heterogeneous groups on assignment sheets. The groups hand in single sheet, and receive praise as a group based on how well they do the group task.

Group Investigation (GI)

Group Investigation developed by ShlomoSharan and Yael Sharan (1976) at the University of Tel Aviv, is a general class room organisation plan in which students work in small groups using Cooperative inquiry, group discussion and Cooperative planning and project. In this method, students form their own two-to-six members groups. The groups choose sub topics from a unit being studied by the entire class, further break their sub topics into

individual tasks.   The group then makes a presentation or display to communicate it's finding to the entire class.

Student Team Learning (STL)

The most extensively researched and widely used Cooperative Learning techniques are the Student Team Learning Methods developed by Robert Slavin, David De Vries and Keith Edwards at Johns Hopkins University (Slavin, 1980). Important Student Team Learning methods, now in widespread use are Jigsaw I, Student Teams-Achievement Divisions (STAD), Teams-Games-Tournaments (TGT), Team-Assisted Individualization (TAI) and Jigsaw II.The methods are described as follows:

a) Jigsaw I

The Jigsaw method (Aronson, 1978) is a Cooperative Learning Technique in which students work in six members teams to study texts, usually Social Studies or science. Academic material is broken down into five sections. Each team member reads his or her unique section. Then, members of the different teams, who have studied the same sections meet in expert groups to discuss their section. Then the students return to their teams and take turns teaching their team mates about their section

b) Student Teams Achievement Divisions (STAD)

In Student Teams - Achievement Divisions or STAD (Slavin, 1980), each week the teacher introduces new materials, in a lecture or discussion. The team members then study work sheets on the materials. They take turn quizzing each other, or discuss problems as a group or use whatever means they wish to master the material. The students are given work sheet answer sheets, so their task to learn is clear to them.   Following team practice students take quizzes on the materials they have been studying. The scores on

the quizzes are formed into team scores by the teacher. Improvement Point System in STAD has been shown to increase students' Academic performance. The team with the highest scores are recognised in a weekly one-page class news-letter. This strategy is discussed in detail in the following section.

c) Teams Games Tournaments (TGT)

Teams - Games - Tournaments or TGT (DeVries, 1980) uses the same teams, instructional format and worksheets as STAD. However, in TGT, students play academic games to show their individual mastery of the subject matter. The games are played in weekly tournaments, with members of other teams. The competition take place at tournament tables of three students. The tournament table assignments are changed every week. After the tournament team's scores are figured and a newsletter recognizes the highest scoring teams and tournament table winners.

d) Team - Assisted Individualisation (TAI)

Team-Assisted Individualisation (TAI) is a strategy among the Student Team Learning Methods (Slavin, 1984). It is a combination of team learning and individualized instruction applied to the teaching of Mathematics. In TAI also, students are assigned to four or five-member heterogeneous teams. Students follow a regular sequence of activities, involving reading and instruction sheets.Team mates works in pairs, exchanging answer sheets and checking each other's skill sheets and checkouts. Students' test scores and the number of tests they can complete in a week go into a team score and team members receive certificates for exceeding pre-set team standards.

e) Jigsaw II

A modification of Jigsaw I was developed by Slavin (1988) at Johns Hopkins University and thus incorporated in the Student Team Learning Program. In this method called, Jigsaw II, students work in four-or-five members teams. Instead of each student having a unique section, all students read a common narrative, such as a book chapter, or a short story. However, each student is given a topic on which to become an expert. The students who had the same topics meet in expert groups to discuss them and then return to their teams. The students take individual quizzes, which are formed into team scores and the highest scoring teams and individuals are recognized in a class news letter.

f) Cooperative Integrated Reading and Composition (CIRC) and Bilingual Cooperative Integrated Reading and Composition (BRICK)

Cooperative Integrated Reading and Composition (CIRC) is developed by Madden, (1986). Cooperative Integrated Reading and Composition, used in grades two to eight, utilizes activities based on research on reading comprehension and writing strategies. Students work in four members heterogeneous learning teams in which the students work together to plan, draft, revise edit and publish composition in a variety of types. Bilingual Cooperative Integrated Reading and Composition (BRICK) developed by Farnish (1998) adds to the CIRC structure several adaptations to make it appropriate to Bilingual settings.

g) Numbered Heads Together (NHT)

Cooperative Learning Technique namely, Numbered Heads Together have been developed by Olsen and Kagan (1992). It is a way of reviewing information that has been previously presented through direct instruction or

test. Divide the students into groups of four and have them number off from one to four. There are four steps in Numbered Heads Together;

(i)   Each student in a group of four gets a number of 1,2,3 or 4.

(ii)   The teacher or a student ask a question based on the text, the class is reading.

(iii)   All members in the group put their heads together to come up with an answer or answers.

(iv)   The person with that number answers for the group.

  h)   Think Pair Share (TPS)

Think Pair Share (TPS) is a mode of Cooperative Learning developed by Andrini (1994). In this model, students pair with a partner to share their responses to a question. Students are then invited to share their responses with the whole class. There are a variety of ways to share, including stand up and share – everyone stands up and as each student responds he or she sits down. Anyone with a similar response also sits down. It will continue until everyone is seated or does a 'quick whip' through the class in which students respond quickly one right after another.

  i) Complex Instruction (CI)

The Cooperative Learning method of Complex Instruction was developed by Cohen (1998). The programme is a set of Cooperative Learning approaches focused on Spanish bilingual students. It provides students with a series of activity cards on English and Spanish, which direct them to do experiments, take measurements, solve problems, and so on. Students work in small, heterogeneous groups to do experiments and answer questions intended to evoke high level thinking and build language fluency in first Spanish then

English. Complex Instruction adds to a group structure, in which students take on specified roles and learn group process skills. It emphasizes positive expectations for all students.

j) Turn to Your Neighbour (TYN)

In the Cooperative Learning method, Turn to Your Neighbor, students pair up with another student to discuss an idea, to write or to draw as instructed by the teacher. They may be asked to share their work with the class.

k) Pairs of Pairs (PP)

In this method, students write out a list of responses to a question statement such as all the states and their capitals, I know. They first work in pairs and make one list. Two pairs get together and make a single combined list. All the members of the group are responsible to know what is in the list.

l) Inside Outside Circle (IOC)

Inside Outside Circle is a Cooperative Learning method in which students stand in pairs in two concentric circles. The inside circle faces out; the outside circle faces in. Students respond to teacher's question as they rotate to each new partner.

Teacher in Cooperative Learning Classroom

McDonell mentions five roles of teacher in CL, as follows:

The Teacher as Inquirer

CL teachers are continually examining and questioning their beliefs, values, and assumption. Examining attitudes and values held about their culturally diverse learner, race, class, and minority languages is particularly important in the context of teaching in a multilingual, multiracial classroom.

These beliefs, values, and assumptions strongly affect teachers' educational philosophy and their instructional practice.

The Teacher as Creator

Since the cooperative classroom is process oriented, teachers interested in effective group work must realize that the learning environment is highly structured and well organized. Key for structuring a successful CL classroom is found in creating the social climate, setting goals, planning and structuring the task, establishing the physical arrangement of the classroom, assigning students to groups and roles, and selecting materials and time (Johnson, et al., Kessler, 1992).

The Teacher as Observer

Watching and listening to students are natural activities in every teacher's day. Such activities can be formal and informal, planned or unplanned. Observation is the basis of decision making about each learner's progress. It also provides the rationale for specific programming. And observation is an integral part of the teaching process. Cooperative small group learning provides the teacher with the opportunity to observe, reflect, and intervene in supportive ways.

The Teacher as Facilitator

The role of facilitator means that the teacher is prepared to step aside to give the learner a more meaningful role. Effective facilitators are prepared to intervene and assist in the problem-solving process. They support and encourage the learner's desire to learn.

The Teacher as Change Agent

Because ofthe observing, questioning, and learning, a more complete teacher can be found out, a teacher who knows and does. More importantly, because of having studied learners and the classroom environment, teachers have begun to examine themselves as part of the context and the way they teach. Such teacher inquiry lends itself to educational reform from within.

The Importance of Cooperative Skills

Numerous interpersonal skills affect the success of collaborative efforts (Johnson, 1991, 1993; Johnson & Johnson, 1991; Johnson &Johnson, 1994). Which cooperative skills teachers emphasize in their classes depends on what their students have mastered. As teachers observe and monitor their students working in Cooperative Learning groups they notice where students lack important skills. There are four levels of cooperative skills:

1. *Forming* – the bottom-line skills needed to establish a functioning Cooperative Learning group.

2. *Functioning* – the skills needed to manage the group's activities in completing the task and maintain effective working relationships among members.

3. *Formulating* – the skills needed to build deeper-level understanding of the material being studied, to stimulate the use of higher-quality reasoning strategies, and to maximize mastery and retention of the assigned material.

4. *Fermenting* – the skills needed to stimulate re-conceptualization of the material being studied, cognitive conflict, the search for more information, and communication of the rationale behind one's conclusions.

Importance of Cooperative Learning(CL) in English classroom.

Cooperative Learning structures were implemented into the English language curriculum. Students were observed throughout the study on the following areas of participation: being on-task, contributing ideas, helping classmates, and asking for help. Cooperative Learning is one of the main Instructional Strategies that can be used to promote positive social interactions and to create an appropriate learning environment for English language students. Language learning is a social event that varies across communication contexts. Having equal opportunities to participate in activities involving the practice of these variations will help English language learning increase language skills across many contexts successfully, including casual conversations or academic writing (Smith, Butler, Griffith, &Kritsonis, 2007).CL is a group of strategies that address both conceptual learning and social development (Ghaith,2003). The use of cooperative approaches has shown significant results within classrooms regarding English language learners' social and academic language achievement (Ovando, Combs, & Collier, 2006).

Numerous studies have stressed the positive effects that Cooperative Learning has on academic achievement (Rojas-Drummond, Hernandez, Velez, & Villagran, 1998; Ferguson-Patrick, 2007) and social interaction (Jordan & Le Métais,1997; Vasileiadou, 2009; Choi, Johnson, & Johnson, 2011) among other outcomes. Cooperative Learning has become such a widely used instructional procedure in all educational contexts that it is even difficult to find instructional material that does not refer to this methodology (Johnson, Johnson &Stanne, 2000).The effects of Cooperative Learning on achievement in comparison to competitive and individualistic methods (Johnson, Maruyama, Johnson, Nelson, &Skon, 1981) is widely acclaimed.Accordingly, the use of CL in English language students'

environments has shown effectiveness in promoting vocabulary acquisition, academic English development, and positive interdependence. The benefits are maximized when teachers develop a broader understanding of academic language; and consider the context in which interactions occur (Jacob, 1996).

Cooperative Learning has emerged as a significant concept and instructional practice in the field of second language education. Attention has been paid to the pedagogical and psychological rationale of its use in second language classrooms (Long & Porter, 1985) and to possible benefits it might have in bilingual programs and second or foreign language settings (Coelho, 1992, 1994; Cohen, 1994; Holt, 1993; Kessler, 1992; McGroarty, 1989, 1992). Instructional processes and planning of second language education are also compared with those of Cooperative Learning methods to see if there are any parallels (McGroarty, 1993).

Teachers who include the use of social language and cooperative groups in their classrooms help students to develop both social and academic language proficiency in a more meaningful manner (Ovando, et al., 2006).More importantly, Cooperative Learning involves the four models of language, speaking, listening, reading, and writing. Cooperative Learning has shown effectiveness in improving reading achievement in English as foreign language environments when compared to regular textbook instruction (Ghaith, 2003).

Cooperative Learning has proven to be effective for all types of students, including academically gifted, and mainstream students because it promotes learning and fosters respect and friendships among diverse groups of students. In fact, the more diversity in a team, the higher the benefits for each student. Peers learn to depend on each other in a positive way for a variety of learning tasks in the sense that weaker students are ready to learn from the higher achievers and the latter is ready to share with the weaker

students (Colorado, 2007).According to Jacob and Mattson (1987), Cooperative Learning methods provided a way to help academically and develop the English language skills necessary for successful classroom. Slavin (1991) points out that numerous research studies have revealed that students completing CL group tasks tend to have higher academic test scores, higher self-esteem, greater numbers of positive social skills, and greater comprehension of the content.

Recent research and experience in language classrooms have established the benefit of small-group activity in expanding student exposure to a new language and in providing many more opportunities to practice the language naturally than are available in traditional, whole-group instruction (McGroarty, 1993). Student participation in pair and small-group work following cooperative methods facilitates second language acquisition along with the subject matter mastery (McGroarty, 1991). For these reasons, educators concerned with building students' second language skills would benefit from learning about Cooperative Learning techniques.

Cooperative Learning is a beneficial strategy for English language students (McGroarty, 1993). Most studies on the effects of CL have consistently indicated that this method improves students' English oral skills (Pattanpichet, 2011) English reading comprehension (Bolukbas, Keskin, &Polat, 2011; Meng, 2010; Law, 2011) and English writing (Roddy, 2009). In a Cooperative Learning class, students with different strengths and weaknesses can work with each other. This can help teachers to solve the problem of heterogeneity in English classroom. These studies have shown that Cooperative Learning activities give students much more opportunity to use the new language than they typically receive in teacher-centered instruction.

Student Teams Achievement Divisions (STAD).

STAD is one of the most widely used strategies developed in 1994 by Robert Slavin and his colleagues at John Hopkins University. Perhaps the most important model of cooperative learning. which is very much used by teachers, is STAD. STAD is a method in which students master the materials through group learning and the group is responsible for their members. STAD is an ideal framework if the goal is mastery of content and has been shown through research (Sharan & Sharan, 1992; Johnson & Johnson, 1999). STAD emphasizes team rewards (group coring), which account for performance gains (Slavin, 1980). It is a form of teamwork that consists of four or five students representing a cross-section of the class in terms of academic achievement, gender, race, or ethnicity (Slavin, 1995: 71). Slavin (1995: 71) also notes that STAD is one of the simplest of all cooperative learning methods and is a good model for teachers who are new to a Cooperative Learning methods.

Components of STAD.

STAD consists of five major components (Slavin, 1995) as follows:

Class Presentation.

Material in STAD is initially introduced in a class presentation, this is most often direct instruction or a lecture discussion conducted by the teacher, but could include audiovisual presentation. Class presentations in STAD differ from usual teaching only in that they must be clearly focused on the STAD unit. In this way, students realize they must pay careful attention during the class presentation, because doing so will help them do well on the quizzes, and their quiz scores determine their team scores.

Teams.

Teams are composed of four or five students who represent a cross section of the class in terms of academic performance, sex, and race ethnicity. The major function of the team is to make sure that all the team members are learning, and more specifically, to prepare its members to do well on the quizzes. After that the teacher presents the material, the team meets to study worksheets or other materials. Most often, the study involves students discussing problems together, comparing answers, and correcting any misconceptions if teammates make mistakes. The team is the most important feature of STAD. At every point, emphasis is placed on team members doing their best for the team, and on the team doing its best to help its members. The team provides the peer support for academic performance, and the mutual concern and respect that are important for such outcomes as intergroup relations, self-esteem, and acceptance of mainstream students.

Quizzes:

After approximately one to two periods of teacher presentation and one or team practice, the students take individual quizzes. Students are not permitted to help one another during the quizzes. Thus, every student is individually responsible for knowing the materials.

Individual Improvement Scores.

The idea behind the individual improvement scores is to give each student a performance goal that can be attained if she or he works harder and performs better than in the past. Any student can contribute maximum points to his or her team in this scoring system, but no student can do so without doing his or her best work. Each student is given a "base" score, derived from the student's average past performance on similar quizzes. Students then earn points for their teams based on the degree to which their quiz scores exceed

their base scores. Three levels of award are given for the groups who got improvement score from improvement score average for each group. The three criteria are below:

15 – 19   Good Team.

20 – 24   Great Team.

25 – 30   Super Team.

Team Recognition

Teams may earn certificates or other reward if their average score exceed a certain criterion. Student's team score may also be used to determine up to twenty percent of their grade. The team that has improved the most is given most recognition.

Significance of the STAD Strategy in education.

- Student Team Achievement Division (STAD) is one of the most significant CL approaches, which has been influential in bringing about positive effects in multiple grades and subjects.

- STAD provide a useful instructional method that can be adapted for the use of Cooperative Learning to improve students' learning achievement.

- STAD is one of the simplest Cooperative Learning methods and designed for teaching in many subject areas.

- The STAD method helps to develop students' realization of the value of working together, including helping classmates to master the learning content. This can lead to their own success and the better performance of the team.

- In STAD, there are equal benefits for high, average and low achieving students. STAD is most appropriate for teaching well-defined objectives, for example, mathematical computations and applications, language usage and mechanics.

Principles and Characteristics of STAD Strategy.

The basic principles of Cooperative Learning as follows:

Each member of the group are responsible for

- everything that is done in a group.

- should know that all the group members have similar goals.

- has to split the duties and responsibilities equally among group members.

- will be evaluated.

- has to share leadership skills and need to learn together during the learning process.

- individually accountable for the material handled in a cooperative group.

Advantages and Disadvantages of STAD Strategy.

A learning strategy has advantages and disadvantages. STAD has several advantages (Slavin, 1995:17) as follows:

- Students work together in achieving its objectives by upholding the norms of the group.

- Actively assist and motivate students to succeed shared passion.

- Active role as a peer tutor to further enhance the success of the group.

- Interaction among students with increasing their ability to argue.

In addition, STAD also has disadvantages, according to the (Slavin,1991)concluded as follows:

- Require a longer time for the students, so it is difficult to achieve the target curriculum.

- Require a longer time for teachers so that teachers generally do not want to use Cooperative Learning.

- Require special skills of teachers so that not all teachers can do Cooperative Learning.

- Specific nature of students' demands, such as the nature of love to work together.

Significance of STAD strategy in English Language Classroom.

Bibi (2002) reported that teaching English grammar through group work activities played a positive role in improving the academic achievement, the four language skills of the students studying English at elementary as well as secondary stage. Numerous studies have been carried out to improve student literacy by STAD, so most of these studies were conducted according to the nature of experimental teaching. STAD strategy is more effective in reading (Warawudhi 2012; Cahyani 2013; Aliya 2012). Inclusion of STAD strategy is the best ways to achieve four language skill development.

Cooperative Learning methods like STAD have been proven to be successful among a wide range of subjects and at different age levels. Slavin

(1995) claims that STAD is the most heavily researched of the entire Cooperative Learning methods and the positive effects have been consistent in all subjects. The greatest positive effects on student learning occur when groups are recognized or rewarded based on the individual learning of each of the group members. In STAD, there are equal benefits for high, average and low achieving students in comparison to their counterparts in control groups. In addition, STAD is useful for the English classroom that has different levels of proficiency because it benefits both high and low achievers. Nath, Ross and Smith (1996) reported that students are more enthusiastic toward learning when using STAD than when doing individualized seat work. For high achievers, they have improved social and communication skills, enthusiasm in helping friends, and improving skills in working with low achieving students. For low achievers, they have improved self-esteem and motivation, higher level of enthusiasm, gains in performance, and willingness to participate in learning and obtain a sense of belonging and identity within the group, and better understanding of subject matter, leading to student's grade improvement. Students like STAD because it gives them the opportunity to interact and socialize with others and to feel that English language learning is more interesting and less boring than just sitting and listening to lessons.

Slavin (1995) also points out that STAD is most appropriate for teaching well defined objectives in language usage and mechanics. In STAD, students are assigned to groups of four. Each group consists of members of mixed ability levels, mixed gender, and ethnicity. The interaction between the team members has the possibility to communicate language skills. STAD can motivate students to encourage and help each other to master skills presented by the teacher. If students want their team to get a team reward, they must help each other to learn and support members in the team to do their best to get the reward. However, students must also do individual quizzes without any help from teammates which will show their individual accountability.

This motivates students to explain to each other clearly so that each member understands the material before taking the individual quizzes. Each member should ensure that they understand the materials before doing the individual quizzes. The latest scores in the latest quiz will be calculated and compared to the previous scores to find the improvement scores for the team. Moreover, the team scores are based on the improvement scores from all members in the team. Thus, each member has an equal opportunity for success to improve their scores for their team. In addition, students can score better than the last base score. In other words, the improvement scores depend on how much better the teammates can score than in the past.

Many studies have explored the effectiveness of Cooperative Learning in different fields of study besides languages, such as mathematics, science, language arts, or social studies. However, there are an increasing number of research studies on Cooperative Learning in the field of language learning. Student Teams Achievement Division Strategy of cooperative learning has been used for many different purposes, including academic achievement.

Rationale of STAD Strategy on Self Regulation

Self-regulation (SR) is recognized as an important predictor of academic motivation and achievement of students. This process requires that students plan, monitor, and evaluate their learning independently. Effective self - regulation has been associated with a number of positive results, including the maintenance of mental health and mental well - being, increased performance in school and work, and positive relationships (Aspinwall 2004, Forgas, Baumeister & Tice 2009, Ibaňez (2005) Effectiveness of self-regulation has been reflected in the control and control of processes such as thinking, emotions, attention and concentration (Beckmann & Kellmann, 2004, Harris, Friedlander, Sadler, Frizzelle & Graham, 2005) and evaluate their academic progress (De Bruin, Thiede & Camp, 2011). Teachers should

therefore be familiar with the factors that influence the learner's ability to self-regulation and the strategies by which they can identify and promote self-regulated learning (SRL) in their classrooms.

Self Regulation is a key construct for healthy and adaptive child development. A successful regulation of one's own behavior is associated with the executive function, a primary cognitive construct (Shonkoff & Phillips, 2000; Zelazo, Muller, Frye & Marcovitch, 2003). Self-regulation refers to a complex of acquired, intentional abilities associated with the control, control and planning of cognitions, emotions and behavior (Schunk & Zimmerman, 1997). Self-regulation is an essential ability of children to deal with various development policy challenges. Social cognitive theory emphasizes the importance of self-regulation as it acts as a bridge between external factors and internal actions of an individual (Bandura, 1989). In this case, the self-regulated learning itself is not a particular mental ability or academic ability such as reading ability, but it is a self-directional process in transforming mental abilities into certain academic abilities.

Rai and Samsuddin (2007) said that Student Teams - Achievement Divisions (STAD) are one of the learning strategies that are based on cooperative learning and which promote co - operation and Self - Regulatory Learning skills. According to Kerlin (1992, Sumarmo, 2002), Self-Regulated Learning is the process of carefully designing and supervising the individual himself to cognitive and affective abilities in solving an academic task. STAD strategy provides opportunities for improving the self-regulation of students.

Technology Enriched Task Based Language Teaching

The investigator has given a brief theoretical overview of Technology Enriched Task Based Language Teaching is the second strategy used under Instructional Strategies in the following sections.

Benefits of Technology Enrichment in English Classroom

Several studies have the advantages of technology for language learning. These studies cover different aspects of learning, as outlined in the following sections. The novelty of innovative technologies or the experience of learners of these technologies in the classroom can to improve the commitment and motivation of learners in the performance of tasks (DEECD 2010). Galavis (1998) and Dunken (1990) assert that the use of technology enhances learners' language proficiency and their overall academic skills. Another advantage of using technology is the encouragement of collaboration and communication learning activities. According to Gillespie (2006), new technologies allow students to information and interact with resources, such as images and videos. Murphy (2006) states that Internet can serve not only as a source of reference but also as a means of communication. It is argued this technology allows the user to connect to the world outside the classroom and thus produce quality work meaning that the work will be perceived by a wide audience. Riasati, Allahyar & Tan (2012). Braul (2006) study that showed that using computers in language classrooms brought variety into the classroom atmosphere, developed learners' particular language skills and increased learner autonomy. Technology has the potential to influence the quality of instruction in creative ways that challenge the young minds of our children (Kuforiji, 1999).

New technology-enriched classroom systems have become popular for language learning in recent years. With the rapid development of science and technology, the emergence and development of multimedia technology and its application to teaching, featuring audio, visual and animation effects, Teaching in English class and establishes a platform for reform and exploration on the model of teaching English in the new era. There is evidence that multimedia technology plays a positive role in promoting

activities and student and teaching effect initiatives in English classes. Technological innovations went hand in hand with the growth of English and change the way we communicate. It is fair to say that the growth of the Internet has facilitated the growth of the English language and that this has happened at a the time when computers are no longer the exclusive domains of a few, but rather available to many. With this, there has been a tremendous proliferation of literature regarding the use of technology in teaching of the English language (Shyamlee, 2012).

New technologies develop and disseminate so quickly that we cannot avoid their attraction and influence in any form. There are many techniques that apply to varying degrees to the language learning situation for learning and teaching English. New technologies are developing and diffusing so rapidly that we cannot avoid their attraction and influence in any form. There are many techniques applicable in various degrees to language learning situation for English language learning and teaching.

Types of Technology Used In The Classroom

The technology that has permeated every day of our lives also has the field of education. There are number of technological devised used in the classroom. Students like to interact with the technology-based educational tool. Some of the technologies used in the classroom are described below.

Utilization of computers in the classroom

Computers have developed and they have transformed they way the look and the way they work. Presently days we have both desktop computers and compact computers ordinarily known as scratch pad or portable workstations. New advances have likewise risen and birthed some new Computers related devices like the iPad or Galaxy tablet. These Computers can be utilized by teachers to allocate work to students and study bunches in a

classroom. Additionally teachers can utilize computers to delineate visual related subjects which help students to learn effortlessly. Current computers accompanied introduced applications which can help students concentrate well. For instance, students can utilize web wayfarer to look the web, they can utilize word preparing application to compose notes. Teachers can likewise help their students to learn convoluted applications on these computers as a method for making it less demanding for students to learn and furthermore make the teacher's occupation simpler.

Utilization of digital microphones in the classroom

Large classrooms are characterized by endless noise, so teachers can resort to these wireless digital microphones. The receiver will transmit the voice to the uproarious speakers and each student will hear their teacher unmistakably. This helps the teacher not to strain their voice while attempting to disclose focuses to their students. the digital microphones are not very costly so even a little salary creating school can figure out how to purchase a remote mouthpiece for each classroom. Likewise students can utilize a similar microphones when making inquiries to their teachers in class, or when they are explaining a subject to their fellow students during classroom debate.

Utilization of Mobile devices

Teachers and students can utilize smart phones for academic purposes in the classroom. Mobile learning(ML) is becoming so admired. ML is advantageous on the grounds that it is available from anyplace. Cell phones are light yet they can likewise have a similar application a basic computer can have, an student can get to scholastic data like assignments by means of an educational mobile application . Videos related with their subjects , pictures are likewise displayed in the classroom with the assistance of cell phones

.Smart phone utilized it gives another regard for learn diverse applications for helping their four skills improvement in English language .

Utilization of smart interactive Whiteboards

Modern smart white boards have a touch screen functionality, so the teacher can outline focuses utilizing a pen or their finger. Using a projector, teachers can display visual images on these white boards which improves the learning process. Students will take in more effectively with visual pictures. Likewise students can utilize a white board to draw, compose or control pictures. It is very useful in a large classroom for teaching English .

Utilization of online Media

Teachers and students can both utilize web based Medias to learn in the classroom. With the help of a projector, a computer, an internet and a whiteboard, a teacher shows an example in real time with sites like Youtube.com. This website contains videos that can be used for academic reference purposes. For language teachers, a visual element increases the possibilities of using any text in the class. In other words, there are more things can do with words and pictures than with simple words.lot of online resources available for learners and teachers in internet such as easyworldofenglish.com an attractive, user-friendly website including grammar, pronunciation, reading and listening practice and an interactive picture dictionary.

Utilization of LCD Projector

In the age of technology, an LCD projector is essential in a classroom. It is a powerful tool because it allows a single computer to become a powerful tool in a large group. A teacher can gather a whole lesson on a Power Point presentation and actively engage his students in the lesson by installing it on

the LCD projector. Teachers use LCD projectors to show videos in the classroom.

History of Task Based Language Teaching

With the advent of Communicative Language Teaching (CLT) approach in the early 1980's and much emphasis on learners' communicative abilities over the last two decades, the term Task Based Language Teaching (TBLT) came into prevalent use in the field of second language acquisition in terms of developing process-oriented syllabus and designing communicative tasks to promote learners' actual language use (Jeon & Hahn, 2006). Task-based Instruction (TBI) based on the constructivist theory of learning and communicative language teaching methodology has evolved in response to some limitations of the traditional Presentation, Practice, Performance (PPP) approach (Long & Crookes, 1991; Ellis, 2003). Ellis (1999) on the other hand, pointed out that the theoretical base of task-based approach is Input and Interaction Theory. Yet, it is clear that the current interest in tasks stems largely from "the communicative approach" to language teaching (Cheng-jun, 2006). Task-based learning has become an orthodoxy in contemporary EFL teaching and in recent years has been exported to many countries around the globe. Much has been written about definitions of task and the role of tasks in second language acquisition (e.g. Ellis 2000; Skehan 1996), as well as the di.erent stages in task-based lessons (Willis 1996), and task types (Skehan and Foster 1997).

Task-based language teaching can make language learning in classrooms "closer to the natural route and may reach a higher rate of language acquisition because it provides learners with a clear communicative goal, interaction is needed to reach the goal, and comprehensive input can occur, and then language acquisition is facilitated" (Wang, 2006). The first person who has applied TBLT to teaching programs and practice is Prabhu

(Wang, 2006). Therefore; Prabhu is thought to be the originator of TBLT. Prabhu (1987) defined task as 'an activity which require learners to arrive at an outcome from given information through some process of thought, and which allows teachers to control and regulate that process' (Van den , Branden & others, 2006).

Besides Prabhu, Nunan (1989) acknowledged the special nature of classroom- based interaction defining a task as "a piece of classroom work that involves learners in comprehending, manipulating, producing or interacting in the target language while their attention is focused on mobilizing their grammatical knowledge in order to express meaning, and in which the intention is to convey meaning rather than to manipulate form". TBLT is an instructional strategy to teaching a second / foreign language that seeks to engage learners' interactional authentic language use by having them perform a series of tasks. It aims to both enable learners to acquire new linguistic knowledge and systematize their existing knowledge (Ellis, 2003). Task-based learning is advantageous to the learner as it is more learner-centered. Although the teacher may present language in the pre-task, the students are free to use what they want. This allows them to use all the language they know and are learning, rather than a single construct. Furthermore, as the tasks are supposed to be familiar to the students, students are more likely to be engaged, which may further motivate them in their language learning. A classroom task is defined as an activity that (a) is goal-oriented, (b) is content focused, (c) has a real outcome, and (d) reflects real-life language use and language need (Shehadeh, 2005).

Communicative Approach and TBLT

Communicative Language Teaching (CLT) aims to develop the ability of learners to use language in real communication. It is directed at enabling learners to function interactional and transactional in an English Language. In

recent decades, CLT has evolved in response to changing views on the nature of communicative language use and the abilities that underlie it. Though task-based teaching is not the only way of achieving a strong version of CLT, it has been an interesting development of CLT (Ellis, 2003).

TBLT is a kind of "strong version" of CLT, whereby language is applied primarily by focusing on communicative meanings (Larsen-Freeman & Anderson, 2000). In TBLT, students have a much more varied exposure to language and can use any of language forms. The other advantage of TBLT is that, depending on the level of difficulty for students, it is classified into tasks in terms of the type of task, topic or topic, and sequencing criteria. (Ellis, 2003).

The task types, topics and sequencing criteria are flexible and can be changed depending on the level of the students and their interesting in the language items. Tasks can be possible assessed based on the learners' outcomes. The purpose of the assessment is to provide data on the learners' strengths and weaknesses for task design purposes and encourage them to take responsibility for their language learning (Brindle, 1989).

TBLT and CLT have several differences and similarities. TBLT has theoretically grown out of CLT and improves several of its disadvantages which are unrelated to learners' language skills about negotiating meaning. CLT is directed at motivating students to negotiate meanings in a second language. TBLT essentially develop from the communicative class teaching theory, and the aim is also to improve learners' communicative competence, focusing on students' language interaction. The principle of CLT is how learner best learn a language when there is an opportunity for students to focus on meaning rather than form. Though, the problem of how to present opportunities for learners truly to communicate in the CLT classrooms is a controversial issue. Repeat dialogues or substitution drills are limited in terms

of authentic negotiation of meaning. In addition, design a conversation for learners is often unclearly taught. Students will be what exactly to do while talking and the teacher is limited to evaluating the systematic instruction (Nunan, 2004). Another disadvantage of CLT is that the aims of language teaching sometimes favor fluency over accuracy. The TBLT approach overcomes many of the criticisms of CLT.

Theoretical Backgrounds

The task-based learning and teaching is based on several theoretical backgrounds:

A Psycholinguistic theory.

Psycholinguistics is the study of the psychological and neurobiological factors that enable humans to acquire, use, understand and produce language. The initial initiations to psycholinguistics were largely philosophical or educational, mainly because of their location in departments other than applied sciences. Modern research uses biology, neuroscience, cognitive science, linguistics and information science to study how the brain treats language, and less known processes of the social sciences, human development, theories of communication and child development.

Psycholinguistics has its roots in education and philosophy and covers "cognitive processes" that generate a grammatical and meaningful sentence from vocabulary and grammatical structures, as well as processes that make it possible to understand utterances, words, the text, Developmental psycholinguistics studies the ability of children to learn the language. This approach, which was initiated in the 1980s, is the first major research area to be found in task Based teaching. It was strongly influenced by the work of Krashen (1981, 1985, 1994) and Long (1983).

The Cognitive Learning Theory.

The theory of cognitive learning explains why the brain is the most incredible network of treatment and interpretation of information in the body as we learn things. This theory can be divided into two specific theories: Social Cognitive Theory (SCT), Cognitive Behavioral Cognitive Theory (CBT) is based on the cognitive model of human behavior, that is, free will and the positive aspects human behavior. Cognition refers to the thoughts, feelings, ideas, knowledge and understanding of the individual about themselves and the environment. Thus, an organism applies this cognition in learning that results not only in the response to a stimulus, but the application of the internal image of the external environment, so as to reach the goal. The theory of cognitive learning implies that the different processes of learning can be explained by analyzing mental processes first. It postulates that with effective cognitive processes, learning is easier and new information can be stored in memory for a long time.

The Socio Cultural Theory

According to Vygotsky (Rieber & Carton, 1987), external activities that learners participate in are the main source of mental and cognitive activities. When individuals interact, their cognitive processes awaken. These processes, which occur on the inter psychological (or social) plane, include both cognitive and language development. The language development moves from the inter mental plane to the intra mental plane on the assumption that what originates in the inter psychological sphere will eventually be represented intra psychologically, that is, within the individual. In other words, external activities are transformed into mental ones through the processes of approximation and internalization. With respect to English language learning, this means that learners collaboratively construct knowledge as a joint activity.

Linguistic Theory (Avram Noam Chomsky, 1986)

Avram Noam Chomsky with the generative grammar theory to the field of theoretical linguistics of 20th Century Learners are hypothesized to have an innate knowledge of the basic grammatical structure common to all human languages which is referred as universal grammar. It is argued that modeling knowledge of language using a formal grammar accounts for the productivity of languages with a limited set of terms, by which human are able to produce an infinite number of sentences. A strong sense of existence of Chomsky's linguistics came from some researchers who study language acquisition.

Constructivism Theory

Constructivist theory focuses on the relationship between learners and contents (Weimer, 2002). It suggests that the learners "construct their own systems of knowledge as experience is filtered through personal construct systems" (Benson & Voller, 1997). According to the constructivist perspective, knowledge cannot be given to the learners, but the learners will construct their own knowledge (Weimer, 2002) puts forward the idea that the learners create their own knowledge and understanding to make their own connection and to generate their own meaning.

Task Based Language Teaching

Task-Based Language Teaching (TBLT) has been a recent development of Communicative Language Teaching(CLT) and has become a popular method of teaching second-language communicative acquisition. TBLT is a didactic principle used in language teaching. TBLT gives students the chances to experiment more freely with the spoken and written target language. By working on a realistic task which has no connection to a linguistic pattern, the learners exercise their language fluently unconsciously.

In TBLT, students have a much more diverse language and can use language forms. The learners concentrate on the class and spend a lot of time communicating during the task (Hammer, 1999).

TBLT is a teaching strategy which focuses on offering learners tasks so that they can actively engage in using and practicing language in communicative situations, and on measuring the language outcomes that will arise from those tasks. For example, a speaking task can develop students' ability to speak fluently and accurately when communicating with their peers (Nunan, 2004).

TBLT was defined by Breen (1987) as 'any structured language learning endeavor which has a particular objective, appropriate content, a specified working procedure, and a range of outcomes for those who undertake the task. TBLT is that tasks are classified according to the difficulty level of the students by task type, subject or topic and process criteria (Ellis, 2003). The types of tasks, topics and expiry criteria are flexible and can be changed according to the level of the students and their interesting language. Tasks may be assessed based on the results of the learner. Task-based learning is advantageous to the student because it is more student-centered, allows for more meaningful communication. The purpose of the assessment is to provide data on the strengths and weaknesses of the learners for the task design and to encourage them to take responsibility for their language learning (Brindle, 1989).

In order to acquire the respective target language effectively, especially in children, language learners must be actively involved in the treatment of the meanings of everything they hear and read. In this regard, a variety of tasks can be designed to provoke learners and give them an objective for the treatment of the meaning and realization of a desired product (Willis, 1996). Nunan, (1989) reported that Task-Based activities can be a good way of

integrating the four language skills and fostering effective language learning as these activities aim to understand something, to come to a conclusion or to train a global picture of something.

Technology Enriched Task Based Language Teaching

The inclusion of technology in language education is a standard practice today. Among the existing methodologies for language teaching, task-based language teaching (TBLT) presents an ideal platform for informing and fully realizing the potential of technological innovations for language learning. The teacher can use different types of technological devices to improve tasks in TBLT.

Chapelle (2001) pointed out more than a decade ago that "everyone involved in teaching and learning at secondary level in the 21st century needs to understand the nature of the unique technology-mediated tasks that learners can use for language learning", Both technology-based and task-based approaches must "learn from each other" (Thomas & Reinders, 2010), in order to inform the working theory and practice. Thus, new critical directions must be sought by: (a) providing technology-mediated learning to enrich TBLT.

TBLT provide for the selection and design of technology-based language learning resources and activities (Chapelle, 2003; Skehan, 2003). TBLT is the ideal strategy to make full use of the potential of technological advancement in order to integrate learners into a language that generates high-quality language learning with a sense of authenticity and relevance within and outside of language teaching. Doughty and Long (2003) reported that technology provides a natural and authentic place for the implementation of the methodological principles of TBLT provides one Justification and educational framework for the selection and use of technology.

Li and Ni (2015) reported that great potential of implementing comprehensive technology-enhanced TBLT at the curricular level. Recent approaches to English language teaching methodology emphasize student autonomy and student-centered instruction as effective ways of learning. This is because (a) students take much of the responsibility for their own learning; (b) they are actively involved in shaping how they learn; (c) there is ample teacher–student and student–student interaction; (d) there is an abundance of brainstorming activities, pair work, and small-group work; and (e) the teacher's role is more like a partner in the learning process, an advisor, and a facilitator of learning than an instructor or lecturer who spoon-feeds knowledge to learners (Edwards & Willis, 2005; Mayo, 2007). Therefore, internally driven devices as opposed to external techniques and external feedback must be encouraged in the English language classroom because strong empirical evidence suggests that internal attention-drawing devices are more facilitative of English language learning than external attention-drawing techniques (Izumi, 2002; Shehadeh, 2004).

TBLT with very effective technology enables language learning.For instance, research has shown that task-based pair and group activities with technology that are generated by students or are sensitive to students' preferences ensure not only that students take responsibility for much of the work but also that students have greater involvement in the learning process. At the same time, such activities free the teacher to focus on monitoring students and providing relevant feedback (Shehadeh, 2004).

Definition of task

The core concept of TBLT is the task. There are different definitions based on everything from the real world to pedagogical perspectives of tasks.

LONG (1985) introduces the concepts of tasks, defining (target) task as:

A piece of work undertaken for one self or for others, freely or for some reward. Thus, examples of tasks include painting a fence, dressing a child, filling out a form, buying a pair of shoes, making an airline reservation, borrowing a library book, taking a driving test, typing a letter, weighing a patient, sorting letters, making a hotel reservation, writing a check, finding a street destination and helping someone cross the road .

Littlejohn (1998) proposed a broader definition:

"Task" refers to any proposal contained within the materials for action to be undertaken by the learners, which has the direct aim of bringing about the learning of the foreign language (p. 198).

Ellis (2003: 16) provides a composite definition:

A task is a work plan that requires learners to process language pragmatically in order to achieve an outcome that can be evaluated in terms of whether the correct or appropriate propositional content has been conveyed. To this end, it requires them to give primary attention to meaning and to make use of their own linguistic resources, although the design of the task may predispose them to choose particular forms. A task is intended to result in language use that bears a resemblance, direct or indirect, to the way language is used in the real world. Like other language activities, a task can engage productive or receptive, and oral or written skills, and also various cognitive processes. An interesting aspect of this definition is that it includes almost all the major points of contention in language pedagogy: attention to meaning, engagement with grammar, inclusion of pragmatic properties, use of authentic communication, importance of social interaction, integration of language skills, and the connection to psycholinguistic processes.

Nunan (2005) defines task as:

Nunan's (2005) definition emphasizes the pedagogical tasks' involvement in communicative language use. Nunan views tasks as being different from grammatical exercises because a task involves achieve outcome. There are more perspectives in defining tasks than those discussed here, which come from the different contexts in which tasks are used.

1) Scaffolding: Lessons and materials should provide support to the students.

(2) Task chains: Each exercise, activity and task should build upon the ones that have gone before.

(3) Recycling: Recycling language maximizes opportunities for learning.

(4) Organic learning: Language ability "grows" gradually.

(5) Active learning: Learners learn best by actively using the language they are learning. They learn by doing.

(6) Integration: The lesson should teach grammatical form and how the form is used for purposes of communication.

(7) Reflection: Learners should be given opportunities to think about what they have learned and how well they are doing.

(8) Copying to creation: Learners should not only drill and practice what has been written for them, but also be given the opportunity to use their creativity and imagination and what they have learned to solve real world tasks.

Procedures in Task-based Learning

Lesson design

The design of a Task Based Learning involves consideration of the stages or components that has a task as its principal component. There are commonly three principal phases: pre-task, Task cycle and post-task. The design of a task-based lesson involves consideration of the stages or components of a lesson that has a task as its principal component. Various designs have been proposed (Estaire and Zanon 1994; Lee 2000; Prabhu 1987; Skehan 1996; Willis 1996). TBLT has common three principal phases.

Pre-task Phase.

The pre-task phase concerns the different activities that teachers and students can undertake before starting the task. It is "preparing students to perform the task in a way that promotes acquisition" (Ellis, 2003). At this point, the importance of framing the task at hand is described, and the motivation of the learner can be defined. There are four ways to approach the pre-task: 1) to help the learners to perform a task similar to the task they will perform during the task phase, 2) to ask the learners to observe a model of accomplishment of the task. task. task, 3) engage learners in activities not related to tasks designed to prepare them to perform the task, and 4) provide strategic planning of the main task. This serves as an introduction to the subject and the task. This may involve brainstorming, pre-employment, introduction of useful words and phrases, preparation time or listening to native speakers performing the task. There are alternatives that can be approached from the procedures in any of the 4 ways .

1. Support students in performing a task similar to the task they will perform during the work phase of the lesson.

2.   Have students observe a pattern of how to perform the task.

3.   Engage students in non-task activities designed to prepare them for the task.

4.   Strategic planning of the performance of the main task

Task Cycle

Task phase is "a vital opportunity for all learners to use whatever language they can muster, working simultaneously, in pairs or small groups, to achieve the goals of the task" (Wills, 1996). Ellis (2003) identifies the kinds of processes that learners in a task performance need to strive for.

These are (1) discourse that is essentially conversational in nature, (2) discourse that encourages the explicit formulation of messages (3) opportunity for learners to carry out linguistic tasks, (4) occasions where learners focus implicitly and/or explicitly on specific linguistic forms, (5) shared goals for the task, and (6) effective scaffolding of learner's efforts to communicate in English class room. Tasks have a specific purpose that must be achieved in a given time. Learners are free to choose the languages in which they wish to achieve the purpose of the assignment. The focus is on meaning rather than form. Task is a goal-oriented activity in which learners achieve a real outcome.

a. Planning

After completing the task, the students prepare to report the results. Now the focus is on organization and accuracy. The teacher advises students on the language and helps them to correct mistakes they make during this phase

Ramirez (1995) recommends four major points to consider during the planning stage:

1.   The purpose of the task (e.g., finds the main idea in a story or practices a certain grammatical feature).

2.   The content of the task (e.g., skills needed to make a phone call or go shopping).

3.   How the task is accomplished (e.g., recalls and/or transfers of previously learned information or skills). 4. Location where the task is performed (in class, outside class, or at home for homework.

b. Report

Some or all of the groups report briefly to the whole class. The others listen in order compare findings or conduct a survey. The teacher may rephrase but not correct the language.

Post task

This phase allows students to listen to native speakers do the same task and to compare the language. It is known that when students repeat a task their production improves a lot when they are told to repeat the task publicly in front of the class, of course, it may increase the communicative stress, but it gives students an opportunity to show their ability and their wonderful work, through which they can get the self achievement. Post-task phase affords a variety of options. It might be the place where students prepare to tell the class about their findings (Wiilis, 1996). Ellis (2003) states that there are three major pedagogical goals for this phase:

(1)   To provide an opportunity for a repeat performance of the task,

(2)   To encourage reflection on how the task has been performed and

(3)   To encourage attention to form, in particular to those forms that prove problematic to the learners when they perform them.

Language Focus

a. Analysis

Learners focus on form and ask questions about language features.

b. Practice

Teacher conducts activities based on the analysis work or examples from the text or transcript. The theory behind the TBL framework is that it is the methodology which most adequately fulfils the key conditions for language learning .These conditions: exposure to real language, opportunities for real use of language, motivation and focus on language are provided for at each phase of the task based learning framework as illustrated by Willis (1996,): during –task it centres around the task itself and various instructional options. post-task   it involves procedures for following up on the task performance.

Principles for designing lessons

The overall purpose of task-based methodology is to create opportunities for language learning and skill-development through collaborative knowledge-building. The following principles can be used to guide the selection of options for designing lessons (Ellis, 2002):

Principle 1: Ensure the appropriate level of task difficulty

Principle 2: Establish clear goals for each task-based lesson.

Principle 3: Develop an appropriate orientation for the students related to performing the task.

Principle 4: Ensure that students adopt an active role in task-based lessons.

Principle 5: Encourage students to take risks.

Principle 6: Ensure that students are primarily focused on meaning when they perform a task.

Principle 7: Provide opportunities for design options.

Principle 8: Require students to evaluate their performance and progress.

These principles are intended as a general guide to teaching task-based lessons, not as a set of commandments; that is, it is up to teachers to make their own methodological decisions based on their understanding of what will work best with their own students.

Types of Tasks

Ellis (2003) classified tasks into the following types:

Unfocused Tasks

An unfocused task is one that encourages learners to use English freely without concentrating on just one or two specific forms (i.e., a replication activity).

Pedagogical tasks

Pedagogical tasks have a psycholinguistic basis in SLA theory and research but do not necessarily reflect real-world tasks.

Rehearsal tasks

The following tasks of pair-work role play are examples of rehearsal tasks.

Activation tasks

The teacher gives pairs of students' two different pictures, and then asks each one to talk to their partner about the differences between the pictures.

Real-world tasks

Tasks are everywhere in everyday life. Washing our face is a task, as is preparing breakfast, going to work by car, etc. Tasks are a part of our lives to such an extent that there is hardly any activity that cannot be called a task.

Focused Tasks

A focused task (Ellis, 2003) is either a consciousness-raising activity that focuses on examining samples of language to explore particular features. These are sometimes called "meta-cognitive" activities.

Willis (1996: 149) listed the following types of tasks of TBLT:

Listing

Including a brainstorming and fact-finding, the outcome is a completed list or draft mind map. This type of task can help train students' comprehension and induction ability.

Ordering, sorting

Including sequencing, ranking and classifying, the outcome is a set of information ordered and sorted according to specific criteria. These types might foster comprehension, logic and reasoning ability.

Comparing:

This type of task includes matching, finding similarities, or differences. The outcome can be appropriately matched or assembled items. These types of task enhance students' ability of differentiation.

Problem solving

This type of task includes analyzing real situations, reasoning, and decision-making. The outcome involves solutions to the problem, which can then be evaluated. These tasks help promote students' reasoning and decision-making abilities.

Sharing experience

These types of tasks include narrating, describing, exploring and explaining attitudes, opinions, and reactions. The outcome is usually social. These tasks help students to share and exchange their knowledge and experience.

Creative tasks

These include brainstorming, fact finding, ordering and sorting, comparing and many other activities. The outcome is an end product that can be appreciated by a wider audience. Students cultivate their comprehensive problem-solving abilities as well as their reasoning and analyzing abilities.

These tasks are listed from easy to difficult, and all of them reveal the recognition process of students.

Teachers role in Task Based Language Teaching

Role Selection and Sequencer of Tasks

A central role of the teacher is to select, adapt and / or create the tasks himself and then to shape them into a teaching sequence that meets the learning needs, interests and language level.

Preparing Learners for Technology enriched

Activities can include the introduction of topics, the clarification of task instructions, helping students to learn or retrieve useful words and phrases to facilitate task completion, and partial demonstration of task procedures.

Metacognition

Metacognition is defined as "knowledge about cognitive states and abilities that can be shared among individuals while at the same time expanding the construct toinclude affective and motivational characteristics of thinking" (Paris & Winograd, 1990). Metacognition has been defined as "thinking about thinking" and is a complex form of higher-order thinking. Metacognition involves the ability to think about own cognitions, and to know how to analyze, to draw conclusions, to learn from, and to put into practice what has been learned (King, 1999).

Metacognition

Metacognition was originally referred to as the knowledge about and regulation of one's cognitive activities in learning processes (Flavell, 1979; Brown, 1978). Metacognition is generally defined as the activity of monitoring and controlling one'scognition. It can further be defined as what we know about our cognitive processes and how we use these processes in

order to learn and remember (Ormrod, 2004). Researchers further conceptualize Metacognition by breaking down Metacognition into two subcomponents, Metacognitive Awareness and Metacognitive regulation. These two subcomponents have been theorized to be related to one another (Brown, 1987; Flavell, 1987; Schraw & Dennison, 1994).

Importance of Metacognition

Metacognition is an essential part of human skills. First, if learners do not know when the understanding collapses and what they can do about it, the teachers' strategies will fail. Secondly, students without Metacognitive approaches are basically learner-less learners to check their progress, their achievements, and future directions (O'Malley et al., 1985). Pressley, Synder and Cariglia (1987) suggest that Metacognition helps learners to become aware that they learn to understand situations in which they are useful,

Matlin (1989) argued that Metacognition is an important process because our knowledge of our cognitive processes can help us arrange circumstances and select strategies to improve future cognitive performance. The study of Metacognition has given insight into the cognitive processes of learning and what distinguishes successful students from less successful ones. There are also several teaching interventions, such as teaching pupils, how to understand learning processes and products, and how to regulate these processes (Livingston, 1997). The meta-cognitive process can improve learning by directing student thinking and helping the learners to pursue a rational strategy by thinking through a problem, making decisions, or trying to understand a text. In this time of technology, the challenge of teaching is to help students develop skills to become lifelong learners. Metacognition is important as it helps learners adapt their learning activities to the requirements of the task. It provides the learners with the necessary information to design their own learning plans. It shifts the responsibility of

teachers to pupils and produces more independent learners. It helps the students develop the ability to monitor and regulate their cognitive activities while they learn and perform various other functions.

Functions of Metacognition.

There are three functions of Metacognition: Awareness function; evaluation function and regulation function (Wilson, 1998). Awareness and evaluation are parts of thinking activity classified as monitoring. Reflection is the mediating process through which Awareness may become evaluation and evaluation may be transformed into regulation of the thinking processes. The three functions of Metacognition are discussed as follows:

Metacognitive Awareness relates to individuals' Awareness of their position in the learning process, of their content specific knowledge, of their knowledge about learning strategies, and what is required in particular problem solving situations. Nelson (1992) refers it toself-reflection about own cognitions, or how people observe, monitor, evaluate and regulate their thinking processes. Halter (2005) concluded that Metacognitive Awareness includes the following:

(i)   Consciously discover what is known

 (ii)   Defining learning goal

(iii)   Considering personal resources (e.g.; textbooks, access to library, access to computer or a quiet study area)

(iv)   Think the task requirements

(v)   find out how to evaluate the performance

(vi)   think about motivational level

(vii)   Determining level of anxiety

Metacognitive evaluation refers to judgments made about one's thinking power and limitations as these are employed in a particular situation

or as self-attributes. Metacognitive regulation occurs when individuals use their Metacognitive skills to control their knowledge and thinking. They think about their knowledge about self and strategies (including how and why use particular strategies).

Elements of Metacognition.

Different researchers have classified elements of Metacognition in different ways. Adkins, (1997) mentioned four elements of Metacognition:

 (1)   Meta-memory

(2)   Meta-comprehension

(3)   Self-regulation

(4)   Schema Training

Meta-memory

It refers to learner Awareness ofstrategies used, and should be used, for some tasks. It includes knowledge and information about memory systems and memory strategies. Research indicates that young students feel difficulty in accurately estimating their comprehension. Therefore, Meta-memory strategy teaching should focus on specific strategic knowledge. This may include knowing when, where, and how to use specific strategies. (2) Meta-comprehension: Effective comprehension monitoring involves knowing when you do not understand and knowing how to take corrective action. Corrective action is more spontaneous when errors are detected in context than being detected in isolation. It is likely that young learners lack Meta-comprehension strategies because of their limited opportunities to develop such skills. On the other hand, older and more knowledgeable learners have acquired skills

through experience. It requires big effort to master Metacognitive strategies; training should being accordance with age and expert levels of learners.

Self-Regulation

Self-regulation refers to Metacognitive adjustments students make regarding errors. This may be asa result of inherent knowing, trial and error, or hypotheses formulation. Executive control may be transferred to students through modeling. Social interaction provides additional models while feedback from colleagues allows learners observe the comprehension strategies of others.

Schema Training

It helps learners produce their own cognitive structures for understanding information and experiences. Learners who know about the significance of training and master strategies during training appear to use them independently and continuously.

Similarly, Beyer (1988, p. 69) has classified Metacognition as planning, monitoring and assessing. In his scheme, Planning includes Stating a goal,(b) Selecting operations to perform.(c) Ordering operations. (d) Finding potential obstacles. (e) Identifying ways out from obstacles and Foreseeing desired and/or anticipated results.

Another researcher, Anderson (2002) divided it into five primary elements and suggested ways by which teachers might model strategies for learners to follow in all five areas:

Preparing and Planning for Learning

Preparation and planning are important Metacognitive skills that can improve student learning. By engaging in preparation and planning in relation to a learning goal, students are thinking about what they need or want to accomplish and how they intend to do so. Teachers can promote this reflection by explaining his learning goals and guiding the students in establishing their own goals.

Selecting and Using Learning Strategies

The Metacognitive ability to select and use particular strategies for a specific purpose means that the learner can think and make conscious decisions about the learning process. For this purpose, teacher should teach students various learning strategies and also when to use them.

Monitoring Strategy Use

By monitoring the use of learning strategies, students are better able to meet their learning goals. Once students have selected and started to implement particular strategies, they need to ask themselves periodically whether or not they are still using those strategies as intended.

Orchestrating Various Strategies

Knowing how to orchestrate the use of more than one strategy is an important Metacognitive skill. The ability to coordinate, organize, and make associations among the various strategies is a major distinction between strong learners. Teachers can assist students by informing them of multiple strategies.

Evaluating Strategy Use and Learning

Teachers can help students evaluate their strategy use by asking them to answer attentively to the following questions: (1) what am I trying to achieve?(2) What strategies am I using? (3) How well am I using them? (4) What elsecould I do? Responding to these four questions integrates all of the previous aspects of Metacognition, allowing the learner to reflect through the cycle of learning. It is clear that there are several lists which various authors have suggested. The difficulty is in being able to hold all these ideas together.

Comprehensive lists are not very useful in practical terms. In classroom, practice, the lists do not suggest many ideas which teachers have not been using for generations. It is highly unlikely that giving such lists to teachers will be ofany benefit. Indeed, most teachers are acutely aware that their students may need occasional pointers so that their work can be conducted more efficiently and effectively. It may be summed up that Metacognition isnot a clearly defined process that moves from planning to evaluating. More than one Metacognitive process may be occurring at a time during a learning task. This indicated that coordination of various strategies is an essential component of learning. The learners may be provided the opportunities to think about how they combine various strategies.

Schraw & Moshman (1995) note that, "Metacognitive theory is a relatively systematic structure of knowledge that can be used to explain and predict a broad range of cognitive and Metacognitive phenomena." Metacognitive theories mean theory of cognition. It focus on cognitive aspects of the mind. All theories are cognitive in that they are structure of knowledge, but not all theories are about cognition (Bunge, 1972 & Byrnes, 1992). Metacognitive theory based on the work of Plato, Aristotle, Confucius, Lao Tzu, Solomon, and Buddha (King, 1999). In 1690, John Locke observed that most children steadily develop the ability to reflect on their thought

processes. Strategies for measuring and teaching Metacognitive skills were in use before the term became famous. Reading was an early center of research on reflective thinking. In 1909, Baldwin used a questionnaire to learn about students' reading, and later Dewey introduced "reflective reading".

Dewey viewed reflection as a kind of thinking. By 1917, Thorndike used reflection when asking students to solve problems by answering questions on texts they had read (Brown, 1987; Hatton & Smith 1995). Flavell published the Developmental Psychology of Jean Piaget in 1963, and higher order thinking caught the interest of researchers. In 1971, Flavell introduced the idea of "Metamemory" and conducted the first study on children's Metamemory. In 1977, Flavell and Wellman presented a theory of Metamemory to explain young children's development and application of recall strategies. Flavell and Wellman stated that young children's failure to use strategies for recalling information was due to lack of Awareness of"parameters that govern effective recall" (Wong, 1995, p. 1). As a result, they concluded that children's failure to recall is due to eficiency in Metamemory. By 1975, the word "Metacognition" had come into common use (King, 1999).

Hunt and Ellis (2004, pp. 234-235) described that 'Meta' can refer to any aspect of cognition, such as Meta-language (cognition about language) and Meta comprehension (cognition about comprehension).They described three aspects of Metacognition: knowledge, monitoring and control.

(1) Metacognitive Awareness is concerned with people's declarative knowledge about memory and may include implicit and sometimes inaccurate beliefs. For example, some people believe their learning ability has declined more significantly in old age than it actually has (Hertzog & Hultsch, 2000).

(2)   Monitoring involves assessing the progress of any aspect of learning and retrieval. For example, while studying for an examination, a student may assess how well they are learning each section of their class notes, and, while taking the exam, they may assess whether their response to each question is correct.

(3)   Control involves the regulation of ongoing learning and retrieval processes. Examples of control are when students regulate learning by deciding to stop studying a section of their notes that they believe they know well, and they decide to keep trying to retrieve an answer to a test question even when they cannot initially recall it.

Although Metacognition has been a part of discussion of educational psychologists for more than twenty years, but a clear definition of Metacognition, is still not agreed upon. However, researchers agreed to divide it into two constructs: Metacognitive Awareness and Metacognitive control and regulation .

From the above discussion it may be concluded that there is a fine difference between cognition and Metacognition. It is hard to make a distinction between what is 'Meta' and what is cognition. In defining Metacognition, there were three major obstacles which included: conceptualizing the main aspects of Metacognition, establishing the relationship between these aspects, and distinguishing between cognition and Metacognition (Wilson & Clarke, 2002). Williamson (2005) indicated that even Flavell acknowledges that distinguishing Metacognition from cognition is not always easy. However, King (1999) viewed that cognition focuses on solving the problem while Metacognition stresses on the process of solving the problem.

Models of Metacognition

J. H. Flavell (1979) :

John Flavell of Stanford University is regarded as a foundation researcher in Metacognition. He was influenced by the work of JeanPiaget. According to Flavell (1979), the monitoring of a wide variety of cognitive enterprises occurs through the actions and interactions among four classes of phenomena

a)   Metacognitive Awarenessb) Metacognitive experiences

c)   Goals (or tasks) and d) Actions (or strategies)

Metacognitive Awareness is that segment of a child's or an adult's stored word knowledge that has to do with people as cognitive creatures and with their diverse cognitive tasks, goals, actions, and experiences.

Metacognitive experiences are any conscious cognitive or affective experiences that accompany and pertain to any intellectual enterprise. Flavell assumed that Metacognitive Awareness and Metacognitive experiences differ from other kinds only in their content and functions, not in their form or quality.

Goals (or tasks) refer to the objectives of a cognitive enterprise, while actions (or strategies) refer to the cognitions or other behaviors employed to achieve them.

Metacognitive Awareness.

Metacognitive Awareness is "knowledge about what factors act and interact in what ways to affect the course and outcome of cognitive enterprises" (Flavell, 1999, p.4). The major categories of these factors are person, task and strategy. The person category encompasses everything that a

person believes about his nature and nature of other people as cognitive processors. It refers to the type of acquired knowledge and beliefs that concern human beings as cognitive organisms. The task category concerns the information about the object available to a person during a cognitive enterprise (Demetriou, 2000). The strategy category includes knowledge of effective strategies that can be acquired in achieving various goals and in various sorts of cognitive undertakings.

Metacognitive Awareness is knowledge that individuals have about their cognitive abilities, cognitive strategies and tasks. While Flavell uses the person-task-strategy taxonomy to define Metacognitive Awareness, Brown (1987) has categorized Metacognitive Awareness into declarative, procedural and conditional knowledge. Declarative knowledge refers to "knowing what", procedural knowledge refers to "knowing how" and conditional knowledge refers to "knowing why and when". Regulation of cognition refers to select processes that coordinate cognition.

Moshman (1995) divided Metacognition into Metacognitive Awareness and Metacognitive control processes (regulation of cognition). They argued that Metacognitive Awareness is not necessarily stable but children routinely use Metacognitive Awareness without being able to express that knowledge. They also classified Metacognitive regulation into three skills as planning, monitoring and evaluation. (i) Planning involves the selection of strategies and the allocation of resources. (ii) Monitoring refers to Awareness of comprehension and task performance. (iii) Evaluation refers to value judgment.

This refers to the segment of acquired world knowledge that has to do with cognitive matters. It is the knowledge or beliefs accumulated through experience and stored in long-term memory that concern the human mind and its doings. Some of this stored knowledge is declarative ('knowing that') and

other procedural ('knowing how'). For example, your declarative knowledge is knowing how and when to supplement your poor memory by the use of shopping lists and other external memory aids. One's knowledge of any given Metacognitive item could be both declarative and procedural.

Metacognitive Awareness consists primarily of knowledge or beliefs about what factors or variables act and interact to affect the course and outcome of cognitive enterprises. These factors or variables fall into three major categories: person, task and strategy.

Person category

The person category encompasses everything that you might believe about the nature of yourself and other people as cognitive processors. It can be further categorized into beliefs about intra-individual differences, inter-individual differences, and universals of cognition.

Task Category

Knowledge of a task variables include knowledge about the nature of the task as well as the type of processing demands that it will place upon the individual.

Strategy Category

Knowledge about strategy variables include knowledge about both cognitive and Metacognitive strategies, as well as conditional knowledge about when and where it is appropriate to use such strategies.

General Metacognitive Processes

Metacognitionis vital to cognitive effectiveness. Brown (1994) suggested that learners can maximize their leaning success when they have access to their learning repertoires in addition to insights in to their own

capabilities. Not surprisingly therefore, it has been suggested that, if students Metacognition can be improved, then it should be possible to improve their learning outcomes. Such a position provides an optimistic outlook on education. Wang, Haertel and Walberg (1990) revealed Metacognition to be a most powerful predictor of learning. Sternberg (1981, 1986) outlined in detail the Metacognitive skills that are essential to intelligent functioning but are rarely acknowledged or measured by standard intelligence tests. Metacognitive processes are internal, "executive "processes that supervise and control cognitive processes. Metacognitive Awareness is conceptualized as the "knowledge of the readers' cognition relative to the reading process and the self-control mechanism they use to monitor and enhance comprehension" (Sheorey & Mokhtari, 2001), which is a critical component of skilled reading. Flavell (1979) suggests cognitive and Metacognitive resources and strategies should be tapped. There is a clear difference between these two. The role of cognitive strategies is described as making cognitive progress whereas Metacognitive strategies monitor this progress. Pressley and Afflerbach (1995) depicted efficient readers as strategic or "constructively responsive" readers who carefully orchestrate cognitive resources when reading. Similarly, "second language learners are not mere sponges acquiring the new language by osmosis alone. They are thinking, reflective beings who consciously apply mental strategies to learning situations both in the classroom and outside of it" (Chamot, 1987)

Metacognitive Awareness and English Language Learners.

Metacognitive Awareness as a tool that can empower language learners.(Cardens,2009) In fact, several authors acknowledge that being conscious of their learning processes helps learners to plan, organise and assess their learning, and in doing so, they become more autonomous and self-sufficient (Wenden & Rubin, 1987; Schraw & Denison, 1994; Oxford,

1996b; Cohen, 1998). In a language learning context this means knowing about oneself as a learner ,in other words, the knowledge and self-Awareness a learner has of their own learning process ,and is regarded as the key to successful language learning. Joseph (2009) explains this process as one where students must generate questions based on the text, clarify misunderstandings, summarize and predict the content of the next section of text. Teachers would instruct the type of thinking required for each strategy and would encourage students to support each other and move independently through the steps of questioning, clarifying, summarizing and predicting (Joseph, 2009). Self Regulation is selected as an independent variable for the select study. Detail description are given below.

Self Regulation

Self Regulation requires several sophisticated cognitive skills. These include the Awareness of the demands of any given situation; consistent tracking of our own behavior, thoughts and strategies; consideration of the success with which we respond to the demands of the situation; and the ability to change aspects of our current operations as needed to adapt to the situation or achieve a goal. Aspects of self-regulation are correlated with various positive outcomes for children and adolescents - including better school performance, problem-solving skills, and an understanding of reading; more satisfying interactions with peers; higher levels of intrinsic motivation, self-esteem, perceived competence, self-efficacy, moral cognition and moral conduct; fewer behavioral problems; and lower levels of psychopathology (eg, depression) (Eisenberg, Smith,Sadovsky and Spinrad 2004, Grolnick, Kurowski and Gurland 1999, Howse Lange Farran and Boyles 2003, Kochanska Murray and Coy 1997, Ryan, Connell and Grolnick, 1992).

Component of Self Regulation

Three Component Processes Self Regulation models are concerned with what individuals decide to do and how they go about trying to achieve their goals. The three components of Self-Regulation Process are goal selection, preparation for action and cybernetic cycle of behavior (Markus & Wurf, 1987).

Goal Selection

Goal selection stage is the first stage in self regulation. Before they can effectively regulate their behavior, people must select a goal; they must decide what they intend to do. Expectancy-value models assume that people select goals according to their expectancy of reaching the goal, in conjunction with the positive value they place on attaining the goal and the negative value they place on not attaining the goal. Goals can be conceived at different levels of abstraction (Powers, 1973; Vallacher & Wegner, 1987). Some of these interpretations are specific and concrete; others are broad and abstract. For example, reading this passage may be relevant to several of your goals, such as "learning the material," "doing well on a test," or "preparing for graduate school." Generally speaking, goals conceived in broad terms assume greater value than do goals conceived in specific terms (Vallacher & Wegner, 1987). At the most general level, people's goals center around who they want to be or what they want to become. For example, a person might be striving to "be independent" or even to "be a good person." Self-relevant goals like these have been studied by numerous researchers (Emmons, 1986; Klinger, 1977; Little, 1981; Zirkel & Cantor, 1990) and are often the most highly valued goals in life.

Preparation for Action

Having adopted a goal, people prepare to attain it. This is the second stage in the self-regulation process. Here, people gather information, construct scenarios regarding possible outcomes, and engage in behavioral practice (rehearsal). In short, they design and prepare to implement a plan to achieve their goal. Of course, not all behavior fits this model. As noted earlier, sometimes people act impulsively without a good deal of forethought. Impulsive behavior of this type is not considered in this framework.

Cybernetic Cycle of Behavior: The third stage in the self-regulation process has been conceptualized as a cybernetic cycle of action. Cybernetics is the study of how entities use information to regulate their actions (Wiener, 1948). It is also called control theory, as it emphasizes negative feedback control as the means by which machines (e.g., thermostats, guided missiles, cruise control settings in automobiles) as well as animals adjust their behavior to match some standard. In this context, negative feedback doesn't mean bad or unfavorable; it means discrepancy reducing.

Self Regulation in Learning

Self-regulation is important because an important function of education is the development of lifelong learning skills. Self-regulation of learning involves more than detailed knowledge of skills. it gradually develops in children, beginning in infancy and further through puberty years. Self-regulation is important because an important function of education is the development of lifelong learning skills. It includes self-Awareness, self-motivation, and behavioral capacity to adequately implement this knowledge (Zimmerman, 2000). It is an integral learning process consisting of the development of a set of constructive behavior that influences a learning process. These processes are planned and adopted to support the pursuit of

personal goals in changing learning environments. Self-regulated learners can organize their academic strength and weakness, and have their own strategies that can be used appropriately to cope with the daily challenges of academic tasks. These learners have a strong belief in intelligence and write their success or failure in factors within their own control. Self-regulation is a strong predictor of academic success. Students who live in the school know if they have an ability and if they do not follow obstacles, such as poor learning conditions, a confusing textual passage or an unclear teaching preparation, material or look for another source of support. These active, targeted teaching strategies strongly influence the advancement and self-regulation of the individual. Teachers use different teaching strategies in the classroom to help children improve their learning process by focusing on the assessment, understanding and evaluation of their belief system. This leads to a self-regulation of the individual student-centered class atmosphere. Self-regulation of cognition involves the control of various cognitive strategies for learning, Such as the use of deep processing strategies that lead to a better Self Regulating environment

Review of Related Studies

Studies are arranged in such a way related with Student Teams Achievement Divisions Strategy, Technology Enriched Task Based Language Teaching on Achievement and Self Regulation .

Studies related with Student Teams Achievement Divisions (STAD) Strategy

This section deals with the studies related to Student Teams achievement divisions strategy . Since this study has two dependent variables (Achievement and Self Regulation, studies are presented in relation to both these variables.

Studies related with Student Teams Achievement Divisions (STAD) Strategy and Achievement.

Studies related with Student Teams Achievement Divisions (STAD) Strategy and Achievement are presented. Studies are presented in the chronological order.

Slavin (1978) investigated the independent effects of level of reward (recognition based on the performance of a four-to-five membersCooperative Learningteam vs. comparison with entire class) on student achievement and attitudes on 205seventh graders in English (grammar and punctuation) classes. Results indicated reward level effects in favour of team reward and comparison group effects in favour of the comparison with equals on percentage of time on task, positive interpersonal perceptions. In case of attitudes, reward effect favouring team rewards were supported for perceived probability of success, motivation, dependence of outcome on performance, liking of others, peer support for academic performance. Comparison group effect in favour of comparison with equals were supported for feeling of being of being liked, liking of others, peer support for academic performance and number of friends named. No academic achievement effects were found for either factor.

Slavin (1980)investigated the separate effects on student achievement and time on-task of threecomponents of the team learning technique, STAD Cooperative rewards, group tasks and a focused schedule of instructions. The sample comprised of 336 fourth and fifth grade students who studied language mechanics for nine weeks. Results revealed the following: (1) In case of academic achievement, reward and taskinteraction effects were found significant for curriculum-specific test. The reward effect was in favour of team reward and the task effect was in favour of the individual task. No effects were found for standardized effect; (2) The experimental

classeslearnedsignificantly more than the comparison classes due to focused schedule ofinstruction; (3) Students in team reward conditions were found to be on-tasksignificantly more than in the individual reward conditions. Students tutoredsignificantly more in the team reward classes than they did in the individual rewardclass.

Nederhood (1986) investigated the effects of Cooperative Learning technique on achievement and attitude outcomes of 1145 seventh graders in five experimental teaching teams of mathematics, language, arts and social studies and found significant positive results linking a teacher's use of student team learning with positive classroom involvement, increased number of friends, higher academic expectation and increased self-confidence. Findings showed that no significant differences were found for achievement.

Peck (1991) compared differences in spelling achievement among groups of students who were high, average and low achievers. The study attempted to determine any treatment effects resulting from students being cooperatively grouped for spelling instruction on 135 intermediate grade elementary children. Normal curve equivalent scores from an existing standardized achievement test were used to classify students as high, average or low achievers. STAD was implemented. The sessions provided activities designated to encourage the development of collaborate skills prior to initiating treatment. A bonus point system was used to reinforce the collaborative kills. The results indicated that intermediate children achieved equally of how they were grouped for spelling instruction. High, average and low achieving students achieved equally well regardless of how they were grouped for spelling instruction. Low achieving students achieved significantly different from high and average achieving students.

Pinkeaw (1993) investigated students' views on interaction and learning achievement through Cooperative Learning method in upper

secondary students. The subjects were classified into 3 groups of 30 high achievers, 24 moderate achievers, and 28 low achievers. The researcher taught all classes herself for 20 periods. The questionnaire on the students' view on interaction was given before teaching. After teaching, students were given the test and the same questionnaire on interaction including their opinion of the STAD approach. The finding indicated that STAD approach were at the satisfactory level but no significant difference was found among the three groups.

Thupapong (1996) studied the effects of Students Teams–Achievement Division (STAD) learning on English reading achievement and cooperation with 78 students. The subjects were divided into two groups-the experimental group taught by the STAD approach and the control group taught by the teacher's manual for six weeks. The instruments used in this study were reading achievement tests and cooperation tests. The results revealed that the gained English reading achievement scores of the students taught by the STAD strategy were not significantly different from those of the students taught by the teacher's manual approach . The finding also exposed that the high, medium, and low achievers taught by the STAD teaching strategy were not significantly different in their cooperation .

Armstrong (1997) studied the effect of Student Team Achievement Divisions (STAD) Cooperative Learning method on academic achievement and attitude toward social studies class on the sample of 47 twelfth-grade social studies students in two advanced progressive American classes. Findings revealed that the application of STAD in the upper secondary social studies classroom exhibited no statistically significant difference in academic achievement on student attitude toward social studies class.

Suyanto(1998) studied the impact of the student Teams-Achievement Division (STAD) Cooperative Learning model on students' mathematics

achievement and their perceptions of classroom environments in rural primary schools. The sample consisted of 664 third, fourth and fifth-grade student and their teacher who were trained in the use of STAD. The findings showed that the STAD classes in third and fifth grades performed significantly higher on tests of mathematics knowledge than the traditionally instructed classes. No significant differences in mathematics achievement were found between the fourth-grade students in the STAD group and those who were in the control group. Student in STAD group had significantly higher attitudes towards classroom environment

Chen (2004) investigated the effectiveness of Cooperative Learning methods in teaching English as a foreign language to a group of 110 college students (34 males and 76 females). Two Cooperative Learning methods, Jigsaw and Student Teams –Achievement Division (STAD) were implemented in the experimental group and control group was instructed through traditional Grammar-translation method. The finding of the study indicated that the experimental group outperformed the control group and that males performed better in a cooperative structure than in the traditional competitive structure.

Jolliffe (2005) explored the implementation of CL (STAD model) in some selected schools in England and found that teachers in those schools were convinced of the effectiveness of CL regarding its positive effects on (a) academic achievement and (b) development of social skills. A large majority of the teachers from the sample schools reported its use and half of them claimed to use it in more than half of their lessons.

Yang (2005) compared the effectiveness of CL and traditional teaching methods on Taiwanese college students' English oral performance and motivation towards learning. Sixty Taiwanese college students from two intact classes were involved in the study. A quasi-experimental non-

equivalent control group pre-test post-test design was used. The total experimental period was eight weeks of instruction. The subjects were administered a pre-test and post-test, using the intermediate-level, speaking component of the GEPT (General English Proficiency Test) as well as the MIQ (Motivational Intensity Questionnaire) as a pre-test and post-test in the study. One-way ANCOVA was used to analyze the speaking component (intermediate level) of the GEPT scores and MIQ results. Results revealed that of English oral performance and motivation to learn in favour of the cooperative learning.

Liao (2005)examined the effects of Cooperative Learning on EFL students in Taiwan. A 12-week quasi-experimental pretest-posttest comparison group research study was designed. Two college classes (42 students each) in Taiwan participated in the study, one receiving grammar instruction through Cooperative Learning and the other through whole-class teaching. Cooperative Learning was found to have large positive effects on motivation and strategy use, and medium-to-large positive effects on grammar achievement. Overall, the findings indicated a consistent pattern in favor of Cooperative Learning over whole-class instruction in teaching the Taiwanese learners English grammar. The results of the exploratory questions indicated that Cooperative Learning facilitated motivation and strategy use of learners across all subgroups, but more so with those performing at higher and lower levels. Additional analyses also indicated Cooperative Learning positively affected learning at higher cognitive levels.

Wichadee (2005) examined on the Effects of Cooperative Learning on English Reading Skills and Attitudes of the First-Year Students at Bangkok University. A Student Teams-Achievement Divisions (STAD) program was used with the subject group over an eight–week period. The instruments used were the reading comprehension test, the questionnaire of attitudes towards

Cooperative Learning, the Cooperative Learning behavioral assessment form, and the interview. The researcher administered the English reading comprehension test before and after teaching. Results indicate that the students obtained higher reading comprehension scores for the post-test than the pre-test scores at the .05 level of significance. The findings indicate that most students rated Cooperative Learning moderately positive. Moreover, assessment forms show they performed good Cooperative Learning behaviors in their tasks.

Wang (2007)conducted a study on the comparison of the difficulties this study, the teacher as a researcher employed Cooperative Learning strategies Students Teams-Achievement Divisions (STAD), Jigsaw II, Numbered Head Together, and Learning Together (LT). The researcher employed a qualitative approach with on-site observations, interviews, and reflective instructions to understand the effectiveness of teaching in EFL Cooperative Learning classroom. Based on the empirical findings from Cooperative Learning and traditional teaching methods in EFL classroom, the difficulties were presented to solve the instructional problems and to meet current need effectively in our global society.

Gomleksz, (2007) through an experimental study explored the effects of Jigsaw II method of CL on English as foreign language students and concluded that CL enhances students' learning of vocabulary and use of active and passive voice in English. It also revealed that CL develops students' positive attitude towards learning English.

Ning and Hornby (2010) conducted a study to investigate the effects of CL on Chinese EFL learners' competencies in listening, speaking, reading, writing and vocabulary. Participants were 100 first-year College English learners from a university in the north of China. A pre-test-post-test quasi-experimental design was employed to study the effects of the CL

approach on students' language competencies in comparison to traditional instruction. Findings revealed clear differences in favour of the CL approach in the teaching of listening, speaking and reading but no differences were found between the two approaches in the areas of writing and vocabulary.

Ning (2011) conducted a study to find out the effect of CL in enhancing tertiary students' fluency and communication. It aimed to offer students more opportunities for language production and thus enhancing their fluency and effectiveness in communication. The test result showed students' that English competence in skills and vocabulary in CL classes was superior to whole-class instruction, particularly in speaking, listening, and reading.

Muraya and Kimamo (2011) studied on the effect of Cooperative Learning approach on mean achievement scores in Biology of secondary school students. Solomon-four-non-equivalent-control-group design was used and the target population comprised 183 form two students in four secondary schools. Students were taught one Biology topic for five weeks and Cooperative Learning approach was used in experimental groups while the regular teaching method was used in control groups. Pre-test was administered before treatment and a post-test after treatment. findings revealed that Cooperative Learning resulted significantly higher mean achievement scores compared to regular teaching method and gender had no significant influence on achievement.

Mohseny andJamour (2012) explored the effect of applying STAD technique on the vocabulary learning of Iranian pre-intermediate EFL learners. 50 students were selected for the experiment. They were assigned to two groups. Each group consisted of 25 participants, one experimental and one control. The STAD technique for learning vocabulary was applied to the experimental group while the control group received no special instruction and was taught using conventional ways. t test was used for analyzing data.

Investigator found that STAD was more effective than that of conventional method of teaching.

Zarei (2012) examine the effects of the 'Student Teams-Achievement Divisions' (STAD) and 'Cooperative Integrated Reading and Composition' (CIRC) Cooperative Learning models on reading achievement and vocabulary learning of Iranian learners of English. 132 female Language learners of EFL participated in the study at National Iran English Language (NIEL) institute in Takestan. The four experimental groups were taught in Cooperative Learning for one semester with methods of the 'Student Teams Achievement Divisions' (STAD) and 'Cooperative Integrated Reading and Composition' (CIRC), the control groups were taught in a non-cooperative method. The results indicated that the Cooperative Learning model CIRC had statistically significant effects on reading comprehension and vocabulary learning, particularly for elementary EFL learners.

Wyk (2013) examined the impact of Student Teams Achievement Divisions (STAD) as a Cooperative Learning teaching strategy in building economics knowledge of secondary school learners. Data was collected from 229 grade 10 economics learners and eight teachers at secondary schools. Teachers used both STAD and direct instruction .Learners completed a 40-item multiple-choice economics test as a pre-test and posttest. Findings revealed that STAD strategy increased learners' knowledge of contemporary economics issues statistically as compared to the direct instruction classes.

Anto, Padmadewi and Putra (2013) investigated an experimental research which aimed at identifying the effect of implementation of Student Team Achievement Division (STAD) and learning motivation toward students' reading competence. The population was 4 classes (197 students) of grade VIII in which 2 classes were chosen as the sample of the study. The findings revealed that, there was a significant different effect between the

students taught by using STAD method and conventional method. Finding also revealed that there was a significant different effect between the student having low motivation taught by using student team achievement division (STAD) and conventional method.

Sirisrimangkorn and Suwanthep (2013)investigated the pedagogical use of integrated drama-based role play and Student Teams Achievement Division (STAD) method of Cooperative Learning, and its effects on 80 first year non-English majors' speaking skills, motivation, and self-esteem. The design was used as quasi-experimental design. Over the 16 weeks of the study, both groups of students studied English with the same learning content. The findings showed the effectiveness of drama-based role play combined with STAD on students' speaking skills, motivation, and self-esteem in the experimental group.

Rohmah (2013) studied a classroom action research on Improving Vocabulary Achievement by using Student Teams   Achievement Division (STAD) among the Second Year Students. The research objective was intended to know the way STAD technique can improve the second-year student's achievement in vocabulary of secondary school students. This study found that the application of STAD method can improve the students' vocabulary achievement.

Al-Tamimi (2014) investigated the effectiveness of Cooperative Learning in English language classrooms to enhance Yemeni students' speaking skills and attitudes. A quasi-experimental interrupted time series design was used. The data of the current study were gathered at multiple points of time before and after the end of the experiment to determine the effectiveness of Cooperative Learning on the sample's speaking skills and attitudes. The oral skills of the sample were first examined by means of an oral test in English before and after certain cooperative learning pedagogical

activities. A questionnaire was administered to the sample before and at the end of the course to identify students' attitudes towards the use of cooperative learning in English classes. The data were analyzed using basic and inferential statistical methods including mean scores, standard deviations, paired sample t-test, and effect size. The findings showed a remarkable development in the students' speaking skills and attitudes after the introduction of Cooperative Learning techniques.

Kristina (2014) has conducted an action research to find out whether speaking skill could be improved through STAD. The sample consists of consisting of 22 students which comprised 13 females and 9 males. In this research, there were three cycles; pre-cycle, cycle I and cycle II. The result of Cycle I showed that STAD could improve the students' speaking skill. The students' achievement in speaking of Cycle II also was improved significantly through STAD

Khansir and Alipour (2015) examined the impact of Students Team Achievement Divisions (STAD) on Iranian EFL Learners Listening Comprehension. The sample of the present study was sixty Iranian students selected based on their performance on Oxford Placement Test (OPT). For homogeneity of the learners, a proficiency test (Edwards, 2007) was administered to the study. Result of the study revealed that the use of STAD, in contrast to individual teaching and learning can be more effective at different stages of teaching listening.

Asminar and Syaifullah (2015) investigated on improving students' achievement in speaking by using Students Teams Achievement Divisions (STAD).There were 35 students in this class that consisted of 15 males and 20 females. The method used is a classroom action research with two cycles containing plan, action, observation, and reflection. The result shows that students' low achievement in speaking can be improved. Finally, the

conclusion is that using STAD can better improve students' achievement in speaking.

Rahimi(2015) investigated the effects of Student Team Achievement Division (STAD) on English reading comprehension of pre-university students. The sample of the study was 43 Iranian EFL learners . In the experimental class, the teacher used STAD technique and in the control group the teacher used the conventional method of teaching. The materials of this study consisted of 2 teacher-made English achievement tests, and one questionnaire measuring the participants' motivation towards learning English. The data were analyzed using paired and independent t tests. The results of the study showed that the experimental group outperformed the control group significantly in the measurement of reading comprehension and motivational questionnaire.

Mardhiah and Ownie (2015) conducted a study to improve students' achievement in writing recount text by using Student Teams Achievement Division (STAD) method. This Study was conducted by using classroom action research. The sample consisted of 31 students. The research was conducted in two cycles and every cycle consisted of three meetings. The instrument of collecting data were quantitative (writing test) and qualitative data (diary notes, observation, and interview). Based on writing test scores, students' score kept improving in every test. The result of the research showed that Student Teams Achievement Division (STAD) method could significantly improve students' achievement in writing recount text.

Wandari, Aruan, and Sumbayak (2015) investigated a study to find out whether STAD method could improve the students' writing ability. The participants were 31 students of second year female students. This research was an Classroom Action Research (CAR) which consisted of three cycles,

two meetings in each cycle. The research finding showed that STAD method could improve the students' writing ability.

Khan and Akhtar (2017) investigated and compared the effect of Cooperative Learning method and the whole class traditional method in developing English language of the students of 7th class. The STAD (Student Teams Achievement Divisions) model of Cooperative Learning was used in this study. Four intact groups were taken from boys and girls schools for this study. A pre-test post- test control group design was applied. The independent sample t-test procedures were used to compare the control and experimental groups on pre-test and post test scores of achievement test. The results based on post test scores showed that the STAD model of Cooperative Learning had significant effect on the achievement of students, both male and female, in learning English grammar at Elementary level. The effect size was also calculated to determine the magnitude of difference between achievements of experimental and control groups which showed high increase in the achievement of treatment groups.

Faramarz and Mowlaie (2017) reports the effect of Student Teams Achievement Division (STAD) technique on improving Iranian51 male EFL elementary EFL learners' reading comprehension. After administering YLE Flyers test to in elementary level they were divided into control and experimental groups. The treatment took 13 sessions of grouping students and assessing their reading skill according to the criteria of STAD technique, in the experimental group. The findings revealed that experimental group made significantly higher progress in reading comprehension compared to control group

Studies related with Student Teams Achievement Divisions Strategy and Self Regulation

Studies related with Student Teams Achievement Divisions Strategy and Self Regulation is presented. From the Review of literature it was noted that there are few studies related to Student Teams Achievement Divisions Strategy and Self Regulation.

Rio, Cecchini, Gimenez, Alonso, and Prieto (2017)studied on the interactions between self-regulated learning, Cooperative Learning and academic self-efficacy in secondary education students experiencing Cooperative Learning as the main pedagogical approach for at least one school year. 2,513 secondary education students Participants were asked to complete the Cooperative Learning questionnaire, the strategies to control the study questionnaire and the global academic self-efficacy questionnaire. Participants were grouped based on their perceptions on Cooperative Learning and self-regulated learning in their classes. Results revealed a four-cluster solution: cluster one included students with low levels of Cooperative Learning, self-regulated learning and academic self-efficacy, cluster two included students with high levels of Cooperative Learning, self-regulated learning and academic self-efficacy, cluster three included students with high levels of Cooperative Learning, low levels of self-regulated learning and intermediate-low levels of academic self-efficacy, and, finally, cluster four included students with high levels of self-regulated learning, low levels of Cooperative Learning, and intermediate-high levels of academic self-efficacy.

Ishtiaq, Ali and Salem (2015) investigated the effects of STAD on motivation of Saudi EFL learners. Two intact groups of 1st semester students were selected. A questionnaire was administered to both groups at the beginning of the semester. The experimental group was taught with STAD whereas the control group was taught with the traditional whole class teacher-

fronted method. The treatment was administered for two weeks. The same questionnaire was re-administered after the treatment. The data was analyzed using independent samples t-test. Findings revealed that there was no significant difference between the experimental and the control groups in terms of motivation**.**

Studies Related with Technology Enriched Task Based Language Teaching

This section deals with the studies related to Technology Enriched Task Based Language teaching . Since this study has two dependent variables (Achievement and Self Regulation, studies are presented in relation to both these variables.

Studies related with Technology Enriched Task Based Language teaching Strategy and Achievement.

Studies related with Technology Enriched Task Based Language teaching Strategy and Achievement are presented. Studies are presented in the chronological order.

Kenning and Madeleine (2010) investigated Collaborative Scaffolding in Online Task-Based Voice Interactions between Advanced learners. The experiment had a dual aim: (a) to examine the suitability of Wimba Voice Tools as an environment for sustained interactive talk, and (b) to study the nature of interactions between advanced learners, with particular reference to the processes supporting collaborative activity. Extending the classical model of negotiation for meaning to cover other instances of language-related episodes identified through discourse analysis of the empirical data, the study offers a detailed account of the incidence and nature of negotiated interaction and collaboration between partners. This leads to a discussion covering the impact of functionalities, scaffolding and task effects.

Yasemin, K (.2011) conducted a blended learning study on implementing video recorded speaking tasks in task-based classroom instruction for the first-year student teachers of English in Turkish higher education. A mixed research method was used to collect data from multiple sources: recordings of a pre-and post-course speaking task, analysis of the video-recordings of students' speaking tasks, informal interviews with the students, and a written end-of-year course evaluation survey. Analysis of quantitative and qualitative data revealed that students made noticeable improvement in their oral communication skills, and they were positive in their perceptions of integrating technology in the lesson. The study also indicated that the use of video camera, as a technological tool, had a positive impact on students' viewing and critically evaluating their speaking tasks.

Purushothaman, Shunmugasundaram and stella (2012)find out the effectiveness of Video Assisted Instruction in developing the skill of pronunciation in English. 90 students of standard VI were selected at random and divided into 3 random groups. The three groups were assigned 3 different treatments at random. Group I - Video Assisted Instruction Group II - Audio Assisted Instruction Group III - Traditional Teaching Group I was shown the BBC Video Cassette on English Language Teaching to develop pronunciation. In the cassette there were short gaps for the learner to practice the correct pronunciation. Group II was taught through the Audio Recording of the same video cassette shown to Group I. Group III was taught through Traditional Teaching Method. This study proved that Video Assisted Instruction results in significantly superior acquisition of pronunciation skills. Audio Assisted Instruction is superior to traditional teaching.

Li and Ni (2013) investigated effects of a technology enriched, task-based language teaching curriculum on Chinese elementary students' achievement in English as a foreign language. The sample consists of 471

fourth-grade students from 4 schools with low SES outside of Beijing who participated in the study. A descriptive analysis was carried out first after completion of the data collection and then a t-test was performed to determine the effect of the intervention. The results show that the pupils who have received the intervention are much faster in their overall language competency than those who have not received the treatment. The study highlights the great potential of introducing a comprehensive technology-based TBLT at curriculum level.

Pellerin and Martine (2014) examined how the use of mobile technologies (iPods and tablets) in language classrooms contributes to redesigning task-based approaches for young language learners. The article is based on a collaborative action research (CAR) project in Early French Immersion classrooms in the province of Alberta, Canada. The findings drew how the use of mobile technologies such as iPods and tablets contributes to redesigning language tasks and activities by helping young learners to create their own learning environment and meaningful language tasks, as well as self-assess and regulate their language learning process.

DeJager and Mpofu (2015) studied the use of technology to create interactive lessons in the English classroom. The sample was consists of Forty 10th graders were randomly selected from a representative senior high school as an experimental group (EG) to attend flipped English classroom intervention while another 10th graders were randomly selected from the same school to be the comparison group. All participants completed the high school student questionnaire that assessed students' ICT, English reading comprehension at the beginning and end of this study. the findings showed that experiment group significantly higher than the control group.

Drood and Asl (2016) examined on the effects of audio- visual recorded and audio recorded listening tasks on the accuracy of Iranian EFL

learners' oral production. The sample consists of 40 students of intermediate level were chosen and then were randomly assigned into two experimental and control groups each of which was under different listening tasks. (Audio visual- and audio only). Data analysis showed that the group which was trained under AV listening tasks showed different effects on students' accuracy, compared to the other group positioned using audio recorded. Based on the results of this study, it is imperative that teachers consider the types of activities and methods that can have influence over language learners' speaking ability.

Liontou (2016) Reports a longitudinal study that adopted a blended teaching approach based on designing and implementing an online EFL course to be used by Greek students aged 13-14 years old along their more traditional face-to-face lessons. The reason for creating a more dynamic learning environment aligned with the rest of the curriculum was to increase EFL learners' engagement and motivation through their exposure to authentic online material and participation in a variety of reading, writing, speaking and listening tasks. Data analysis of pre- and post-achievement tests on English language reading comprehension performance along with students' Computer-Assisted Language Learning (CALL) attitude questionnaire showed that participants generally had a positive attitude toward CALL. the findings of the study revealed that online class components were not designed to fit the online tools into a task-based EFL lesson, but rather served the learning objectives of the actual lesson based on a blended teaching approach.

Studies related with Task Based Language teaching Strategy and Achievement.

Tilfarlioglu, Filiz Yalcin; Basaran, Suleyman (2007) tried to find out whether or not task-based writing activities have a positive effect upon reading comprehension in English as a foreign language. Two groups of 28

students were chosen through random cluster sampling. Both groups were given a pre-test and a post-test. The pre-test and post-test mean scores of the experimental group, which got treatment through task-based writing activities, were compared with those of the control group, which was taught English through traditional methods. The effect of the treatment upon reading comprehension was analyzed through two-way ANOVA. The results provide a theoretical justification for the claims of the proponents of Task-based Learning.

Murad (2009) investigated the effect of a Task-Based Language Teaching (TBLT) program on developing the speaking skills of 91 eleventh grade Palestinian secondary students and their attitudes towards English. Findings of the study revealed that TBLT program improved significantly the speaking skill of the students of the experimental group and positively affected their attitudes towards English. Secondly, the TBLT program improved the girls' speaking skills more than the boys in the experimental group.

Sarani and Sahebi (2012) studied on the impact of task-based approach on vocabulary learning in ESP courses. Two homogenous groups of students who were taking their ESP courses participated in the study as a control and an experimental group. Vocabularies in the control group were taught using a traditional approach, whereas in the experimental group, technical vocabularies were taught on the basis of task-based approach. Data analysis showed that the task-based approach was more effective in teaching technical vocabularies compared to the traditional one and results showed that in the experimental group the male learners outperformed the female learners.

In an experimental study by Kumara, Padmadewi and Suarnajaya, I., (2013) explored the effect of task-based language teaching and English grammar mastery toward reading comprehension of the second semester

students . The population of the study was 175 second semester students of the English Education Study 52 students were chosen as the sample through Intact Group Random Sampling. The findings showed that the students who were treated by TBLT achieved better reading comprehension than those who were treated by conventional method. It also revealed that there was an interactional effect between TBLT and grammar mastery upon the students' reading comprehension, the students with high grammar mastery gained higher reading comprehension score when they were treated by TBLT than by conventional method and there was significant difference in reading comprehension between the students who had low grammar mastery taught by using TBLT and those who were taught by conventional method.

Zhang and Hung (2013)through a case study explored viability of Task-based Instruction on College English Teaching in Big-sized Class. Pre-and–post written tests, oral tests, and interviews were administered for data collections. Three main findings from the case study are reported: a). the experimental group is likely to have presented significantly better learning attainments while comparing with the control group; b) the experimental group seems to have showed significantly better oral English performance than the control group; c) the experimental group tends to have presented more active and motivated learning than the control group based on data collected from individual interviews.

Sultan (2013) compared Task-Based Language Teaching Vs. Traditional Way of English Language Teaching In Saudi Intermediate Schools The study involved 122 participants divided into treatment and control groups. The treatment group has received ten weeks of English language instruction via the TBLT method while the control group has received ten weeks of English language instruction via the traditional teaching method. The independent variable is the use of TBLT in the classroom and

the effect/dependent variable is the students' reading comprehension achievement scores. The findings show that teaching via the TBLT method has significantly helped students increase their reading comprehension achievement scores more than that of the traditional teaching method of the English language. The findings also advocated that the TBLT method, as a constructivist practice, is a better way for English language teaching and has involved practices that are desired in a modern educational context when compared to the traditional teaching method of the English language.

Wu, Xiaoli., Lowyck., Joost., Sercu., Lies., Elen, Jan (2013) examined task complexity and sequence in relation to the learner related variables drawn from the social cognitive perspective of self-regulated learning. Results reveals that a significant effect of task sequence on vocabulary learning self-efficacy beliefs, frequency of learning strategy use and task performance, and a significant interaction effect of sequence with task complexity.

Urhahne., et al (2013) examined the effects of different study tasks on the acquisition of knowledge about acids and bases in a computer-based learning environment. Three different task formats were selected to create three treatment conditions: learning with gap-fill and matching tasks, learning with multiple-choice tasks, and learning only from text and figures without any additional tasks. Participants were 196 ninth-grade students who learned with a self-developed multimedia program in a pretest -posttest control group design. Research results reveal that gap-fill and matching tasks were most effective in promoting knowledge acquisition, followed by multiple-choice tasks, and no tasks at all.

Tatsuro and Marchesseau (2013) investigated the effectiveness of tasks in elementary school Foreign Language Activities classes in Japan. First, classes were observed over a two-month period to investigate how often, and how tasks are employed currently in the elementary school setting. Then, the

researchers taught two different groups of students, administering tasks to an experimental group and a non-task-based lesson to a control group to observe students' attitudes towards Task-based Language Teaching. It was found that tasks are frequently employed by teachers and are well-received by students.

Payman (2014) studied on effects of task-based strategies on students' writing skill among translation students. 90 translation students were selected out of 120 Translation students through a homogeneity grammar test. Then they were randomly divided in to three (i.e., class discussion, oral summary, and mind mapping) equal groups received treatment on the three tasks in a-10 session period of treatment in writing courses. Findings revealed that the mind mapping and class discussion groups outperformed the oral summary group. However mind mapping group outperformed both groups. Implications for future English teaching and learning could be the use of mind mapping tasks which develops EFL learners' writing proficiency. Thus through analyzing the passages in the classroom, the learners were able to discover the passage structures and use this knowledge in their writing process.

Shabani and Ghasemi (2014) investigated the impact of Task-Based Language Teaching (TBLT) and content-based language teaching (CBLT) on reading comprehension of the Iranian intermediate ESP learners. Results revealed subjects in TBLT group performed better on the reading comprehension post-test than CBLT group. Findings of the study revealed that TBLT has been more effective than CBLT in teaching reading comprehension to Iranian ESP learners.

Miao Hai-yan (2014) conducted an empirical study in the form of questionnaires to test the effectiveness of this task-based procedure to foreign language writing in the Chinese EFL setting. Results show that the task-based approach is effective to teach big classes English writing, as it deepens

students' understanding of the task-based approach and enhances various aspects of writing.

BavaHarji, Madhubala; Gheitanchian, Mehrnaz; etchumanan, Krishnaveni (2014) examined the effects of tasks, with varying levels of complexity, i.e. simple, complex and complex tasks on EFL learners' oral production in a multimedia task-based language teaching environment. 57 EFL adult learners carried out a total of 12 tasks, in sets of four tasks within three different themes and different levels of complexity. This study found that scaffolding learners in performing tasks with increasing levels of complexity in a multimedia task-based language teaching/learning context, results in improved second language oral production, particularly in terms of accuracy, fluency and complexity.

Tale and Ahmad (2015) studied the Impacts of Task-based Teaching on Grammar Learning by Iranian First Grade High School Students. Study aims at investigating the impact of Task-Based Instruction (TBI) on grammar learning of elementary EFL Learners and their motivation after implementing TBLT The treatment group enjoyed TBI by implementing different tasks for about fifteen 35-minute sessions. The control group benefited the same amount of grammar instruction, but not through the TBLT At the end, students of both groups were given the Michigan grammar-oriented post-test to gauge the effect of TBLT on improving the grammar proficiency of the learners. The results revealed that TBLT had a significant impact on promoting the grammar proficiency of Iranian elementary EFL learners. The study concluded that TBLT instruction on grammar could be used effectively for Iranian language learners especially for the improvement of their motivation.

Megan, Sheen and Younghee (2015) in an action-research study reports on one teacher's experience of developing, implementing, critically

reflecting on, and modifying a language learning task to better address the needs of her students in an adult refugee English program. Task evaluation involved a response-based comparison of student success in task completion and qualitative student-based results. The results noticeably improved after the task modification and the successful implementation of the modified task led to changes in how the teacher viewed task-based teaching.

Zhaochun and Sun (2015) examined effects of TBLT on the improvement of EFL learners' writing competence when such a framework is applied to English writing course for English majors in Chinese EFL context. The findings of this research revealed that the application of TBL framework to English writing classrooms in Chinese EFL settings is effective in improving English majors' writing competence and performance. This study provides the teaching of EFL writing a feasible and effective approach.

Dost and Bohloulzadeh (2017) investigate the effect of the effect of task-based language teaching on motivation and grammatical achievement of EFL junior high school students of Ahvaz. To fulfill the objectives of the study a Homogeneity test (Oxford Quick Placement Test) was administered among 100 students at the junior high school and finally 80 participants were selected. The findings showed that the experimental group significantly performed better than the control group. Generally, the experimental groups outperformed the control groups. The results suggest that task-based language teaching can be used in English classes to develop grammar ability among Iranian EFL learners

Studies related to Task Based Language Teaching and Self Regulation

Dembovskaya (2009) investigated the effects of motivational and cognitive pre-tasks on oral task production by intermediate and low-advanced college learners of French at a large public university in the United States.

The results of the study did not show any significant differences between the motivation, cognitive and control treatments in terms of accuracy, fluency or complexity of their speech.

Anagam, Suresh and Nagarathinam (2011) examine the effectiveness of task-based learning (TBL) and traditional teaching approaches on various aspects of self-regulated training, including motivation and learning strategies using MSLQ. Participants included 61 Periyar University PG students from 2 intact classes (TBL and non-TBL) who were taught by the same environmental economics teacher. Non-TBL group with teacher-centered, textbook-oriented traditional instruction; They taught the experimental group on task-based learning, where students worked with poorly structured problems. The results showed that TBL students had a higher level of intrinsic goal orientation, task value, use of executive learning strategies, critical thinking, metacognitive self-regulation, work regulation, and peer-learning compared to control group students**.**

Motallebzadeh (2013) investigated exploring the role of task-based listening activities in augmenting EFL learners' listening self-efficacy. the sample consists of 70 male and female participated in the study. The results of independent t-test revealed that the participants' levels of listening self-efficacy in the experimental group was significantly higher than those in the control group (P=0.05).

Pyun and Ooyoung (2013)explored second/foreign language (L2) learners' attitudes toward task-based language learning (TBLL) and how these attitudes relate to selected learner variables, namely anxiety, integrated motivation, instrumental motivation, and self-efficacy. Ninety-one college students of Korean as a foreign language, who received task-based language instruction, participated in this questionnaire study. A correlation analysis between variables indicated that students' attitudes toward TBLL were

positively associated with self-efficacy and integrative motivation while they were negatively associated with anxiety. A multiple regression analysis further revealed that only one variable, self-efficacy, was the significant predictor of learners' attitudes toward TBLL.

In a mixed method by Khedidja., Amal., Mechraoui., Kafayat., Motilewa and Quadri (2014) examined the effect task based language teaching has on second language learners' autonomy. Data was collected using questionnaires and semi-structured interviews. The findings show that both teachers and learners perceived task-based language teaching in a positive light. Furthermore, the majority of participating teachers believed that task-based language teaching promotes learner autonomy. It was also revealed that students were not ready to independently self-direct their own learning.

Lee (2016) investigated the affordances for autonomous learning in a fully online learning environment involving the implementation of task-based instruction in conjunction with Web 2.0 technologies. the sample consists of 48 students. The data was collected from two online tutorials with intermediate reflection, poster applications and recent interviews. The results show that the types of assignments and digital tools used by students have autonomy that were learned in different ways. structured tasks show that students have the ability to work independently to create content, while open tasks provide more freedom to explore a particular topic through social interaction. Significantly, teacher education has been influenced by the student's self-regulating efforts in online learning through modeling and timely feedback.

Yen (2017) examines the extent to which task-based language teaching (TBLT) can help Vietnamese students increase the use of self-regulated learning strategies in a writing class. Sixty-nine students were instructed to

write descriptive and argumentative paragraphs on task-based learning over a ten-week period. The results showed that students significantly improved their overall score on self-regulatory writing strategies, especially their ratings of personal self-regulation.

Studies related with Metacognitive Awareness and achievement

Scott ,Schutz, , Glanz and Weinstein (1992) examined the interactive influence of two self-regulatory processes: goal setting and Metacognitive Awareness on the performance of 80 students. The result indicated that a high level of Metacognitive Awareness was the best way to facilitate individuals' performance in a decision-making task. The results provide initial support for multidimensional interactive self-regulation models.

Tsai (2002) investigated the impacts of strategic learning, cooperative learning, and their combination on junior high school students' computer achievement, attitudes, and anxiety. A total of 155 Taiwanese eighth graders participated in this study. Regarding computer achievement, a significant interaction was found between gender and learning context. No significant difference was found in students' computer attitudes due to either learning context or gender factor. With respect to computer anxiety, however, the boys exhibited a significantly higher level than did the girls. Students' computer anxiety in the cooperative learning group was also significantly higher than that in the control group. It is believed that the culture of socialization involving computers plays an important role in junior high school computer classrooms. In addition, strategic learning is regarded as an effective approach to promote female students' learning with computers.

Takallou (2005) examined the effect of Metacognitive Awareness on EFL learners' reading comprehension among 94 male and female students in Iran. The result indicated that experimental groups in the reading

comprehension test showed that those who received instruction that included 'planning' and 'self-monitoring' had a better performance than the control group.

Romainville (2006) explores in particular the relationship between students' metacognition and their academic performance. In a sample of 35 economics students, a relationship was found between performance and some students' Metacognitive Awareness characteristics. In particular, it was found that high achieving students seem to be aware of more cognitive rules and to evoke Metacognitive Awareness about cognitive processes and cognitive results more frequently (for instance, justification of a cognitive rule by an anticipated cognitive result). Their Metacognitive Awareness also seemed more structured and hierarchically organised; for instance, high achieving students describe more frequently their cognitive strategy as a complex sequence including several relationships (temporal, alternative, etc.). A cluster analysis also unfolded five Metacognitive profiles: these profiles associate different performance levels with students' Metacognitive Awareness characteristics, their learning conception and their attribution modes. This paper concludes with a discussion on the implications of the results for 'learning to learn's programmes. It is suggested that the main objective of these programmes should be to foster students' reflection on the*ir own learning*. And comprehension since students who demonstrate a wide range of Metacognitive skills perform better in examinations and complete work more efficiently.

Gou (2008) examined the relationship between Metacognitive Awareness of reading strategies and reading comprehension among 278 Chinese college students. The results showed that there is significant relationship between Metacognitive Awareness and reading comprehension

Pushpalalitha (2008) effects of cooperative learning on primary school pupils' Metacognitive Awareness and reported strategy use in listening comprehension. Data was retrieved from two groups of primary five pupils who belonged to the high ability group through two instruments namely, the Metacognitive Awareness Listening Questionnaire (MALQ) and the reflective journals. Vandergrift's Metacognitive Cycle (2004) was incorporated into the traditionally carried out listening comprehension lessons in order to explore the effects of cooperative learning on the pupils' Metacognitive Awareness and reported strategy use. Findings reveled that control and experimental groups in relation to the Metacognitive knowledge, namely, person, task and strategic knowledge. Positive as well as negative feedback in relation to the attitude of the pupils from the experimental group towards the use of cooperative learning in the listening comprehension lessons have also been gathered.

Young and Fry (2008) The researchers investigated the Metacognitive Awareness inventory (MAI) (Schraw and Dennison, 1994) determine how it relates to broad and single measures of academic achievement in college students. The result of the study indicates that the scores on the MAI differ significantly between graduate students and undergraduate students

Jun Zhang AND Wu (2009) studied Metacognitive Awareness and reading-strategy use of Chinese 270 senior high school students .The strategies were classified into three categories such as global, problem-solving, and support. The results showed that the students reported using the 3 categories of strategies at a high-frequency level. Both the main effect for strategies and the main effect for learners' proficiency were significant. The high-proficiency group outperformed the intermediate group and the low-proficiency group in 2 categories of reading strategies: global and problem-

solving; but no statistically significant difference was found among the 3 proficiency groups in using support strategies.

Tok et al (2010) investigated the effects of Metacognitive Awareness and learning strategies on students success in a distance learning class. The data were collected through Metacognitive Awareness Inventory (Schraw & Dennison, 1994) and Learning Strategies Questionnaire (Pintrich, P.R., Smith, D.A.F., Garcia, T. & McKeachie, W.J., 1993). The data were gathered from 126 undergraduate students. The results showed that Metacognitive Awareness and learning strategies has an important role on students' academic success in an online English course ,metacognitive Awareness, evaluation strategy, was the positive predictor of academic success and The MSLQ, organization and peer learning strategies were the positive predictors of academic success.

. Rahman et al., (2010) investigated the impact of Metacognitive Awareness on students' performance among 900 students in Pakistan. The sample consists of384 undergraduate students between the ages of 17 and 21 at Thai University. The findings of the study showed that Metacognitive Awareness has an appreciable correlation with the performance of students. The students who had Metacognitive Awareness were more likely to do better on the test .

Temur, Kargin, Bayar, Bayar (2010) studied on Metacognitive Awareness of grades 6, 7 and 8 students in reading process. The rationale of the study was to investigate the differences among 6th, 7th, and 8th grades in respect to their Metacognitive Awareness in the field of reading. The research was conducted using a correlational method. The sample included 101 students from a public school in Turkey. The result of the study revealed that there was a positive correlation between grade level and Metacognitive Awareness in reading, but the difference was not statistically significant.

Khonamriand Kojidi (2011) investigated on the relationship between Metacognitive Awareness of reading strategies and comprehension monitoring of language learners in English as a foreign language context. Participants were thirty first year university students majoring in electronics. They completed a questionnaire aimed at discerning the strategies that readers use when coping with academic reading tasks. Participants were then divided into six groups according to their reading proficiency and Metacognitive Awareness. Think-aloud protocol analysis, error detection and retrospective questions were used to examine the comprehension monitoring of readers. The data were analysed through descriptive statistical procedures as well as t-tests. The results indicated the combined effect of Metacognitive Awareness of reading strategies and reading ability of academic reading texts on language learners' comprehension monitoring.

Jaleel and Premachandran investigated a study on the Metacognitive Awareness of secondary school students. The sample includes 180 high school students from various schools in Kottayam District. The tool used was a Metacognitive Awareness inventory prepared and standardized by Sindhu P.G (2011). The results of the study showed that high school students are identically distributed in each group in the Metacognitive consciousness. There is no significant difference in the Metacognitive consciousness of high school students according to their location, gender and type of school management.

Bas(2012)examine the effect of teaching learning strategies in an English lesson on students achievement, attitudes, and Metacognitive Awareness levels. The sample consisted of 60 eight-graders from two different classrooms. The study consisted of a pre-test post-test control group design. The results showed a significant difference between attitude scores of both groups. It has also been found that teaching learning strategies is more

effective in improving students 'performance, increasing their Metacognitive increase in Awareness, and making them develop a more positive attitude towards English teaching than teaching the students' textbooks.

Anjomshoaa et al (2012) examine the role of Metacognitive Awareness on reading comprehension among students in English undergraduate studies at Azad University of Kerman, a province in Iran. Data were collected by questionnaire from 81 Iranian EFL undergraduate students of English. The results of Pearson Correlation analyses showed a significant moderate positive relationship between Metacognitive Awareness and reading comprehension where students who asserted using effective reading strategies also appeared to achieve higher reading abilities. Results confirm that being aware of reading Metacognitive strategy considerably affects reading comprehension. The findings suggest that the students who are aware of a range of efficient reading strategies can significantly enhance their reading ability. The final conclusions of the paper include a discussion about pedagogical implications of the results.

Tavakoliet al (2012)investigated the relationship between language learners' Metacognitive Awareness and their performance on the listening section of IELTS. This study employs both quantitative and qualitative data analyses. Based on the participants' performance on the IELTS test, the participants were identified as less (N=34) or more-proficient (N=32) listeners. The results suggested that (1) listeners' Metacognitive Awareness had a positive relationship with the listening test performance; (2) more-proficient listeners reported significantly higher use of problem solving and directed attention strategies than the less-proficient listeners; (3) less-proficient listeners tended to use mental translation strategy; and (4) there was no difference between the more-proficient and the less-proficient listeners in planning and evaluation and person knowledge.

Reshadi and Aidinlou (2012) investigated the relationship between writing Metacognitive Awareness and the use of two types of cohesive ties among Iranian EFL learners in the process of writing. A questionnaire developed and validated by the researchers was used to gather data about the Iranian English learners' writing Metacognitive Awareness. Moreover, the researchers administrated a writing test to find out if Iranian EFL learners made use of three types of conjunctions including coordinating, correlative and transitional conjunctions and also three types of references. The results were arguable in that there was only a significant relationship between writing Metacognitive Awareness and the use of references.

Memis and Bozkurt(2013)investigated the relationship between Metacognitive Awareness, reading motivations, reading levels, and the reading comprehension success of 577 randomly selected fifth grade students. the results revealed that the moderately significant relationship between reading comprehension and understanding of Metacognitive reading.

Rahimirad and Shams (2014) explore the effect of activating Metacognitive Strategies on the listening performance of English as a foreign language (EFL) university students and explores the impact of such strategies on their Metacognitive Awareness of the listening task. The sample was 60 students were randomly assigned to the experimental and control groups. The experimental group used the Metacognitive Strategy instruction based on the models proposed by Vandergrift and Tafaghodtari (2010), while the control group used the listening input without strategy instruction. The listening module of the International English Language Assessment System (IELTS) was used to evaluate the listening performance of participants in both groups during pretests and post-tests, and the measuring instrument of the Metacognitive Awareness was used to measure Metacognitive Awareness before and after treatment. The results of the IELTS test revealed that the

experimental group significantly outperformed the control group on the post-test and that, according to the analysis of the MALQ instrument, there was a significant improvement in the students' level of Metacognitive Awareness after the test.

Hong-Nam, Leavell and Maher (2014) studied the relationships among reported strategy use, Metacognitive Awareness, and reading achievement of high school students. Correlations between reading scores and strategy use were examined as well as variation in the use of the strategy by self-rated reading skill and academic grades. Factor analysis revealed four factors in the inventory of Metacognitive Awareness of reading strategies such as Metacognitive Awareness strategies, textual strategies, reading strategies, and prediction strategies. Reading strategies were preferred by the participants, while textual strategies were the least preferred. A statistically significant difference in the use of the strategy was found for reading performance, reading self-assessment, and grade level.

Goh and Hu. (2014)examined the relationship between Metacognitive Awareness and listening performance with questionnaire data. Data were collected through the Metacognitive Awareness Listening Questionnaire (MALQ) and an official sample IELTS listening test. The findings showed a significant positive relationship between learners' Metacognitive Awareness scores and listening performance and that their Metacognitive Awareness . result also revealed that Analysis of individual factors showed a significant relationship between listening performance and the strategies of directed attention and problem solving as well as an overall moderate-to-low sense of confidence among the participants in the study. It also revealed considerable intrapersonal variation in different aspects of Metacognitive Awareness.

Turkyilmaz (2015) studied the relationship between reading attitude, personality, self-regulation and Metacognitive Awareness of reading

strategies of secondary school students. our scales were used by 419 high school students . Metacognitive Awareness of reading strategies and personality was a significant predictor of reading attitude. On the other hand, self-regulation was not a significant predictor of reading behavior. As a result, it can be said that a student who has a Metacognitive Awareness of reading strategies and responsibility has a higher reading attitude level than others.

Shahmoradi and Askarian (2015) explored the relationship between Metacognitive Awareness and Self Regulation Mediation reflective thinking and learning at high school students . the sample included in this study was 375 by stratified random sampling. the instruments used in the study were a standard questionnaire teaching (LPQ) Biggs et al (2011), "Metacognitive Awareness (MAI) Schraw and Denison (2004), Self-regulated learning strategies MSLQ (1999) Pintrich and De Groot (2009) and reflective thinking RTS Mezirow and Kember questionnaire (2011). The results of the study showed that aspects of self-regulation (evaluation, will and emotions) and a significant positive relationship with their reflexive thinking also showed that cognitive and Metacognitive Strategies and resource management and the significant negative relationship with reflection and Metacognitive Awareness and self-regulated learning approach high correlation obtained there is a significant positive relationship.

Feiz (2016) examined Metacognitive Awareness and attitudes toward foreign language learning. The data was collected using the Metacognitive Awareness Inventory (Schraw & Dennison, 1994) and Attitudes to Foreign Language Learning (A-FLL) developed by Vandewaetere and Desmet (2009). The results indicated a statistically significant relationship between participants' perceptions of Metacognitive Awareness and their attitudes towards learning foreign languages. The analysis established that

Metacognitive Awareness was the strong predictor of attitudes towards learning English.

Poo and Funn (2017) studied on Using Metacognitive Awareness in Learning Vocabulary with Cloud-Based Immersive Technology. This study included 40 students from a Chinese elementary . Data were collected from student questionnaires and interviews. The study revealed that Metacognitive Awareness helped student in vocabulary learning.

Chou (2017) examined A Task-based Language Teaching Approach to Developing Metacognitive Strategies for Listening Comprehension. Eighty-eight students participated in the study, which used a quasi-experimental design.. The experimental group received strategy- embedded task-based listening instruction for 18 weeks, whereas the control group received only strategy-based instruction. Listening tests and questionnaires were used in the pretest and posttest stages. The results showed that the experimental group improved their Metacognitive Awareness of strategies for listening and outperformed the control group in the listening test.

Studies related with Metacognitive Awareness and Self Regulation

Connor et al. (2010) studied the effect of individualized student instruction on the self-regulation gains of first-year students compared to a typical control group. The result also shows that self-regulation, conceptualized as a constellation of executive skills, was positively associated with academic development. the findings also shows that no major effect of the ISI on self-regulation gains. However, among students whose initial self-regulation was lower, ISI was associated with greater self-regulation gains than students in the control classes.

Ruan (2014) investigated   into Metacognitive Awareness of chinese English as a foreign language (EFL) student writers, under a threefold

Metacognition framework - person, task, and strategy variables, and within the broader domain of cognitive writing theories. The sample consists of 51 English major students prior to an English writing course. Findings demonstrate that motivation, self-efficacy, and writing anxiety constitute students' Awareness of person variables influencing their EFL writing, whereas their task Awareness involves task purposes, task constraints, and cross-language task interference. Strategy Awareness of planning, text generating, and revising was found typical of novice EFL student writers.

Ali (2015) studied the effect of collaborative learning of teacher assistants and the self-assessment of learners on self-regulation and academic achievement at high levels was studied. The study population consists of 75 people divided into three groups of 25 subjects (two experimental groups and one control group). the instruments used the Questionnaire and Questionnaire on Motivated Strategies for Learning (MSLQ) as well as a self-developed achievement test to measure geometry in the lower and upper levels of the cognitive domain. the results revealed that cooperative learning and self-assessment have a positive effect on the promotion of learners' self-regulatory knowledge for geometry courses

Ben-Eliyahu and Linnenbrink-Garcia (2015) integrated self-regulated learning situated in students' favorite and least favorite courses was empirically tested in a sample of 178 high school and 280 college students. finding revealed that there were significant indirect paths from behavioral and cognitive regulation to achievement through learning strategies, although some of these indirect paths were counter to expectations.

Reed (2015 explored whether increasing Metacognitive Awareness through participating student performance and motivation among 30 high-school Students. Metacognitive Awareness Inventory (MAI) and Motivated Strategies for Learning Questionnaire (MSLQ) instruments were used .

Results provide evidence that Metacognitive skills can be increased in students in an indirect way, positively affecting academic performance.

Turkyilmaz (2015) studied the relationship between reading attitude, personality, self-regulation and Metacognitive Awareness of reading strategies of 419 secondary school students. The result indicated that Metacognitive Awareness of reading strategies and personality was significant predictor of reading attitude. It also revealed that self-regulation was not significant predictor of reading attitude. as a result it can be said a student who has Metacognitive Awareness of reading strategies and responsibility have higher reading attitude level than others.

Adiguzel and Orhan (2017) studied the relationship between the metacognitive and self-regulatory skills of students in the preparatory class and their academic performance in language learning, and to determine whether students' levels of Metacognitive and self-regulation skills differ among variables. The descriptive survey method, one of the quantitative research models, was used in this study and the data were collected by two scales. The result indicated that students had high levels of self Regulation and Metacognitive skills, Self Regulation skills of students differed in favor of female students, it was found that these skills did not differ by age, students' faculties , type of education, and type of high school graduation. A positive and meaningful relationship was revealed between the self-regulation skills of the students and the academic results in the English lesson. It was concluded that students' Metacognitive skill levels differed in favor of female students, but not according to faculties, type of education, age, and type of high school.

Conclusion

The theoretical overview led the researcher to understand the conceptual framework of the considered variables. It also helped to focus on the essential features and to find out the different interpretations and perspectives of different researchers for this particular study. it is undoubtedly easier for the investigator to define the methodology for further proceedings. The previous research study on STAD shows that English language learning has gained too much importance and attracts interest in achievement in English throughout the world. Analysis of the review shows that many studies have been conducted to verify the efficacy of STAD, TTBLT on English classes independent effects of the strategies were found studies, both positive and negative effects were found. Based on the literature review studies prove that different instructional strategies effectively used to make learners more competent using target language and to become a self regulated learner. No single study was found on the combined effect of the two selected strategies. Very few number of studies in effect of selected instructional strategies on self-regulation were found. vey-limited research can be seen in the field of technology enriched language teaching on English language classroom and Self Regulation. Therefore, the investigator felt the need to conduct an experimental study to find out the effectiveness of selected Instructional Strategies on Achievement in English and Self Regulation**.**

CHAPTER **THREE**

METHODOLOGY

- Variables of the Study
- Objectives of the Study
- Hypotheses of the Study
- Design of the Study
- Procedure
- Summary of Procedure

Methodology is an operational frame work of the study with which the design of the study is described. It refers to a general strategy for the collection and analysis of the data necessary to solve the problem. The method used for a study is decided by the nature of the problem and the type of data required to answer the questions of the problem.

The present experimental study was conducted in two phases. In the first phase, the study was focused to find out the attitude of Secondary School English teachers towards the Instructional Strategies used in Secondary School classrooms. In the second phase, the study was aimed to find out the effectiveness of Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning and Technology Enriched Task Based Language Teaching (TETBLT) over Activity Oriented Method of Teaching (AOMT) in terms achievement in English and Self Regulation of Standard VIII students. The study was also aimed to find out the main and interaction effects of Instructional Strategies (STAD, TETBLT and AOMT) and Metacognitive Awareness on Achievement in English and Self Regulation of Standard VIII students. The methodology adopted for the study is presented under the following headings.

Variables of the Study

Objectives of the Study

Hypotheses of the Study

Design of the Study

Procedure

Summary of Procedure

Variables of the Study

The rationale behind the selection of the Independent, Dependent and Control Variables of the study is explained in the following sections.

The investigator made a careful review of literature to identify the Instructional Strategies developed on the basis of research on human learning and communication. These were categorized under broad classifications as varied Methods of Teaching, Models of Teaching and Strategies of Instruction and Learning.

It is worthwhile to note that efficiency in learning depends on student characteristics both cognitive and non-cognitive. Socio-Economic background of the parents and other environmental variables are also having varied influence on teaching and learning. These variables influencing student's performance in English language and Self Regulation were specifically selected for the experiment. The following Independent, Dependent and Control Variables related to Achievement in school subjects have been considered.

Independent Variables

Independent Variables selected for the study were Instructional Strategies and Metacognitive Awareness.

Instructional Strategies.

Stones and Morris (1977) defined Instructional Strategy as a generalised plan for a lesson which includes structure, desired learning behaviour in terms of goals of instruction and an outline of planned tactics necessary to implement the strategy. In the present study it includes Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning, Technology Enriched Task Based Language Teaching (TTBLT) and Activity

Oriented Method of Teaching (AOMT). A brief description of the levels of Instructional Strategies is as follows:

Student Teams Achievement Divisions (STAD) Strategy.

Students Teams Achievement Divisions (STAD) Strategy is one of the cooperative learning strategies where the learner should work in a group and solve the problem together with their group. According to Slavin (1995), Student Teams Achievement Divisions (STAD) has been used in a wide variety of subjects, from Mathematics to Language, Arts to Social studies, and has been used from second grade through college. In STAD, students are assigned to four- or five-member learning teams. The teams are composed of high, average, and low achievers, and of boys and girls of different backgrounds. Thus, each team is a microcosm of the entire class.

Technology Enriched Task Based Language Teaching (TETBLT).

Task Based Language Teaching allows the students to use language and skills in situations that they will face in their academic lives (Alexander, Argent, & Spencer, 2008). TETBLT is beneficial because students learn language by communicating interactively while engaging in meaningful tasks.

TBLT is relevant to students' needs and interests, as it stimulates language learning and skills development necessary for completing tasks that students may encounter outside the classroom (Nunan, 2004). It is an effective Strategy for teaching the core skills including grammar, pronunciation, and vocabulary (Willis, 1996; Willis & Willis, 2007). It aims to enable learners to acquire new linguistic knowledge and systematize their existing knowledge (Ellis, 2003). Among the existing methodologies for language teaching, Technology Enriched Task Based Language Teaching (TETBLT) presents an ideal platform for informing and fully realizing the potential of technological innovations for language learning. The meaningful

resources, authentic experiences, and exciting, interactive opportunities that a technology rich learning environment can make the difference in students' learning attitudes and boosting their self-confidence. Literature review exposed that technology enriched TBLT in language learning strengthen learner engagement, facilitate the instructor's role, and provide a structured, comprehensive learning experience.

Activity oriented Method of Teaching.

Activity Oriented Method of Teaching is the existing teaching strategy used in the schools of Kerala. Investigator prepared the lesson transcripts based on the Activity Oriented Method of Teaching and the Control group was exposed to this method..

Metacognitive Awareness.

Metacognitive Awareness is the ability to reflect on one's own thinking and develop and use practical problem solving skills to resolve learning difficulties (Joseph, 2010). Garner and Alexander, (1989) indicates that meta-cognitively aware learners are more strategic and perform better than unaware learners. Metacognitive Awareness allows individual to plan, sequence, and monitor their learning in a way that directly improves performance (Schraw & Dennison, 1994). Students with good Metacognition are able to monitor and direct their own learning processes; they have the ability to master information and apply the learning strategies to solve problems more easily. As Metacognitive Awareness is the best researched Psychological Motive, which has an effect on learning outcomes especially in enhancing Academic Achievement, it was also selected as one of the Independent Variables for the present study.

Dependent Variables

The study concentrated on the effectiveness of Instructional Strategies, over one another, on Achievement in English and Self-regulation of Standard VIII students. The study also aims to find out the main and interaction effects of Instructional Strategies (STAD, TETBLT and AOMT) and Metacognitive Awareness on Achievement in English and Self-regulation of Standard VIII students. Thus, Achievement in English (Total and Skills wise scores ie., Listening, Speaking, Reading and Writing) and Self-regulation of standard VIII Students were selected as the Dependent Variables.

Control Variables

The investigator anticipated some attributes of the subjects that might intervene in the experimental situation and the outcomes of the treatment might be affected by these factors. To overcome this problem, these variables were controlled statistically using ANCOVA. Variables controlled for this Experimental study were Pre-experimental Status in terms of Achievement in English (Total and Skill wise scores) and Self-regulation measured by a Pretest each, Verbal Intelligence, Non-verbal Intelligence and Classroom Environment.

Objectives of the Study

Objectives formulated for the present Experimental study are described in the following sections.

Two major objectives were formulated for the present study. The first objective was to investigate the effectiveness of Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning and Technology Enriched Task Based Language Teaching (TETBLT) over Activity Oriented

Method of Teaching, in case of Achievement in English (Total and Skill wise Scores) and Self Regulation of Standard VIII Students.

Examination of the main and interaction effects of Instructional Strategies (Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning, Technology Enriched Task Based Language Teaching (TETBLT) and Activity Oriented Method of Teaching) and Metacognitive Awareness on Achievement in English (Total and Skill wise Scores) and Self-Regulation of standard VIII Students was the second major objective of the study.

The specific objectives formulated are presented to get an idea regarding the nature and scope of the experiment. They are as follows:

1. To explore the attitude of Secondary School English teachers towards Instructional Strategies in general and Cooperative Learning strategies and Task Based Language teaching in particular.

2. To study whether there exists any significant difference in the mean Achievement in English (Total and Skill wise scores) of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) for the Total Sample, Boys and Girls.

3. To study whether there exists any significant difference in the mean Gain score of Achievement in English (Total and Skill wise Scores) of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) for the Total Sample, Boys and Girls.

4. To study whether there exists any significant difference in the mean Self-Regulation scores of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) for the Total Sample, Boys and Girls.

5. To study whether there exists any significant difference in the mean Gain Score of Self-Regulation of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) for the Total Sample, Boys and Girls.

6. To study the effectiveness of Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning over Activity Oriented Method of Teaching (AOMT), if any, in terms of Achievement in English (Total and Skill wise scores) of standard VIII Students.

7. To study the effectiveness of Technology Enriched Task Based Language Teaching (TETBLT) over Activity Oriented Method of Teaching (AOMT), if any, in terms of Achievement in English (Total and Skill wise scores) of standard VIII Students.

8. To study the effectiveness of Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning over Technology Enriched Task Based Language Teaching (TETBLT), if any, in terms of Achievement in English (Total and Skill wise scores) of standard VIII Students.

9. To study the effectiveness of Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning over Activity Oriented Method of Teaching (AOMT), if any, in terms of Self-Regulation of standard VIII Students.

10. To study the effectiveness of Technology Enriched Task Based Language Teaching (TETBLT) over Activity Oriented Method of Teaching (AOMT), if any, in terms of Self-Regulation of standard VIII Students.

11.   To study the effectiveness of Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning over Technology Enriched Task Based Language Teaching (TETBLT), if any, in terms of Self-Regulation of standard VIII Students.

12.   To study the main effect of Independent Variables (Instructional Strategies and Metacognitive Awareness) on Achievement in English (Total and Skill wise Scores) of standard VIII Students for the Total Sample, Boys and Girls.

13.   To study the interaction effect of Independent Variables (Instructional Strategies and Metacognitive Awareness) on Achievement in English (Total and Skill wise Scores) of standard VIII Students for the Total Sample, Boys and Girls.

14.   To study the main effect of Independent Variables (Instructional Strategies and Metacognitive Awareness) on Self-Regulation of standard VIII Students for the Total Sample, Boys and Girls.

15.   To study the interaction effect of Independent Variables (Instructional Strategies and Metacognitive Awareness) on Self-Regulation of standard VIII Students for the Total Sample, Boys and Girls.

Hypotheses of the Study

For the experiment it, was necessary to formulate some assumptions or intelligent guesses regarding the expected outcomes of the study. In research methodology these assumptions are called hypotheses. Hypotheses provide a clear path to the investigator and delimit the study into some relevant issues of the problem under consideration. The hypotheses always keep the investigator in touch with the main objectives of the study.

On the basis of the review of literature, the experiment was designed to test the following hypotheses.

1. There will be no significant difference in the mean Achievement in English (Total and Skill wise Scores) of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) for the Total Sample, Boys and Girls.

2. There will be no significant difference in the mean Gain score of Achievement in English (Total and Skill wise Scores) of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) for the Total Sample, Boys and Girls.

3. There will be no significant difference in the mean Self-Regulation scores of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) for the Total Sample, Boys and Girls.

4. There will be no significant difference in the mean Gain score of Self-Regulation of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) for the Total Sample, Boys and Girls.

5. Students taught through Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning will not differ significantly than students taught through Activity Oriented Method of Teaching (AOMT), if any, in terms of Achievement in English (Total and Skill wise scores) of standard VIII Students.

6. Students taught through Technology Enriched Task Based Language Teaching (TETBLT) will not differ significantly than students taught through Activity Oriented Method of Teaching (AOMT), if any, in

terms of Achievement in English (Total and Skill wise scores) of standard VIII Students.

7. Students taught through Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning will not differ significantly than students taught through Technology Enriched Task Based Language Teaching (TETBLT), if any, in terms of Achievement in English (Total and Skill wise scores) of standard VIII Students.

8. Students taught through Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning will not differ significantly than students taught through Activity Oriented Method of Teaching (AOMT), if any, in terms of Self-Regulation of standard VIII Students.

9. Students taught through Technology Enriched Task Based Language Teaching (TETBLT) will not differ significantly than students taught through Activity Oriented Method of Teaching (AOMT), if any, in terms of Self-Regulation of standard VIII Students.

10. Students taught through Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning will not differ significantly than students taught through Technology Enriched Task Based Language Teaching (TETBLT), if any, in terms of Self-Regulation of Standard VIII Students.

11. There will be no significant main effects of Independent Variables (Instructional Strategies and Metacognitive Awareness) on Achievement in English (Total and Skill wise Scores) of Standard VIII Students for the Total Sample, Boys and Girls.

12. There will be no significant interaction effect of Independent Variables (Instructional Strategies and Metacognitive Awareness) on

Achievement in English (Total and Skill wise Scores) of standard VIII Students for the Total Sample, Boys and Girls.

13.   There will be no significant main effects of Independent Variables (Instructional Strategies and Metacognitive Awareness) on Self-Regulation of standard VIII Students for the Total Sample, Boys and Girls.

14.   There will be no significant interaction effect of Independent Variables (Instructional Strategies and Metacognitive Awareness) on Self-Regulation of standard VIII Students for the Total Sample, Boys and Girls.

Design of the Study

The present study has been conducted by employing the Quasi Experimental Design. The experimental design selected for the study is explained as follows.

Research Design Selected

To test the effectiveness of STAD Strategy of Cooperative Learning, TETBLT over the Activity Oriented Method of Teaching, in enhancing Achievement in English and Self Regulation of Standard VIII Students, Non Equivalent Groups Pretest-Posttest Control and Comparison Groups Design was used as it is more common and usually more desirable to have comparison rather than control groups. A comparison design uses two or more variations of the independent variables and can use two or more groups McMillan and Schumacher, (2010).   The investigator used Analysis of Covariance to control differences on the pre-test or other variables so that post-test differences would not be due to initial differences prior to training (Best & Kahn, 2006). In the present study, there were two experimental

groups and one control group. All these three groups received both pretests and posttests. The layout of the design is as follows.

The design selected for the study is illustrated as followed by McMillan and Schumacher, (2010).

Non Equivalent Groups Pretest-Posttest Control and Comparison Groups Design			
Group	**Pretest**	**Intervention**	**Posttest**
A	O	X_1	O
B	O	X_2	O
C	O	C_1	O
		Time	

ABC - Groups; O - Observation; X_1 - Treatment 1; X_2 - Treatment 2; C_1 – Application in the Control Groups

Design of the Present Study

Group Pretest Treatment Posttest

Group	Pretest	Treatment	Posttest	
A	O_1	X_1 (STAD)	O_2	
B	O_3	X_2 (TETBLT)	O_4	Achievement in English
C	O_5	C (AOMT)	O_6	
A	O_7	X_1 (STAD)	O_8	
B	O_9	X_2 (TETBLT)	O_{10}	Listening Skill
C	O_{11}	C (AOMT)	O_{12}	
A	O_{13}	X_1 (STAD)	O_{14}	
B	O_{15}	X_2 (TETBLT)	O_{16}	Speaking Skill
C	O_{17}	C (AOMT)	O_{18}	
A	O_{19}	X_1 (STAD)	O_{20}	
B	O_{21}	X_2 (TETBLT)	O_{22}	Reading Skill
C	O_{23}	C (AOMT)	O_{24}	
A	O_{25}	X_1 (STAD)	O_{26}	
B	O_{27}	X_2 (TETBLT)	O_{28}	Writing Skill
C	O_{29}	C (AOMT)	O_{30}	
A	O_{31}	X_1 (STAD)	O_{32}	
B	O_{33}	X_2 (TETBLT)	O_{34}	Self Regulation
C	O_{35}	C (AOMT)	O_{36}	

In the layout of the design:

O_1, O_3 and O_5	-	Pre tests on Achievement in English
O_2, O_4 and O_6	-	Post tests on Achievement in English.
O_7, O_9 and O_{11}	-	Pre tests on Listening skill
O_8, O_{10} and O_{12}	-	Post tests on Listening skill
O_{13}, O_{15} and O_{17}	-	Pre tests on Speaking skill
O_{14}, O_{16} and O_{18}	-	Post tests on Speaking skill
O_{19}, O_{21} and O_{23}	-	Pre tests on Reading skill
O_{20}, O_{22} and O_{24}	-	Post tests on Reading skill
O_{25}, O_{27} and O_{29}	-	Pre tests on Writing skill
O_{26}, O_{28} and O_{30}	-	Post tests on Writing skill
O_{31}, O_{33} and O_{34}	-	Pre tests on Self Regulation
O_{32}, O_{34} and O_{36}	-	Post tests on Self Regulation

X_1 is the treatment in the Experimental Group I (Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning).

X_2 is the treatment in the Experimental Group II (Technology Enriched Task Based Language Teaching (TETBLT).

C   is the application of the Method in the Control Group (Activity Oriented Method of Teaching)

All the three groups (STAD, TETBLT and AOMT) were matched based on their Pre-experimental Status in terms of Achievement in English (Total and Skill-wise Scores) and Self- Regulation, Verbal Intelligence, Non - Verbal Intelligence, Classroom Environment and Socio-Economic Status.

Procedure

The present study was conducted in two major phases. In the first phase, the study was focused to find out the attitude of Secondary School English language teachers towards the Instructional Strategies used in Secondary School classrooms. The second phase of the study was experimentation. For this, Non- Equivalent Groups Pretest-Posttest Control Groups Design was adopted. For the study, three intact classes of Standard VIII were selected from two different schools. Among them, two intact classes were assigned as Experimental Groups and the third intact class was assigned as the Control group.

Phase 1- Preliminary Survey

Previous research has shown that preliminary survey is required and relevant to the improvement of the preparation of Instructional Strategies. A Preliminary Survey was done to explore the Secondary school English teachers' attitude towards Instructional Strategies. Preliminary survey was conducted for the following purpose;

• To explore secondary school English teachers' attitude towards Instructional Strategies in general and Cooperative Learning strategies and Technology Enriched Task Based Language teaching in particular.

The preliminary survey helped in sieving out the attitude of English teachers towards the Instructional Strategies. Major question in mind was whether Cooperative Learning Strategies and TBLT were practiced in schools. Suggestions obtained from the teachers from the preliminary survey phase of the study was the ground work on which the experiment materialised. It also helped in preparing the lesson transcripts for STAD, and TETBLT based treatments for the target population. Detailed literature review also rendered a robust support in the designing of the lesson transcripts of these strategies. For this, the investigator prepared an attitude scale and administered to the English teachers.

Method Used.

A preliminary survey was conducted among fifty Secondary School English teachers from 13 randomly selected schools in Malappuram district. This preliminary survey helped to verify teachers' attitude towards Instructional Strategies in general as well as Cooperative Learning Strategies and Technology Enriched Task Based Language Teaching in English classroom in particular.

Tool used.

Scale of Attitude towards Instructional Strategies in Teaching English (Hameed & Sabna, 2014) was the tool used in the survey phase. The detailed description of the scale is provided in the following section.

Scale of Attitude towards Instructional Strategies in Teaching English (Hameed & Sabna, 2014)

Preparation of this tool is proceeded through the following steps.

Planning.

Scale of Attitude towards Instructional Strategies in Teaching English is composed of three sections ie,

Section I. Items to assess the attitude towards Instructional Strategies used in Teaching English.

Section II – Items to assess the attitude of teachers towards Cooperative Learning Strategies. It also examined Secondary School Teachers' perceptions, and reasons for teachers' choosing or avoiding CL in English teaching.

Section III – Items to assess the attitude of teachers towards Task Based Language Teaching. The Nunan's Checklist (2004) was helpful in the item preparation of the scale.

Item writing.

Statements included in the scale were prepared on the basis of the dimension identified from the review of related studies and theoretical basis of the strategy provided by the experts in the field. Section I, included 40 items in draft and 35 items were selected after standardization. Section II include 30 items in the draft scale and after item analysis, 25 items were

selected. Section III include 25 items in draft and after standardization 20 items were retained. In total, the tool consists of 80 items with positive s and negative items.

Scoring.

All the statements are in three point Likert Scale type with three graded response, Viz; 'Agree', 'Undecided', and 'Disagree'. The scores assigned to the statements ranged from 3 to 1 (Agree- 3, Undecided- 2, and Disagree-1 for positive statements). Scores are reversed for negative statements. Sum of the scores on each statement in the scale gave the total score on the scale. The draft scale is presented in Appendix A.

Item Analysis

Ferguson (1952) puts item analysis as "any of the many process by which one can find which items differentiate and which do not differentiate between the contrasting criterion groups". Conventional item analysis procedure was applied here. 100 English teachers from various schools of Malappuram district was used for the item analysis. Responses from the try out were scored and arranged in the increasing order of the total score on attitude. Subjects scoring the highest 27% (top 27%) and subjects scoring the lowest 27% (bottom 27%) are chosen as the criterion groups. The numerical values of their mean responses to each statement was computed. Item wise discriminating power in terms of t-value were computed using the formula:

$$t = \frac{X_H - X_L}{\sqrt{\partial_H^2/n_H - \partial_L^2/n_L}}$$

If nH = nL = n as well be the case, if some percentage of the total number of subjects selected for high and low groups, then the formula can be written as

$$t = \frac{XH\text{-}XL}{\sqrt{\sum (XH\text{-}XH)\ 2 + \sum (XL\text{-}XL)\ 2/n\ (n\text{-}1)}}$$

Where $\sum (XH\text{-}XH)\ 2 = \sum XH2 - (\sum XH)\ 2/n$

$\sum (XL\text{-}XL)\ 2 = \sum XL2 - (\sum XL)\ 2/n$

XH   –   The mean score of a given statement for the high group

XL   –   The mean score of a given statement for the low group

XH   –   score of the individual item in the high group

XL   –   core of the individual item in the low group

∂H2 –   The variance of the distribution of responses of the high group
               to the statement

∂L2   –   The variance of the distribution of responses of the low group to
               the statement

nH   –   Number of subjects in the high group

nL   –   Number of subjects in the low group

n   –   Size of the sample

The t-values of each item are presented in table

The obtained value of '*t*' is a measure of the extent to which a given statement differentiate attitude groups and the low attitude groups. Details of statements selected and the items wise discrimination power are provided in the following Table 1.

Table 1.

Details of Statements Selected for the Scale of Attitude towards Instructional Strategies in teaching English

Sl. No.	t value	Remarks	Sl. No.	t value	Remarks
1	2.06	*	48	4.47	*
2	1.10	Rejected	49	1.55	Rejected
3	2.02	*	50	3.26	*
4	0.99	Rejected	51	5.18	*
5	2.04	*	52	10.69	*
6	2.50	*	53	5.59	*
7	1.38	Rejected	54	1.68	Rejected
8	6.91	*	55	8.05	*
9	1.38	Rejected	56	1.45	Rejected
10	3.11	*	57	7.31	*
11	5.12	*	58	6.67	*
12	6.21	*	59	6.12	*
13	6.83	*	60	2.06	*
14	7.22	*	61	1.10	*
15	3.47	*	62	2.08	*
16	12.01	*	63	0.91	*
17	10.56	*	64	1.45	*
18	9.52	*	65	3.52	*
19	3.72	*	66	1.63	*
20	6.51	*	67	5.12	*
21	4.01	*	68	6.21	*
22	7.78	*	69	3.47	*
23	1.65	Rejected	70	8.05	*
24	4.62	*	71	6.43	*
25	2.38	*	72	4.04	*
26	2.76	*	73	3.11	*
27	3.01	*	74	2.39	*
28	3.27	*	75	0.29	Rejected
29	2.76	*	76	2.01	*
30	1.38	*	77	2.26	*
31	4.01	*	78	3.25	*
32	7.73	*	79	0.73	Rejected
33	6.55	*	80	3.11	*
34	4.62	*	81	2.53	*
35	2.38	*	82	2.26	*
36	3.01	*	83	0.69	Rejected
37	2.76	*	84	1.11	Rejected
38	3.98	*	85	2.26	*
39	5.62	*	86	2.56	*
40	8.25	*	87	3.55	*
41	1.77	Rejected	88	3.89	*
42	2.46	*	89	6.95	*
43	3.86	*	90	7.12	*
44	2.70	*	91	3.11	*
45	1.18	Rejected	92	11.58	*
46	3.71	*	93	4.19	*
47	2.73	*	94	1.39	Rejected
			95	2.95	*

* selected item

Selection of items.

Items for the final Scale of Attitude consists of 80 items in three sections, selected on the basis of 't' value. A statement with t value greater than or equal to 1.96 are selected for the final scale. The finale scale is presented as Appendix A1.

Validity.

The Scale of Attitude for teachers was prepared by ensuring all aspects related to attitude towards prevailing Instructional Strategies, Cooperative Learning Strategies and Task Based Language Teaching. Expert assessment of the scale ensured its face validity.

Reliability.

The reliability of the present study was found out by Test Retest Method. The scale was administered to a sample of 25 teachers and repeated again in the same group by giving an interval of two weeks. The reliability coefficient of the scale obtained is found 0.81. The obtained reliability coefficient shows that the scale is reliable one.

Phase II- Experimentation

Since the present study was to find out the relative Effectiveness of Student Teams Achievement Divisions Strategy and Technology Enriched Task Based Language Teaching over Activity Oriented Method of Teaching in case of Achievement in English and Self Regulation of Standard VIII Students, and to study the main and interaction effects of Instructional Strategies and Meta cognitive Awareness on Achievement in English and Self Regulation of Standard VIII Students, Phase II of the study was carried out using the Experimental method. The sample and tool used and the statistical Techniques utilized in the study are as follows.

Sample selected for the Study.

Standard VIII Students of Secondary Schools in Kerala State were considered as the population for the study. Being an experimental study, the investigator felt it difficult to conduct the experiment on a large sample, because class size has great role in the acceleration of Academic Achievement (Smith & Glass, 1990) in the classroom. It is noted that in recent years, there has been a marked increase of interest in the small groups. Smaller groups are advocated because they seems to allow for greater participation and involvement by the students (Slavin, 1985). The investigator therefore selected two intact class divisions of standard VIII students from one school as the Experimental Group I (STAD) and the Control group, and one intact class group from another School as Experimental Group II (TETBLT). The three groups were equated on the basis of the following

Rural-Urban Locality.

The two schools selected were situated in semi -urban areas of Malappuram district.

Sex.

The two schools from which the samples were drawn were provided with co-education.

Instructional Efficiency.

It is an important criterion which decides the quality of learning of the pupils. Equality of the instructional efficiency of the subjects of the three groups (Classes) was ensured by comparing the results in the terminal examination in the previous year.

In the selection of the sample, the conveniences of the schools to conduct the experiment and the physical distance between the two schools (so that the students of the two groups cannot mingle mutually) were also considered. The three classroom groups were equated in their Pre-experimental Status in terms of Achievement in English and Self-regulation measured by a Pretest, Verbal Intelligence, Non-verbal Intelligence, Classroom Environment and Socio-Economic Status. Appropriate tools were used for this purpose.

Allocation of Experimental and Control Groups.

Three intact class groups of standard VIII students each from two schools in Malappuram district were selected for the experiment. Details of the schools selected for the Experiment are given in Table 2.

Table 2

Details of the Schools Selected for the Treatment

SI. No.	Name of School	Nature of the Group
1	DGHSS Tanur, Malappuram	Experimental Group 1 (STAD)
2	GHSS, Niremerathur, Malappuram	Experimental Group 2 (TETBLT)
3	DGHSS Tanur, Malappuram	Control Group (AOMT)

Actual number of subjects in the Experimental and Control groups at the beginning of the Experiment are shown in Table 3.

Table 3.

Details of the Sample Distribution for Treatments

Sample	Experimental Group I (STAD)	Experimental Group II (TETBLT)	Control Group (AOMT)	Total
Boys	21	24	20	62
Girls	24	21	25	73
Total	45	45	45	135

Experimental Group I and Experimental Group II were taught through Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning Strategy, and Technology Enriched Task Based Language Teaching (TETBLT) respectively and the Control group was taught through the Activity Oriented Method of Teaching.

Selection of Topics for Treatment.

The topics for the treatment in the present study were selected from the syllabus prescribed for standard VIII students of Kerala State for the academic year 2014-2015. The investigator thoroughly reviewed the English textbook of Standard VIII for topic selection. From the total number of units, the investigator selected only two units, which were found suitable for teaching using the three selected instructional strategies. Each topic and its sub units are as given Table 4.

Table 4

Details of Topics Selected for Treatment

SI. No	Name of the Lesson	Type of lesson
1.	*As We Shall We Reap (Unit)*	
a	In search of mothers garden	Memoir
b	The River	Poem
c	Gulliver's Travels	Novel
d	River	Poem
2.	*Within And Without (Unit)*	
a	Harrison Bergeron	Fiction
b	The Bat	Poem
c	First Manned Flight To Venus	Drama
d	Sugar Fields (Poem)	Poem

All lessons were examined with great care and found amenable to STAD Strategy of Cooperative Learning, TETBLT and Activity Oriented Method of Teaching. The two units were taught in twenty four periods, (8 period for poem and 16 period for prose for two units) each for a time duration of 45 minutes. Thus the total duration of treatment both in the Experimental groups and the Control group was fixed at 20 hours each.

Tools and Other Learning Materials Used

A detailed description of the Tools and other learning Materials used for the study are presented in the following sections.

- Lesson Transcript for Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning (Hameed & Sabna, 2014).

- Lesson Transcript for Technology Enriched Task Based Language Teaching -TETBLT (Hameed & Sabna, 2014)

- Lesson Transcript of Activity Oriented Method of Teaching (Hameed & Sabna, 2014).

- Scale of Metacognitive Awareness (Hameed, Sabna & Meharunnisa, 2014).

- Achievement Test in English- ATE (Hameed & Sabna, 2014).

- Test of Listening Skill in English- TLSE (Hameed & Sabna, 2014)

- Test of Speaking Skill in English- TSSE **(**Hameed & Sabna, 2014**)**

- Test of Reading Comprehension- TRC (Hameed & Sabna, 2014).

- Test of Writing Skill in English- TWSE (Hameed & Sabna, 2014).

- The Self-regulation Questionnaire (Brown & Miller).

- Classroom Environment Inventory (CEI), (Aruna, Sureshan & Unnikrishnan, 1998).

- General Data Sheet for Assessing Socio-Economic Status (SES).

The tools and other learning materials used for these variables are described as follows.

Lesson Transcript for Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning (Hameed & Sabna, 2014).

The Student Teams Achievement Division (STAD) Strategy of Cooperative Learning was introduced as an innovative method of instruction. The lesson transcripts were prepared for 45 minutes duration as the appropriate time for presentation of each lesson.

Planning.

The investigator prepared Lesson Transcripts for the Student Teams Achievement Division (STAD) Strategy of Cooperative Learning, following the steps proposed by Slavin (1995). The topics selected for treatment were "As We Shall We Reap" and "Within and Without". These two units are again divided in to four sub units. Objectives were assigned and activities were selected for each lesson and learning materials were prepared accordingly. The topics selected and the specific objectives set for each learning unit were the same for the two Experimental groups and the Control group.

For the development of the Lesson Transcripts, the investigator reviewed different Cooperative Learning Procedures like Jigsaw I (Aronson, 1978), Jigsaw II (Slavin, 1980); Learning Together (Johnson & Johnson, 1975), Cooperative Integrated Reading and Composition – CIRC (Madden, et al,1986); Numbered Heads Together(Olsen & Kagan, 1992)and other

Cooperative Learning Methods proposed by Starr and Schuerman (1974) and Wheeler (1977). Among these, the investigator selected the Student Teams Achievement Division (STAD*)* Strategy of Cooperative Learning for treatment in Experimental Group I, because this model is purely based on theory and validated through research (Slavin,1980).The Cooperative Learning procedures implied in Student Teams Achievement Divisions model involve students work in four or five member heterogeneous groups.

After fixing the STAD Strategy of Cooperative Learning for treatment in the Experimental Group I, the investigator made adequate planning to prepare Lesson Transcripts for this strategy. For the same, the entire topics selected were examined thoroughly and suggestions were sought from the experts concerned. Moreover, the guidelines given by Slavin (1980) for their STAD Strategy were studied thoroughly.

For the experimental study, the investigator prepared Lesson Transcripts on the basis of the theoretical framework of Cooperative goal structure suggested by Slavin (1995). Slavin (1995) enumerated three main concepts of STAD as team rewards, individual accountability and equal opportunities for success. Team rewards are certificates or either rewards which are given if a STAD group achieves higher than predetermined level. In this way a spirit of positive competition is reinforced and all or none of the groups would be rewarded based on how they score. In terms of individual accountability, the individual learning of each of the group members determines the success of the terms. Description of the various stages in the development of the Lesson Transcripts is presented as follows.

STAD consists of five major components (Slavin, 1995: 7173) the Different phases of the strategy are detailed below.

a) Phase I – Class Presentation.

Material in STAD is initially introduced in a class presentation. The class presentation is a teacher directed presentation of the material skills, and processes that the students are to learn. Carefully written and planned objectives are stated and used to determine the nature of the class presentation, and the team study followed. This is most often direct instruction or a lecture discussion conducted by the teacher, but could include audiovisual presentations also. Learners also could follow the lesson plans in their textbook, including the laboratory activities in this phase of STAD. Several lessons were devoted to class presentations. Class presentation in STAD differs from usual teaching only in that they are clearly focused on STAD unit. In this way students realise they must pay careful attention during the class presentation. Students must understand about presentation of reading text from the teacher so it will help them do well on quizzes. And their quiz scores determined their team score. The class presentation is an educator coordinated presentation of the material concepts, aptitudes, and processes that the students are to learn. Precisely composed and arranged targets ought to be expressed and used to decide the way of the class presentation, and the group study to follow.

b) Phase II: Teams.

Teams are composed of four or five students who represent a cross-section of the class in terms of academic performance and gender. The major function of teams is to make sure that all team members are learning, and more specifically, to prepare its members to do well on quizzes. After the teacher presents material of reading text, the team meets to study worksheet or other material. Mostoften, the study involves discussing problem together, comparing answer, and correcting any misconception, if teammates make mistakes. The team is the most important feature of STAD. At every point,

emphasis is placed on team members doing their best for team, and on the team doing its best to help its members. The team provides the peer support for academic performance that is important for learning, and it provides the mutual concern and respect that are important for such outcomes as inter-group relation, self Regulation, and acceptance of mainstreamed students.

Team study consists of one or two periods in which each team masters material that teacher provides. Team members work together with prepared worksheets and make sure that each member of the team can answer all questions on the worksheet. Students should move their desks so that they face each other in small team. Give each team two worksheets and two answer sheets (not one for each student). In the STAD model, the following team rules are explained and posted on the bulletin board:

- Students have the responsibility to make sure that their teammates have learned the material.
- No one finishes studying until all teammates have mastered the subject.
- Ask all teammates for help before asking the teacher.
- Teammates may talk to each other softly.

It is important to encourage team members to work together. They work in pairs within the teams (sharing one worksheet), and then the pairs can share their work. A principle that is integral, not only to STAD, but to all cooperative learning models is that students must talk with each other in team learning sessions. It is during these small group sessions that students will teach each other, and learn from each other. One of the ways to encourage deeper understanding is for students to explain to each other their answers to the questions. One way to facilitate this process is for the teacher to circulate from group to group asking questions, and encouraging students to explain their answers.

c) Phase III. Quizzes.

After approximately one to two periods of teacher presentation and one to two periods of team practice, the students take individual quizzes or test. Students are not permitted to help one another during the quizzes. Thus, every student is individually responsible for knowing the material. Each student uses one copy of the quiz.

d) Phase IV. Individual Improvement Scores.

The idea behind the individual improvement scores is to give each student a performance goal that can be attained if the individual works harder and performs better than in the past. Any student can contribute maximum points to their team in this scoring system, but no student can do so without doing their best work. Each student is given a "base" score, derived from the student's average past performance on similar quizzes. Students then earn points for their teams based on the degree to which their quiz scores exceed their base scores.

Determining Initial Base Scores.

Base scores represent students' average scores on previous quizzes. If the teacher starts STAD after having given three or more quizzes, use students' average quiz scores as base scores. Otherwise, use students' final grades from the previous year.

Three levels of award are given for the groups fromimprovement score average of each groups, is given as follows.

Criterion (Team average)	Award
25-30	Super Team
20-24	Great Team
15-19	Good Team

e) Phase V. Team Recognition.

Team averages are reported in the weekly recognition chart. Teachers can use special words to describe the teams' performance such as famous author's name. Recognition of the work of each team can occur by means of a newsletter, handout, or bulletin board that reports the ranking of each team within the class. Sensitivity is required here. It is important to realize that praising students academically from low status groups is an integral part of the effectiveness of STAD. Teams may earn certificates or other rewards if their average scores exceed a certain criterion.

The investigator followed these phases, in the preparation of the draft Lesson Transcripts in English for STAD Strategy. The model lessons, described by Slavin (1995) for STAD were studied thoroughly by the investigator.

Grouping Techniques.

STAD is a widely practiced strategy with heterogeneous team members. The teacher should be aware of grouping techniques. In terms of individual accountability, the individual learning of each of the group members determines the success of the terms. Some of the relating novel techniques of grouping are described here.

The teacher distributes paper strips to all students.

Teacher provides names of different poets, writers, etc. in strips. After distributing the strips the teacher asks the students to form groups based on the strips (e.g. students who got the names of poet form a group). While making strips, the teacher should consider the number of groups and number of members in each group.

The teacher distributes picture strips to the students.

The students are asked to walk around the room to find the rest of their strips which creates a team. The investigator tried out the above techniques and formed nine groups consisting of five members each.

The Seating Arrangement.

Johnson and Johnson (1975) have suggested a clear out line for the type of seating arrangement to be used in the classroom in order to facilitate Cooperation among pupils. In a Cooperative Learning situation the seating arrangement has to be organised in accordance with student's access to students, to other groups, to the teacher and learning materials. Research on Cooperative Learning in schools has found that its effectiveness depends on how it is organised (Slavin, 1988). The diagrammatic representation of the classroom seating arrangement for the STAD strategy of Cooperative Learning is presented as Figure 1.

Figure1. Classroom seating for STAD Strategy of Cooperative Learning.

Try Out.

The draft lesson transcript was executed by the investigator on 45students of class VIII. The investigator created a good rapport with students. The investigator also explained the main objectives and characteristics of the STAD Strategy and how the instruction is designed in tune with the cooperative learning strategy.

Teacher in the concerned in the school was invited to attend the session and opinion about implementation was sought. On the basis of suggestion given by the teacher and feedbacks from students, the draft lesson transcript was modified and used for the treatment in the Experimental Group. Based on a suggestion given by the teacher and student feedback, the transcript was changed and used for the treatment in the Experimental Group I. A copy of the Lesson Transcript for STAD Learning Strategy is presented as Appendix B.

Lesson Transcripts for Technology Enriched Task Based Language Teaching (TETBLT) - (Hameed & Sabna, 2014)

Technology Enriched Task Based Language Teaching (TETBLT) was introduced as a new method of instruction. Adequate technology was incorporated to prepare the development of TETBLT. The lesson transcripts were prepared for 45 minutes duration as the appropriate time for presentation of each unit. Different technological devices were integrated in this method. For this purpose, the investigator used Technology Enriched Task Based Language Teaching (TETBLT) with the help of supervising teacher. This Strategy incorporated different videos, animations, power point, audio clips, video clips, and internet facilities.

The application of technology enables the teachers to have more flexibility and change in the learning environment. Teacher makes use of

activities that have been specially designed to incorporate several language skills simultaneously (such as reading, writing, listening, and writing). In this instructional strategy, teachers provide learners with opportunities to develop each skill. Lesson transcripts were prepared on the basis of the two units selected. Objectives were assigned and activities were selected for each lesson and learning materials were prepared. The lesson frames include the description of objectives assigned for each lesson related with units, learning materials and previous knowledge relevant to the lesson, activities in the three phases and follow up activities of the lesson. Based on the TETBLT design, 24 lesson transcripts were prepared. Each lesson is of 45 minutes duration.

The investigator made adequate preparation for the development of the Lesson Transcripts for Technology Enriched Task Based Language Teaching (TETBLT) Strategy. For the same, the entire topics selected were examined thoroughly and suggestions were sought from the experts concerned. Moreover, the guidelines given by Ellis and Nunan, (1985) for their Task Based Language Teaching (TBLT) were studied thoroughly. The investigator prepared Lesson Transcripts for TETBLT, following the steps proposed by Nunan 2002, Willis, Ellis, 2009) on the topics selected for treatment.

For the development of the Lesson Transcripts, the investigator reviewed different studies related with Task Based Language Teaching. The investigator selected the Technology Enriched Task Based Language Teaching (TETBLT) Strategy, for treatment because this model is purely based on theory and validated through research (Nunan 2002, Willis 1996; Ellis, 2009; Prabhu (1987). Description of the various stages in the development of the Lesson Transcripts is presented as follows.

Planning.

After fixing the Technology Enriched Task Based Language Teaching (TETBLT) as an Instructional Strategy for the present study, the investigator made adequate planning to prepare Lesson Transcripts for this strategy. For the same, the entire topics selected were examined thoroughly and suggestions were sought from the experts concerned. Moreover, the guidelines given by Prabhu (1987), Wills, (1996), Hammer, (1999), Nunan (2002), were studied thoroughly.

Preparation.

Tasks can be used as the central component of a three-part framework: "Pre Task", "Task Cycle", and "Language Focus."

　　a)　*Phase I -The Pre Task Phase.*

Teacher explores the topic with the class, highlights useful words and phrases, and helps learners understand task instructions and prepare. Learners may see a recording of others doing a similar task, or read part of a text as a lead in to a task. The purpose is to prepare the students to perform the task in ways that will promote language acquisition.

　　b)　*Phase II - The Task Cycle*.

This cycle has three essential phases and one further optional phase. They are Task, Planning and Report

　　c)　*Phase III - Language Focus.*

The Language Focus phase affords a number of options. These have three major pedagogic goals:

1.   To provide an opportunity for a repeated performance of the task

2.   To encourage reflection on how the task was performed and

3.   To encourage attention to form, in particular to those forms that proved problematic to the learners when they performed the task.

Try out.

The draft Lesson Transcripts were tried out by the investigator on 40Standard VIII pupils to work out its application. Teachers concerned in the school, where try out was done, were invited to attend the try out session and their opinion about the implementation was sought. On the basis of the suggestions given by the teachers and the feedback from students, the draft Lesson Transcript was modified, reedited and finalised. A model lesson plan is given as Appendix C.

Lesson Transcript of Activity Oriented Method of Teaching (Hameed & Sabna, 2014).

Lesson Transcripts for Constructivist Teaching Strategy (Activity Oriented Method of Teaching) were prepared in English language for teaching the Control group. Instructional objectives were formulated on the basis of the nature of the content. Constructivist Teaching Strategy (Activity Oriented Method of Teaching) English is the prevailing method of Teaching English in secondary schools of Kerala. The lesson plan for teaching in the control group was prepared on the basis of the activity curriculum of Kerala. Each lesson was prepared by Identification of curriculum statements, Formulation of curriculum competencies, and Presentation of suitable activities, recording the responses of the students, Recapitulation and assignments.

The investigator consulted secondary school English teachers and based on the text book and teachers' handbook prepared lesson transcripts,s for existing method of teaching. The concerned teachers of the three class divisions of standard VIII selected for the experimentation were also consulted. Based on the Constructivist Teaching Strategy (Activity Oriented Method of Teaching, 24 lesson plans were prepared on the same topics selected for the experimentation. Time duration of each lessons 45 minutes. A model lesson plan on English Language based on existing Method of Teaching is given as Appendix D.

Scale of Metacognitive Awareness - SMA (Hameed, Sabna & Meharunnisa, 2014).

Metacognition is "cognition about cognition", "thinking about thinking", or "knowing about knowing" and higher order thinking skills (Dunlosky & Bjork, 2009). Scale of Metacognitive Awareness was developed and standardized by the investigator, with the help of the supervising teacher to measure the Metacognitive awareness of VIII standard students. This test was used to evaluate the level of Metacognitve Awareness among the students. The procedures adopted in the development and standardization of the inventory are detailed in the following sections.

Planning and preparation.

The investigator thoroughly reviewed the literature related to Metacognitive Awareness (MA) in order to clarify the construct. Various researchers have defined Metacognitive Awareness in different ways and there are many theories related to Metacogniitve Awareness. To achieve this, the investigator studied the theoretical and empirical studies in the field of educational research, sought a description of Metacognitive Awareness in earlier research areas in the field of education, and personally observed

several students during the learning activities. In addition, the personal contact with teachers of secondary level, opinions of education experts, researchers from the education sector and extensive literature research are the sources for the development of study subjects. Most of the instruments available in the literature are usually used to measure Metacognitive perception and do not focus on Metacognitive Awareness in learning. The researcher therefore decided to develop a new instrument for the measurement of Metacognitive awareness, especially for the class of secondary school. Meta cognition has components ie. Metacognitive Awareness and Meta cognitive Regualtion.

Metacognitive Awareness.

Knowledge of cognition or Metacognitive Awareness refers to the knowledge about oneself and on learning strategies as well as when, why and how these learning strategies are to be used. Within the knowledge component of knowledge of self and strategies, knowledge about other cognitive constructs such as interest, attention, memory etc. are included. The three stages included in this dimension and its characteristics are given in the following part.

a) *Knowledge of self (Declarative knowledge).*

Knowledge of the self is concerned with an individual's awareness of personal abilities and all other intellectual resources associated with learning. The subcomponents are the following

➢   Awareness of personal strengths and weaknesses

➢   Awareness of other intellectual abilities like Interest, Attention, memory etc.

Example. I am aware of my weaknesses in studies.

Preparation and planning for learning (Procedural knowledge).

Procedural knowledge is the use of knowledge for the purpose of completing a procedures or process. It also includes knowledge about the implementation of learning procedures (eg: strategies). Requires students to know the process and when the process needs to be applied in different situations. This area consists of the awareness of important Metacognitive and cognitive activities in the initial planning phase of learning and they can think about how, how and why they need to perform a particular task.

The sub components are the following:

➢   Goal setting toward a particular task

➢   Previous Knowledge

➢   Sequential ordering of the task

➢   Time requirements

Example:- I am aware of the various elements that arouse interest in learning.

b) *Conditional knowledge.*

Conditional knowledge is the decision under which circumstances certain processes or skills should be transferred. Conditional knowledge refers to knowing when and why to use declarative and procedural knowledge (Garner, 1990). For example, effective learners know when and what information to rehearse. Conditional knowledge is important because it helps students selectively allocate their resources and use strategies more effectively (Reynolds, 1992). It also enables students to adjust to the changing situational demands of each learning task.

Example: I don't categorize lessons in advance based on the time allocated

Metacognitive regulation.

The second component of Metacognition is the regulation of cognition. It refers to the observation and control of one's own cognitive processes during learning (Nelson & Narens, 1990). The three stages included in this dimension and its characteristics are given in the following part.

a) *Selecting and using learning strategies.*

This phase is concerned with the individual's awareness of the identification, selection and use of a particular strategy with a specific purpose that helps the learner to think about the learning process and make decisions.

➢ Identification of strategies

➢ Rationale for selecting strategies

➢ Find out difficulties for using strategies

➢ Use of a particular strategy with a specific purpose

Example: I have found the most suitable methods to learn different topics.

b) *Monitoring and evaluating strategy use.*

When students have selected and started selected strategies, they often have to ask themselves, Is the strategy sufficient or not? What strategies do I use? It also includes knowledge of how to be orchestrated, that is coordinating and linking the different strategies and transferring the positive results in a different situation.

➢ Monitor all the above stages by asking how? In what way? Does it need change?

➢ Is it in accordance with our pace and style?

➢ Identification of errors in the present method

➢ Modifications in strategies for improvement

➢ Use of multiple strategies and

➢ Association of strategies

Example:- I know when and where to apply particular strategy based on its effectiveness.

c) *Evaluation of self.*

In this area they are concerned about 1) what am I attempting to accomplish? (2) In what way would I be able to change my choices? (3) How well am I utilizing them? (4) What else would I be able to do? Responses to these questions integrate all of the previous aspects of Metacognition, including self -assessment which enables the student to reflect through the cycle of learning.

➢ Evaluation of goal

➢ Assessing the suitability of procedures used and

➢ Verifying result obtained

Example: I use all available options to evaluate my mistakes in learning.

The investigator prepared positive and negative items for the measurement of the Metacognitive Awareness and the draft tool was prepared with the help of the supervising teacher. Then the investigator discussed with the supervising teacher on ensuring the relevance of each statement prepared, and to remove its ambiguity in its wording.

After a thorough scrutiny and editing, the final form of draft scale was made. The final version of the draft consisted of 66 items and was constructed based on all components and the items were arranged randomly. The component wise item numbers are presented in the following Table 5.

Table 5

Component wise Item Details of the Scale of Metacognitive Awareness

	Components	Item numbers
1.	Knowledge of Self	1,2,6,7,14,34,36,62,66
2.	Preparation and planning for learning	8,15,19,25,27,36,42,44,46,54,58
3.	Conditional Knowledge	5, 16,26,41, 43,31,49,52,53, 65
4.	Selecting and using learning strategies	3,9,11,17,2239,40,45,50,57,63,64
5.	Monitoring and evaluating Strategy use	10,12, 21,23,24, 35,37,38,47,48,55,61
6.	Evaluation of self	4, 13,18,20,30, 33, 32,51, 56,59,60

Scoring Procedure.

The draft scale of Metacognitive Awareness consisted of 66 statements. The draft scale consisted of 41 favorable statements and 25 unfavorable statements. The scale was prepared in the form of a three-point scale, following a response pattern of 'always', 'sometimes' and 'Never'. Score for each item will be in a sequence of three, two and one for positive items and one, two and three for negative items. All the item score for each student are to be summated to obtain a total measure of the Metacognitive Awareness. A copy of the Draft Scale of Metacognitive Awareness is presented in Appendices E.

Try out.

The draft test with 66 items were tried out by the investigator on a representative sample of 110 students in two class division of standard VIII, in a school other than the Experimental and control subjects were selected. Before the administration of the test, its purpose was made clear to the subjects. The scale included all necessary guidelines about the scale and additional information required was given by the investigator. During this time incomplete response sheets are avoided and 100 response sheet were selected for item analysis. During this time incomplete response sheets are avoided and 100 response sheet were selected for item analysis.

Item Analysis.

The draft scale was administered to a representative group of 400 secondary school students with due weightage to sub samples. Incomplete response sheets are discarded after scrutiny. After random rejection the sample was fixed to 370. The responses of each item by all secondary school students in the sample were scored and subjected to item analysis.

For the finalisation of the items of the scale certain procedure that suggested by Likert (1932) are used. The responses collected from 370 students were arranged in the descending order based on score obtained. Then the subjects were grouped as high group and low group respectively. The top 27 % students and bottom 27% students were taken as the high group and low group respectively for item analysis. The number of students in lower and upper group was 100 each. The mean and standard deviation of each item were calculated separately for lower and upper groups and t-value were calculated. The final version of Inventory consists of 53 items. The t-value for each item was calculated using the formula (Formula 1)

$$t = \frac{XH-XL}{\sqrt{\partial H2/nH - \partial L2/nL}}$$

If nH = nL = n as well be the case, if some percentage of the total number of subjects selected for high and low groups, then the formula can be written as

$$t = \frac{XH-XL}{\sqrt{\sum (XH-XH)2 + \sum (XL-XL)2/n (n-1)}}$$

Where $\sum (XH-XH)2 = \sum XH2 - (\sum XH)2/n$

$\sum (XL-XL)2 = \sum XL2 - (\sum XL)2/n$

XH – The mean score of a given statement for the high group

XL – The mean score of a given statement for the low group

XH – score of the individual item in the high group

XL – core of the individual item in the low group

∂H2 – The variance of the distribution of responses of the high group to the statement

∂L2 – The variance of the distribution of responses of the low group to the statement

nH – Number of subjects in the high group

nL – Number of subjects in the low group

n –   Size of the sample

The t-values of each item are presented in Table 6.

Table 6

Data and Results of Item Analysis of Metacognitive Awareness Inventory

Item No.	t values	Status		Item No.	t values	Status
1	2.83	*		34	3.13	*
2	2.37	Rejected		35	1.97	Rejected
3	3.35	*		36	5.67	*
4	3.36	*		37	4.96	*
5	4.31	*		38	3.24	*
6	3.45	*		39	2.51	Rejected
7	4.42	*		40	2.47	Rejected
8	1.99	Rejected		41	2.85	*
9	4.21	*		42	4.53	*
10	4.72	*		43	2.36	Rejected
11	3.74	*		44	4.81	*
12	2.88	*		45	4.16	*
13	2.80	*		46	5.28	*
14	4.05	*		47	3.30	*
15	3.61	*		48	0.63	Rejected
16	4.79	*		49	5.23	*
17	0.66	Rejected		50	3.84	*
18	3.78	*		51	4.81	*
19	3.48	*		52	2.12	Rejected
20	2.56	Rejected		53	5.27	*
21	4.84	*		54	4.16	*
22	4.15	*		55	4.78	*
23	3.54	*		56	5.57	*
24	6.99	*		57	3.35	*
25	7.40	*		58	4.70	*
26	3.07	*		59	5.47	*
27	2.39	Rejected		60	2.55	Rejected
28	3.21	*		61	3.61	*
29	4.67	*		62	2.52	Rejected
30	3.58	*		63	2.95	*
31	6.20	*		64	4.58	*
32	3.64	*		65	5.46	*
33	6.78	*		66	6.21	*

* - Selected item

Selection of items.

Items for the final test were selected on the basis of 't' value. A statement with t value greater than or equal to 2.58 are selected for the final scale. Therefore, the investigator selected favourable and unfavorable statements with 't' value greater than 2.58. There are 41 Favorable statements

and 25 unfavorable statements in the finale scale. A copy of the final scale of metacognitive awareness is presented as Appendix E1.

Content Validity.

Items in the Scale of Metacognitive Awareness were carefully prepared and chosen reflecting on the theoretical baseline of the Metacognition, related studies reviewed and on consultation with experts in the field. Hence, theoretically the scale can be considered valid.

Face Validity.

Face validity is established for the scale. The statements in the scale appear to measure scale of Metacognitive Awareness of subjects has confirmed by experts. The experts confirmed that the items were able to assess the Metacognitive Awareness of standard VIII students. Hence the scale has face validity also.

Reliability.

Reliability of the test was established using Test-Retest Method. The test was administered to a sample of 52 students and after a period of three weeks the same test was administered to the same sample. The reliability coefficient thus obtained is 0.88 the internal consistency of the scale was established by calculating Cronbach's Alpha. The obtained Cronbach Alpha of the scale is 0.93 suggesting very high internal consistency of the scale. Hence Scale of Metacognitive Awareness is valid and reliable tool with good psychometric properties to assess the Metacognitive Awareness of Secondary School Students.

Achievement Test in English –ATE (Hameed & Sabna, 2014)

Achievement Test in English, is used as pre-test and post-test, was constructed and standardized by the investigator for the present study on the topic selected for the treatment.   Main stages of preparation and standardization of the test were as follows:

Planning of the Test.

The investigator studied the curriculum, syllabus and text book of English for Standard VIII students, for the academic year 2013-14.   During the time, for guidance, the investigator consulted subject experts and experienced teachers in English.   The investigator also referred available text books for framing the items for the test. The preparation of an Achievement Test involves a number of stages. Here, decision regarding when to test, what kind of questions are to be included use in the test and how many questions to include in the test etc. are taken.   With regard to type of questions, the investigator decided to have only objective type questions in the test because the topic were limited and the duration of the test was fixed as 45 minutes.

Preparation of the test.

Items for the Achievement Test in English were prepared on the basis of the major objectives of the Revised Taxonomy of Cognitive Domain. When the test was prepared, due weightage was given to objectives, content and difficulty level of items.

a) *Weightage of Objectives.*

Objectives are broad goals and are stated in terms of desired changes in student's behaviour. Items were prepared on the basis of the relevant objectives of the revised Taxonomy of educational objectives.   The weightage given to the categories of objectives under cognitive domains are:

Remembering

Understanding

Applying

The weightage given to different objectives for the achievement test are given in Table 7.

Table 7

Weightage to Objectives

Sl. No	Objectives	Marks	Percentage
1	Remembering	29	29
2	Understanding	36	36
3	Applying	35	35
	Total	100	100

b) *Weightage to Content.*

The investigator analyzed and divided the entire content from units and tried to give adequate weightage to each unit. The weightage given to each unit is given in Table 8.

Table 8

Weightage to Content

Content	Marks	percentage
Unit 3-As We Shall We Reap		
In search of mothers garden	20	20
The river	10	5
Gulliver's Travels	16	20
River	4	5
Unit 4-Within and without		
Harrison Bergeron	23	20
The Bat	3	10
First Manned Flight To Venus	14	10
Sugar fields	10	10
Total	100	100

c) *Weightage to Difficulty level.*

Weightage given to the difficulty level is presented in Table 9.

Table 9

Weightage to Difficulty Level

Sl. No	Difficulty level	Marks	Percentage
1	Easy	25	25
2	Average	55	55
3	Difficult	20	20
	Total	100	100

Blue Print.

The investigator prepared a blue print for conducting the Achievement Test in English on the basis of the weightage given for instructional objectives and content. The blue print for the Achievement Test in English incorporating weightage given to instructional objectives, content area and difficulty level are presented in Table 10.

Table 10

Blue print for the Achievement Test in English

Form of questions / Content	'Remembering			Understanding			Applying			Total
	O	S	E	O	S	E	O	S	E	
Unit 3- Unit 3-As We Shall We Reap	15(1)			18(1)			18(1)			51
Unit 4- Within and without	14(1)			18(1)			17(1)			49
Total	29			36			35			100

Based on the blue print, the investigator prepared multiple choice items representing each objective for the draft test. A copy of Achievement Test in English (Draft) together with its Response sheet and scoring key are presented as Appendices F, F1, F2.

Try out.

The draft test with 100 multiple choice items were tried out by the investigator on a representative sample of 110 students in two class division of standard VIII, in a school other than the Experimental and control subjects were selected. Before the administration of the test, its purpose was made clear to the subjects. The test included all necessary guidelines about the test and additional information required was given by the investigator. During this time incomplete response sheets are avoided and 100 response sheet were selected for item analysis.

For the purpose of valuation the investigator prepared a window screen. Through this method, all items were scored. During this time incomplete response sheets are avoided and 100 response sheet were selected for item analysis.

Item Analysis.

For item analysis, the procedure suggested by Ebel and Frisbie (1991) was used. The selected response sheets were arranged in the descending order of the magnitude of scores. The scores obtained by upper 22 subjects (27%) and lower 22 subjects (27%) were taken as the upper and lower group respectively. For the selection of the items in the final test, the difficulty index and discriminating power of each item were found out.

Difficult Index.

The following formula suggested by Ebel (1991) was used to calculate the difficult index of each item.

$$\text{Difficulty index} \quad = \quad \frac{U + L}{2N}$$

Where,

U = The number of correct responses in the upper group

L = The number of correct responses in the lower group

N = The number of subjects in each group

Discriminating Power.

The higher the discrimination index for items in a test, the more variable the scores are likely to be and more reliable the scores are expected to be (Ebel, 1991).

Formula used for calculating the discriminating power is the following.

$$\text{Discriminating power} \quad = \frac{U + L}{N}$$

Where,

U= The number of correct responses in the upper group

L = The number of correct responses in the lower group

N = The number of subjects in each group

The difficulty Index and Discriminating Power of each items are given in Table 11.

Table 11

Difficulty index and discriminating power of item in Achievement Test in English

Item No	U	L	DI	DP	Selected Items	Item No	U	L	DI	DP	Selected Items
1	26	24	0.92	0.07		52	8	5	0.24	0.11	
2	26	10	0.66	0.59	*	53	15	13	0.51	0. 07	
3	24	10	0.64	0.51	*	54	23	10	0.61	0.48	*
4	24	11	0.64	0.48	*	55	6	3	0.16	0.11	
5	24	13	0.68	0.4	*	56	23	9	0.59	0.51	*
6	23	12	0.64	0. 40		57	25	23	0.88	0.07	
7	24	9	0.61	0.55	*	58	21	8	0.53	0.48	*
8	27	20	0.87	0.25		59	18	7	0.46	0 .40	*
9	26	9	0.64	0.62	*	60	24	22	0.85	0 .07	
10	21	7	0.51	0.51	*	61	20	8	0.51	0.44	*
11	23	10	0.61	0.48	*	62	25	12	0.68	0.48	*
12	18	16	0.62	0.07		63	25	10	0.64	0.55	*
13	20	8	0.51	0.44	*	64	25	24	0 90	0 .03	
14	23	12	0.64	0 .40	*	65	23	8	0.57	0.55	*
15	21	8	0.53	0.48	*	66	20	8	0.51	0.44	*
16	20	8	0.51	0.44	*	67	23	8	0.57	0.55	*
17	22	16	0. 70	0.22		68	26	21	0.87	0.18	
18	18	7	0.46	0. 40	*	69	19	14	0.61	0.48	*
19	23	9	0.59	0.51	*	70	20	8	0.51	0.44	*
20	22	9	0.57	0.48	*	71	20	8	0.51	0.44	*
21	24	18	0.77	0.22		72	26	22	0.88	0.14	
22	22	8	0.55	0.51	*	73	27	24	0.94	0.11	
23	21	8	0.53	0.48	*	74	21	9	0.55	0.44	*
24	22	11	0.61	0.4	*	75	22	11	0.61	0 .40	*
25	17	6	0.42	0.4	*	76	23	10	0.61	0.48	*
26	26	9	0.64	0.62	*	77	18	7	0.46	0. 40	*
27	27	23	0.92	0.14		78	20	8	0.51	0.44	*
28	25	10	0.64	0.55	*	79	21	8	0.53	0.48	*
29	24	11	0.64	0.48	*	80	24	11	0.64	0.48	*
30	26	10	0.66	0.59	*	81	23	11	0.62	0.44	*
31	21	8	0.53	0.48	*	82	24	10	0.62	0.51	*
32	26	11	0.68	0.55	*	83	25	10	0.64	0.55	*
33	27	24	0.94	0.11		84	11	5	0.29	0.22	
34	25	10	0.64	0.55	*	85	18	14	0.59	0.14	
35	27	20	0.87	0.25		86	20	9	0.53	0 .40	*
36	26	10	0.66	0.59	*	87	22	9	0.57	0.48	*
37	24	10	0.62	0.51	*	88	17	6	0.42	0 .40	*
38	17	6	0.42	0. 40	*	89	25	24	0. 90	0 . 03	
39	24	11	0.64	0.48	*	90	22	10	0.59	0.44	*
40	26	20	0.85	0.22		91	25	10	0.64	0.55	*
41	26	21	0.87	0.18		92	24	10	0.62	0.51	*
42	25	9	0.62	0.59	*	93	25	9	0.62	0.59	*
43	27	24	0.94	0.11		94	21	10	0.57	0. 40	*
44	23	11	0.62	0.44	*	95	20	20	0.81	0.14	
45	24	12	0.66	0.44	*	96	21	9	0.55	0.44	*
46	24	19	0.79	0.18		97	25	11	0.66	0.51	*
47	26	25	0.94	0. 03		98	25	21	0.85	0.14	
48	27	25	0.96	0. 07		99	24	11	0.64	0.48	*
49	24	10	0.62	0.51	*	100	22	10	0.59	0.44	*
50	8	1	0.16	0.25							
51	21	10	0.57	0. 40	*						

Selection of the items.

The investigator decided to select from the total items of draft test having discriminating power more than 0.4 and difficulty index and discrimination between 0.4 and 0.6. Thus the investigator prepared the final test with 70 multiple choice items selected from the draft test. The time duration fixed for the test was one hour and the maximum score of the test was 70.

Content Validity.

Content validity of the test was ensured by including adequate components of the content as per the objectives based on the VIII standard text book. Thus the content validity of the Test of Achievement Test in English was established.

Face Validity.

To establish the face validity, items of the Test were subjected to experts' evaluation. The experts confirmed that the items in the Test were able to measure Listening Skills in English of VIII standard students.

Reliability of the Test.

Reliability of the Test was established using Test- Retest Method. The same test was again administered on the same sample, from whom the data obtained for validation, after a period of three weeks. Thus two sets of scores, the original score and the retest scores, were obtained. The correlation coefficient of the two sets of scores was calculated using the Pearson's Product Moment formula. The coefficient of correlation was found to be 0.83. The obtained values for validity and reliability suggest that the test has acceptable psychometric qualities to measure the Achievement in English of VIII standard students. A copy of Achievement Test in English (Final)

together with its Response sheet and scoring key are presented as Appendices F3, F4 and F5.

Achievement Tests in English Language Skills.

English has fours skills; Listening, Speaking, Reading and Writing. Without the integration of these four skills, English will be meaningless. In the Secondary school environment, students believe that English only consists of two main parts; grammar and vocabulary, basically reading and writing. Even the educational system supports this notion through dull curricula, teaching methods and examinations that only measure reading and writing. Languages are generally taught and assessed in terms of the 'four skills': Listening, Speaking, Reading and Writing. Listening and reading are known as 'receptive' skills while speaking and writing are known as 'productive' skills. Apart from the Achievement Test in English, the investigator has developed and used 4 separate Skill wise Tests in listening, speaking, reading, and writing, with the help of supervising teacher. Achievement Test in English (based on the topic for the prescribed text book), Skill wise test (Listening, Speaking, Reading and writing) were prepared and standardized by the investigator. These tests were also administered as the pretest and posttest. The investigator made use of different activities that have been specially designed to incorporate several language skills. They provide students with situations that allow for all rounded development and progress in all areas of language learning. So the investigator prepared four subtests of Achievement Tests in English Language Skills namely the Test of Listening Skill in English, Test of Speaking Skill in English, Test of Reading Comprehension in English and Test of Writing Skill in English. The description of the test is given in the following sections.

Test of Listening Skill in English – TLSE (Hameed & Sabna, 2014).

Test of Listening Skills is constructed as a tool for testing the skill of listening of VIII Standard students with the help of supervising teacher. The test consisted of different activities. Story, poem, short paragraph, Announcement, Newspaper report, Sentence Completion and Picture based statements are used in the listening test. Forty questions were included in the Draft test. After standardization 35 were selected for final test. The test in which the students were supposed to put tick mark against the appropriate response. The procedures adopted for the construction and standardization of Test of Listening Skills in English is described as follows:

Planning of the test.

Various studies revealed that the language assessment is required for development of language proficiency can be assessed using appropriate tool. The investigator consulted the supervising teacher and collected needful information in constructing the listening test. The investigator also consulted with subject experts and experienced teachers, used different websites sites of IELTS, TESOL, etc. for preparing items in the test.

Preparation.

As per the guidance of the experts the investigator fixed the frame of the test. For the selection of the items the investigator referred different books and websites. To save time and to ensure reliability and validity of the test, only objective type items were prepared. The listening sub skills meant to measure are Phonological recognition, Prediction, Global Comprehension, Interpreting text, identifying the topic, listening for Specific Information, and Understanding the collocation of words.

Phonological recognition.

This is the primary step of listening skill. Without phonological recognition, one could not receive the information. The students have difficulty with recognizing the sounds in the language, especially supra segmental phonology.

eg: . . We (peel / peal) the orange with a knife.

Predictive skill.

For every listening activity, there will be an objective in the listeners' mind. This makes the listener have some expectations or prediction about the item, the listener is about to listen to. While trying to understand the piece, the listener will be actually comparing it with his own prediction.

Eg:-Here is a poem 'daffodils 'written by Williams Wordsworth. Listen the poem carefully and answer the following questions.

General comprehension.

In listening, there are chances for pauses and redundancy. A good listener should have the ability to extract the gist, discarding irrelevant matters.

Eg:- You are going to listen to a passage related with 'yoga'. Listen it carefully and write the answers for the following questions.

Extracting specific information.

The listener has an objective in mind and he will always seek for that much information to realize the objective. Attention, interest etc. are the related factors in this step.

Eg: Newspaper report, Announcement etc.

Deducing Meaning:

The listener will have to guess the meaning of words, phrases etc. which are new to him. In order to comprehend the piece, he will guess or deduce the meaning from the context.

eg: The word 'sprightly' means.........

Table 12 gives weightage to sub skills of Listening skill in English.

Table 12

Weightage to Sub Skills of Listening Skill in English

Sl. No.	Sub skills	No. of questions	Marks	Percentage
1.	Phonological recognition	5	5	12.5
2.	Predictive skill	5	5	12.5
3.	General comprehension	10	10	25
4	Extracting specific information	10	10	25
5	Deducing meaning	10	10	25
	Total	40	40	100

Preparation of the test.

As per the advice of subject experts, the investigator decided to choose the items for the test which were suitable to the level of students. The respondent has to answer an item by putting tick mark against the appropriate responses. The items selected were simple and easy to follow and questions asked under each section were simple and unambiguous. So there was no difficulty in understanding the questions. Repetition of the same idea was avoided and selected relevant ones. A set of themes and situations which make the students engaging in a variety of listening activates have been selected which scope has been for evaluating under all the components of

skill. A copy of the draft Test of Listening Skill in English (Teachers Script and Student Script are given in the Appendices G and G1.

Try out.

The draft test with 40 multiple choice item was tried out by the investigator on a representative sample of 105 students in two class division of standard VIII, in an school other than the Experimental and control subjects were selected. Before the administration of the test, its purpose was made clear to the subjects. The test included all necessary guidelines about the test and additional information required was given by the investigator.

For the purpose of valuation the investigator prepared a window screen. Through this method, all items were scored. During this time uncompleted response sheets are avoided and 100 response sheet were selected for item analysis.

Item analysis.

For item analysis the procedure suggested by Ebel (1972) was used. According to Ebel, the scored answer sheets were arranged in the order of scores from high to low. Then separated upper 27% and lower 27% response sheets. The middle part was discarded. Each item were tailed by each response sheet, 27 high mark response sheets and 27 low mark response sheets (L) were selected. Procedure of Item Analysis is detailed in the section of the Standardization of Achievement Test in English.

Difficulty index and discriminating power of item in Listening Skills test in English was given in Table 13.

Table 13

Difficulty Index and Discriminating Power of item in the Test of Listening Skill in English

Sl. No	U	L	Dl	DP	Selected Items	Sl. No	U	L	Dl	DP	Selected Items
1	22	11	0.61	0. 40	*	21	25	15	0.74	0.37	*
2	22	12	0.62	0.37	*	22	18	9	0.5	0.33	*
3	23	13	0.66	0.37	*	23	24	13	0.68	0 .40	*
4	24	22	0.07	0.85		24	24	12	0.66	0.44	*
5	22	13	0.64	0.33	*	25	25	23	0.14	0.92	
6	23	14	0.68	0.33	*	26	20	10	0.55	0.37	*
7	23	10	0.611	0.48	*	27	24	13	0.68	0. 40	*
8	22	12	0.62	0.37	*	28	22	11	0.61	0 .40	*
9	24	21	0. 11	0.83		29	22	10	0.59	0.44	*
10	21	12	0.61	0.33	*	30	21	12	0.61	0.33	*
11	22	11	0.61	0 .40	*	31	24	11	0.64	0.48	*
12	25	15	0.74	0.37	*	32	22	11	0.61	0. 40	*
13	25	12	0.68	0.48	*	33	22	12	0.62	0.37	*
14	24	12	0.66	0.44	*	34	21	11	0.59	0.37	*
15	21	11	0.59	0.37	*	35	23	12	0.64	0. 40	*
16	26	23	0.11	0.9		36	25	12	0.68	0.48	*
17	24	12	0.66	0.44	*	37	21	12	0.61	0.33	*
18	19	6	0.46	0.48	*	38	23	14	0.68	0.33	*
19	25	23	0.07	0.88		39	23	13	0.66	0.37	*
						40	24	13	0.68	0. 40	*

Selection of the items.

Items for the final test consists of 35 were selected on the basis of its difficulty index and discriminating power. Items having difficulty index. Between 0.4 - 0.7 and discriminating power 0.3 above were selected as good item and it was included in the final test.

Content Validity.

Content validity of the test was ensured by including adequate components of the listening skills as per the objectives based on the VIII standard text book. Each item is prepared according to these sub skills. Thus the content validity of the Test of Listening Skills in English was established.

Face Validity.

To establish the face validity, items of the Test was subjected to experts' evaluation. The experts confirmed that the items in the Test were able to measure Listening Skills in English of VIII standard students.

Reliability of the Test.

Reliability of the Test was established using Test-Retest Method. The same test was again administered on the same sample, from whom the data obtained for validation, after a period of three weeks. Thus two sets of scores, the original score and the retest scores, were obtained. The correlation coefficient of the two sets of scores was calculated using the Pearson's Product Moment formula. The coefficient of correlation was found to be 0.76. The obtained values for validity and reliability suggest that the test has acceptable psychometric qualities to measure the Listening Skills in English of VIII standard students. A copy of the final test of listening skill in English together with the students scripts is given as appendices G2 and G3.

Test of Speaking Skills in English Language (Hameed & Sabna, 2014).

This test is meant for assessing the Speaking Skill of students in English.

Planning.

Speaking is defined as an interactive process of constructing meaning that involves producing, receiving and processing information. Its form and meaning are dependent on the context in which it occurs, the participants, and the purposes of speaking (Burns & Joyce, 1997). The investigator consulted the supervising teacher and collected information necessary to construct the Test of Speaking Skill in English and Speaking Evaluation Rubrics.

Preparation.

According to the guidance of the experts the researcher set the framework of the test. For the selection of the items, the researcher referred different books and websites. Items contained 5 questions. Questions used in the speaking test are Speech construction, Narration and Picture description. The Test of Speaking Skill in English was developed by the help of supervising teacher. The item are evaluated by Speaking Evaluation Rubrics. Items are assesed by Organization, Fluency, Pronunciations, Accuracy and grammar and Vocabulary. For the purpose of assessment of Test of Speaking Skill in English, investigator developed Speaking Evaluation Rubrics.

Details of items used in the speaking test are given in Table 14.

Table 14

Details of Items used in the Test of Speaking Skill in English

Sl. No.	Items	Number of items
1	Speech construction	4
2	Picture description	6
	Total	10

A set of themes and situation which make the students engage in a variety of communication activities have been selected. A copy of the draft Test of Speaking Skill in English is given in the Appendix H.

Pilot Test.

To have an estimate of time and check whether there was any ambiguity in the item, a pilot test was administered to 10 pupils consisting of 5 boys and 5 girls of standard IX from Devadar Higher Secondary School. Time was fixed as 20 minutes for preparation and presentation of each student.

Tryout.

The draft test with item was tried out by the investigator on a representative sample of 40 students in a class division of standard VIII, in an school other than from the school from where the Experimental and control subjects were selected. Before the administration of the test, its purpose was made clear to the subjects. The test included all necessary guidelines about the test and additional information required was given by the investigator.

Assessment.

For the purpose of the assessment of Speaking Skills, investigator developed Speaking Evaluation Rating Scale (Speaking Evaluation Rubrics). The detailed description of the preparation of Speaking Evaluation Rubrics is the following.

Speaking Evaluation Rubrics (Hameed & Sabna, 2014).

Each items are assed by Organization, Fluency, Pronunciations, Accuracy and grammar and Vocabulary. Main stages of preparation of the Rating Scale as follows:

Planning.

Researcher developed rubrics for assessing speaking Skills with the help of supervising teacher. It was found that five components were assessed in the speaking skill assessment: Organization, Fluency, Pronunciations, Accuracy and grammar, Vocabulary. Based on the literature review and the opinion of experts, the salient component of speaking skill which act as the criteria for assessing the nature of speaking skill were determined.

In this Speaking Evaluation Evaluation, five components were assessed. Detailed description are following:

a) Organization.

This is the knowledge employed in the overall organization of the content and its systematic presentation which includes accurate and apt arrangement of ideas, systematic presentation of content and its logical arrangement. Organization area assessed through Accurate organizing, systematic presentation, apt content, elaboration and logical presentation

b) Fluency.

Fluency was assessed through Intonation, Stress, Clarity, Manner of speaking and loudness.

c) Pronunciation.

Appropriate speed, voice modulation, proper flow, gestures and expression pronunciations are assessed.

d) Accuracy /grammar.

Accuracy and grammar has been assessed through Accuracy and grammar sentence structure, apt and accurate use of sentence, simple sentence, and accuracy of words and use of connectors.

e) Vocabulary.

Vocabulary was assessed through wide variety of words, adequate vocabulary, use of idioms and phrasal verb, use of active vocabulary and attention grabbing   words and usages.

Scoring.

Each sub skill was assessed based on the value point of the rating scale. The value points indicates '1' for poor,'2' for Fair,'3' for good,'4'for

very good, and '5' for excellent. Maximum Mark is '25' and the minimum mark is '5'.

Scoring scheme.

An interesting strategy was employed by the investigator to evaluate the speaking skill. Each student has been allotted time of 3 minutes for preparation and five minute for presentation. While presenting the investigator has to evaluate all the components of speaking skills with the help of Speaking Evaluation Rating Scale. Each speaking skill was given the marks according to their sub skills.

A copy of the draft Speaking Evaluation Rubrics is given in the Appendix H1.

Pilot test.

To have an estimate of time and to check whether there was any ambiguity in the items, a pilot test was administered to ten students consisting of 5 girls and 5 boys of standard IX from DGHSS Tanur. Time was fixed as 20 minutes for preparation and presentation of each student. The average time taken by students in answering was fixed as the time needed to finish the test and it was two hour and test was ready for try out and question paper ,scoring key and score sheet was prepared.

Content validity.

Content validity of the test was ensured by including adequate components of the speaking skills as per the objectives based on the standard VIII book. For establishing the content validity, the investigator subjected the test items for expert's evaluation

Face validity

Face validity was established by subjecting the value points for the rubrics for expert criticism. As per the evaluation of the experts, the content of rubrics covers the significant component of speaking skill it is suitable to assess the speaking Skills.

Reliability of the Test.

Reliability of the Test was established using Test-Retest Method. The same test was again administered on the same sample, from whom the data obtained for validation, after a period of three weeks. Thus two sets of scores, the original score and the retest scores, were obtained. The correlation coefficient of the two sets of scores was calculated using the Pearson's Product Moment formula. The coefficient of correlation was found to be 0.82.

A copy of the Final Version of the Test of Speaking Skills in English is given in the Appendix, H2.

Test of Reading Comprehension (Hameed & Sabna, 2014)

The researcher developed a tool to test the reading comprehension of Standard VIII standard students. The test was developed and standardized by the researcher with the help of the supervising teacher, which was used to quantify the reading comprehension of English. The main phases of the planning, preparation and standardization of the test are the following:

Planning of the Test.

The initial step in the construction and standardisation of a test is the planning stage .Various studies revealed that the language assessment is required for the development of language and language proficiency can be assessed using appropriate tools. The investigator consulted the supervising

teacher and collected needed information in constructing the Test. The investigator also consulted the subject experts and experienced teachers in the field. As per the guidance of the experts, the investigator fixed the frame of the test. And the investigator also made use of several books in language assessment for the selection of items. The preparation of a Test involves a number of stages.

Preparation.

The major points to be taken into account are the coverage of the areas of content and the coverage of expected behaviours implied by the pre-determined objectives. Consultation with the supervising teacher and a thorough review of the related literature assisted the investigator to perform this successfully. Here decision regarding when to test, what kind of questions to be used in the test and how many questions are to be include in the test etc. are considered. This test consisted of one descriptive and objective type items to ensure various sub skills involved in the reading comprehension. To evaluate the expected outcome based on these skills, duration of the test was fixed as one hour. The sub skills of Reading Test were meant to measure reading comprehension, Grammar and vocabulary and summarizing. Items of the Test are prepared based on the following sub skills.

a) Skimming:

Skimming is an activity in which the reader glances through a text material quickly to catch a general idea or gist of it without attending to details. It is the process of reading only main ideas within a passage to get an overall impression of the content of a reading section.

eg: What is the underlying theme of this great novel written by Tagore?

(a) Devoted wife   (c). Turbulence of partition

(b) Cheating wife   (d) Love triangle

b) Scanning.

Scanning is a reading technique to be used when the learner want to find specific information quickly. In scanning the learner has a question in his mind and he read a passage only to find the answer, ignoring unrelated information. Scanning is typically reading through quickly in search of specific key terms or phrases. Scanning tends to cause the learner to skip over a larger amount of material than skimming because when the learner is scanning anything that isn't what he is looking for the learner bypass and don't even attempt to retain most of it, normally.

eg: Solve the following crossword on the basis of the reading of the above poem

c. Comprehension.

Reading comprehension is the ability to read text, process it, and understand its meaning. An individual's ability to comprehend the text is influenced by their traits and skills, one of which is the ability to make inferences.

eg: Whose eternal flame is burning in the heaven?

   a) Sister's

   b) Mothers

   c) Uncle's

   d) Aunt's

d) Understanding vocabulary pronunciation and grammar:

One of the main qualities of a good reader is to understand the vocabulary and grammar while reading. Items used in the Reading test are Reading unfamiliar passages, Reading Unfamiliar poem, and summarizing.

eg: Choose any three words from the given passage and find their synonyms and antonyms

e. Summarizing.

Summarizing means how to distinguish the most important ideas in a text, how to ignore irrelevant information, and how to integrate the central ideas in a meaningful way. It improves their memory for what is read. Summarizing is how we take larger selections of text and reduce them to their bare essentials: the gist, the key ideas, the main points that are worth noting and remembering. Webster's calls a summary the "general idea in brief form"; it's the distillation, condensation, or reduction of a larger work into its primary notions.

eg: Summarizing

The weightage given to sub skills of Test of Reading Comprehension in English are given in Table 15.

Table 15

Design Showing the Weightage Given to Sub Skills of Test of Reading Comprehension in English

	Sub skills	No. of questions	Percentage
1.	Skimming	5	12.19
2.	Scanning	5	12.19
3.	Comprehension	15	36.58
4.	Summarising	1	2.43
5.	Understanding grammar and vocabulary	15	36.58
	Total	41	100

A copy of the draft Test of Reading comprehension in English its response sheet and scoring key Appendices I, I$_{(1)}$, I$_{(2)}$.

Try out.

The draft test with 41 items 40 objective type item and 1 descriptive type item with 5 mark was tried out by the investigator on a representative sample of 100 students in two class division of standard VIII, in an school other than the Experimental and control subjects were selected. Before the administration of the test, its purpose was made clear to the subjects. The test included all necessary guidelines about the test and additional information required was given by the investigator.

For the purpose of valuation the investigator prepared a window screen. Through this method, 40 items were scored. Descriptive item was scored based on the value point. During this time uncompleted response sheets are avoided and 80 response sheet were selected for item analysis.

Item Analysis.

For item analysis, the procedure suggested by Ebel and Frisbie (1991) was used. The selected response sheets were arranged in the descending order of the magnitude scores. The scores obtained by upper 22 subjects (27%) and lower 22 subjects (27%) were taken as the upper and lower group respectively. Procedure of Item Analysis is detailed in the section of the Standardization of Achievement Test in English.

The difficulty Index and Discriminating Power of each item are given in Table 16

Table 16

Difficulty Index and Discriminating Power of Item in Test of Reading Comprehension in English

tem No.	U	L	Dl	DP	Selected Item	tem No.	U	L	Dl	DP	Selected Item
1	23	14	0.68	0.33	*	20	22	11	0.61	0. 40	*
2	23	21	0.81	0.07	*	21	25	15	0.74	0.37	*
3	22	13	0.06	0.33	*	22	26	23	0 .90	0.11	
4	22	10	0.59	0.44	*	23	26	13	0.72	0.48	*
5	27	16	0.79	0 .40	*	24	26	25	0.94	0. 03	
6	24	13	0.68	0 .40	*	25	21	9	0.55	0.44	*
7	25	16	0.75	0.33	*	26	25	22	0.87	0.11	
8	23	12	0.64	0. 40	*	27	24	13	0.68	0. 40	*
9	24	12	0.66	0.44	*	28	26	13	0.72	0.48	*
10	24	14	0. 70	0.37	*	29	23	20	0.79	0.11	
11	21	11	0.59	0.37	*	30	23	11	0.62	0.44	*
12	24	13	0.68	0 .40	*	31	21	12	0.61	0.33	*
13	21	11	0.59	0.37	*	32	22	12	0.62	0.37	*
14	22	12	0.62	0.37	*	33	23	14	0.68	0.33	*
15	21	12	0.61	0.33	*	34	23	11	0.62	0.44	*
16	19	9	0.51	0.37	*	35	23	10	0.61	0.48	*
17	23	13	0.66	0.37	*	36	24	12	0.66	0.44	*
18	21	12	0.61	0.33	*	37	24	12	0.66	0.44	*
19	24	12	0.66	0.44	*	38	24	22	0.85	0 .07	
						39	22	12	0.62	0.37	*
						40	22	13	0.64	0.33	*

Selection of the item

Items for the final test were selected on the basis of its difficulty index and discriminating power. Items having difficulty index between 0.5 and discriminating power 0.7 and discriminating power of .03 above were selected as good item and it was included in the final test. Descriptive item selected on the basis of facility value.

Facility value.

Non- objective items are commonly analysed by calculated facility value. To calculate the facility value of non-objective type items, Edwin Harper suggested a simplified formula.

$$\dfrac{\left[\begin{array}{l}\text{Mean scores of the upper group}\\ \text{Students in the questions (MU)}\end{array}\right] + \left[\begin{array}{l}\text{Mean scores of the lower group}\\ \text{students in the questions (ML)}\end{array}\right]}{2 \times \text{Maximum marks for a question}} \times 100$$

In the present study, the investigator used total marks of the students in lower and upper group instead of the mean marks of the upper and lower students. The items were analyzed by calculating FV using the formula.

$$FV = \dfrac{\text{Sum of marks by all candidates of upper and lower group}}{\text{Sum of marks obtained on that question}}$$

Facility values of the test items are presented in Table 17.

Table 17

Details of Facility values of the Items of the Reading Comprehension in English

SI.No.	No total marks obtained	Maximum Marks For Items	FV	Remarks
1	72	132	0.54	Accepted

Selection of the item.

Item for the final test was selected on the basis of the facility value. As the value of the item is above the level of the index, it was selected.

Content Validity.

For establishing the content validity of the Test of Reading comprehension in English, the investigator subjected the test items for expert's evaluation. As per the evaluation of the experts, the test content covers the significant concepts and comprehensive enough in terms of the instructional objectives. Different sub skills of Reading are used to construct

the tool. Each item is prepared according to these sub skills. Thus the content validity of the Test of Reading comprehension was ensured.

Face Validity.

To establish the face validity, items of the Test of Reading comprehension in English Language was subjected to experts' evaluation. The experts confirmed that the items in the Test were able to measure the Reading comprehension in English Language of VIII standard students.

Reliability of the Test.

Reliability of the Test was established using Test-Retest Method. The same test was again administered on the same sample, from whom the data obtained for validation, after a period of three weeks. Thus two sets of scores, the original score and the retest scores, were obtained. The correlation coefficient of the two sets of scores was calculated using the Pearson's Product Moment formula. The coefficient of correlation was found to be 0.86.

The obtained values for validity and reliability suggest that the test has acceptable psychometric qualities to measure the Reading Comprehension of standard VIII Students.

A copy of the final Test of Reading comprehension in English its response sheet and scoring key Appendices $I_{(3)}$, $I_{(4)}$.

Test of Writing Skill in English (Hameed & Sabna, 2014)

The investigator constructed Test of Writing Skill in English for testing the writing skill of VIII standard students with the help of supervising teacher.

Planning.

The investigator consulted the subject experts and experienced teachers in the field. As per the guidance of the experts the investigator fixed the frame

of the test. And the investigator also made use of several books in language assessment for the selection of items.

Preparation.

According to the advice of experts in the field, the researcher decided to choose the elements for the test that were suitable for the level of students. To save time and to ensure the reliability and validity of the test, the researcher also referred to available textbooks, TOEFL, IELTS websites for the development of test elements. The test items were selected according to the content area of the VIII standard curriculum. The researcher went through related literature to learn about new trends in language tests. After preparing the items, the researcher consulted with language experts and made the necessary modifications. This test consist of descriptive item to ensure various sub skills involved in the writing skill and to evaluate the expected outcome based on these skills. Sub skills meant to measure are Use of correct spelling, use of correct punctuation mark, use of correct link sentence, organization of ideas, creative expression of ideas/creative writing skill, adequate vocabulary, use of one's own language, handling of content, stylistic skill, judgment skill and Functional writing

Mechanical skill

Ability to use correctly those conventions peculiar to the language (spelling and punctuation)

Use of correct spelling.

This is the primary step of writing skill. With the use of correct spelling the writer can convey the intended message to the reader and correct spelling creates bad impression among readers.

All the items in the test were used to test the skill of using correct spelling and hand writing and punctuation mark.

Use of correct punctuation mark.

Different punctuation mark have significant role in conveying the right meaning of a good piece of writing. These punctuation marks really support and add to the power and meaning of sentence. No separate item was given to assess the correct punctuation marks by the students to avoid the misconceptions that these punctuation marks are limited to particular items only. All the items were also used to check the use of correct punctuation mark.

Grammatical skills.

This refers to the ability of the students to use a variety of sentence patterns and constructions. All the items in the test were also used to check the usage of grammar.

Organization skill.

Organization of information logically and clearly comprehends the reader. In this case the student is concerned with the integration of pieces of information into paragraphs and texts. A good writer should have the ability to organize and arrange his ideas logically. So, items were included in this test to assess their skill to arrange ideas logically.

Eg: Choose the best sentence from the given box to complete the following letter.

Creative expression of idea.

Creative writing is the writing through which individuals express their feelings, opinions reactions and ideas to the reader in a distinguished literary

style. This kind of writing include several type such as writing poems, essays, short stories and description. One of the important component of writing skill is the creative expression of ideas. A good writer should be able to express his ideas using the language. He should have good imaginative power and the language would not be hindrance for the creative expression. Items were also used in the test to assess students skill of creative expression of ideas.

Eg: story writing with hints

Language use: Meaningful selection words and sentence.

Even a single word has a lot to express when added to its context. So the writer should have the ability to select the words and sentences according to the context. Item to assess the meaningful selection of words and sentences were included in the text.

Eg: Read the conversation and complete the passage that follows.

Stylistic skill.

It is the ability to manipulate sentence, paragraphs and use language effectively. This ability of the students help them to express their in their writing with different styles. For this, selection of appropriate words and sentence pattern is necessary. One of the important component of writing skill is the ability of the writer to change the ideas and facts to his own language. The items to assess the skill of the learner were also included in the test.

Eg: The nature club of your school organizing programme called 'Suvarna Keralam Sundara Keralam' .As a part of the programme the club arranges a rally to make the public aware of the need of protecting nature. Prepare Four captions to be displayed as play cards in the rally campaign.

Treatment of content.

It is the ability to think creatively and develop thoughts, avoid all irrelevant information. The writer should be able to treat the content effectively. Therefore there was item in the test to measure the skill of the students to treat t the content effectively.

eg: Write a short profile on O. N. V. Kurup.

Judgment skill.

It is the ability to write in an appropriate manner for a particular purpose with a particular audience in mind, and ability to select, organize and order relevant information. This skill can never be neglected by any good writer. There was item in the test to assess the learner's judgment skill.

Eg: Read the proverb and frame five meaningful sentence from that.

Purposeful writing or functional writing skill.

Functional writing is that kind of wqritingwhich aims at conveying specific, direct and clear message to a specific audience. It includes several areas such as writing instruction, formal letters, notes, invitations and advertisements. A good writer should able to use his skill for the purpose of getting his needs fully satisfied. He must have the ability to use language for preparing letters and application forms. He could be able to write with a purpose. Items for testing learner's ability to use language for purposeful writing were also included

Eg: Write a notice for the school notice board regarding tree plantation ceremony to be held on 5th june2014 in the school premises inviting students to participate in it by contributing at least four plants from each class.   Design showing the weightage to sub skill is presented in Table 18.

Table 18.

Design Showing the Weightage Given to Sub Skill in the Test of Writing Skill in English

Sub skills	No. of questions	Marks	Percentage
Language use	3	13	20
Organization skill	1	5	8
Creative expression of idea	3	11	17
Treatment of content	2	10	16
Stylistic skill.	2	7	11
Judgment skill	1	5	8
Purposeful writing or functional writing skill	4	13	20
Total	16	64	100

A copy of the draft test of writing skill in English its response sheet and scoring key are presented as Appendix J, J1, J2.

Pilot test.

To have an estimate of time and to check whether there was any ambiguity in the items, a pilot test was administered to ten students consisting of 6 girls and 4 boys of standard IX from GHSS Niremerathur. By carefully studying the answers the investigator was able to rectify the errors and ambiguity of the items. The average time taken by students in answering was fixed as the time needed to finish the test and it was two hour and test was ready for try out and question paper, scoring key and score sheets were prepared.

Item analysis.

The validity of each item was assessed by item analysis. Procedure of Item Analysis is detailed in the section of the Standardization of Achievement Test in English.

Facility value.

16 Nonobjective items are commonly analysed by calculated facility value. To calculate the facility value of non-objective type items, Edwin Harper suggested a simplified formula, as discussed in the previous section.

Details of Facility values of the test items are presented in the following Table 19.

Table 19.

Details of Facility Values of the Items in Test of Writing Skills in English

SI.NO	No total marks obtained	Maximum Marks For Items	FV	Remarks
1	69	132	0.52	Accepted
2	100	220	0.45	Accepted
3	102	220	0.46	Accepted
4	96	220	0.43	Accepted
5	86	176	0.48	Accepted
6	79	176	0.44	Accepted
7	86	220	0.4	Accepted
8	75	132	0.56	Accepted
9	94	220	0.42	Accepted
10	63	132	0.47	Accepted
11	83	176	0.42	Accepted
12	15	88	0.170	
13	90	220	0.40	Accepted
14	94	220	0.42	Accepted
15	81	220	0.41	Accepted
16	55	132	0.41	Accepted

Selection of the items.

Item for the final were selected on the basis of the facility values. Items having the facility value of 0.4 and above were selected.

Content Validity.

For establishing the content validity of the Test of Writing skill in English, the investigator subjected the test items for expert's evaluation. As per the evaluation of the experts, the test content covers the significant concepts and comprehensive enough in terms of the instructional objectives. Different sub skills of Writing are used to construct the tool. Each item is prepared according to these sub skills. Thus the content validity of the Test of writing skill was ensured.

Face Validity.

To establish the face validity, items of the Test of Writing skill in English Language was subjected to experts' evaluation. The experts confirmed that the items in the Test were able to measure the Writing Skill in English Language of VIII standard students.

Reliability of the Test.

Reliability of the Test was established using Test-Retest Method. The same test was again administered on the same sample, from whom the data obtained for validation, after a period of three weeks. Thus two sets of scores, the original score and the retest scores, were obtained. The correlation coefficient of the two sets of scores was calculated using the Pearson's Product Moment formula. The coefficient of correlation was found to be 0.84.

Preparation of the final test.

After the selection of items the investigator selected 15 items out of 16 for the final test. The investigator had made essential changes in the final test. The time of final test was allocated 2 hour.

A copy of the final test of writing skill in English its response sheet and scoring key are presented as Appendix J3, J4.

The Self-regulation Questionnaire -SRQ (Miller & Brown, 1991).

Self-regulation is the ability to develop, implement, and flexibly maintain planned behavior in order to achieve one's goals. Building on the foundational work of Frederick (Kanfer, 1970, 1970), Miller and Brown formulated a seven-step model of Self-regulation (Brown, 1998; Miller & Brown, 1991).

This tool is adapted to assess the Self-regulation among standard VIII Standard students and was used as pretest and posttest of Self-regulation, before and after and the experimentation. The tool is used in classroom setting and the item assessed in self regulation learning context. So the available tool was re-edited in accordance with Indian context. The researcher used seven step process in the original tool. The SRQ was developed by following seven sub–processes of SR, as articulated by Miller and Brown (1991), through self-report. Draft copy the Self-regulation Questionnaire –SRQ is presented as Appendix K.

Item Analysis.

The draft scale was administered to a representative group of 400 secondary school students with due weightage to sub samples. Incomplete response sheets are discarded. After random rejection the sample was fixed to 370. The responses of each item by all secondary school students in the sample were scored and subjected to item analysis.

Item Analysis.

For the finalisation of the items of the inventory certain procedure that suggested by Likert (1932) are used. The responses collected from 370 students were arranged in the descending order based on score obtained. Then the subjects were grouped as high group and low group respectively. The top

27 % students and bottom 27% students were taken as the high group and low group respectively for item analysis. The number of students in lower and upper group was 100 each. The procedure used for the calculation of t-values is already discussed in section of the standardization of the Scale of Metacognitive Awareness. The final version of Inventory consists of 53 items.

The t-values of each item are presented in Table 20.

Table 20

Data and Results of Item Analysis of the Self-regulation Questionnaire

Si. No	t-value	Selected Item	Si. No	t-value	Selected Item
1.	3.53	*	33.	6.12	*
2.	9.53	*	34.	5.19	*
3.	5.12	*	35.	4.14	*
4.	7.13	*	36.	6.71	*
5.	5.37	*	37.	9.35	*
6.	7.80	*	38.	5.26	*
7.	4.94	*	39.	5.62	*
8.	5.23	*	40.	5.47	*
9.	4.92	*	41.	6.50	*
10.	2.11		42.	8.21	*
11.	6.13.	*	43.	1.07	
12.	9.45	*	44.	5.38	*
13.	5.68	*	45.	5.29	*
14.	5.83	*	46.	7.58	*
15.	2.98	*	47.	4.34	*
16.	3.14	*	48.	1.12	
17.	2.78	*	49.	2.62	*
18.	3.49	*	50.	5.13	*
19.	4.37	*	51.	6.86	*
20.	1.77		52.	5.21	*
21.	6.04	*	53.	9.07	*
22.	3.26	*	54.	6.16	*
23.	4.13	*	55.	6.21	*
24.	3.07	*	56.	8.21	*
25.	7.22	*	57.	9.07	*
26.	9.35	*	58.	3.10	*
27.	5.19	*	59.	2.63	*
28.	2.44		60.	6.48	*
29.	5.24	*	61.	5.34	*
30.	6.40	*	62.	2.40	
31.	5.19	*	63.	3.25	*
32.	3.53	*			

* indicates selected item

Scoring Procedure.

After Items analysis 57 items are selected of the original tool. The SRQ is a 57 -item instrument whose items were developed to mark each of the seven sub–processes, forming seven rationally-derived subscales of the SRQ. The allocated time for answering the questionnaire is 60 minutes. The participants answer the items by indicating one of the five choices ranging from a score of 1 to a score of 5 on a Likert- type scale from strongly disagree to strongly agree.

Content Validity.

Items in the scale of Self Regulation were carefully prepared and chosen reflecting on the theoretical baseline of the Self Regulation, related studies reviewed and on consultation with experts in the field. Hence, theoretically the scale can be considered valid.

Face Validity.

Face validity of the scale was established. The statements in the scale appear to measure the level of Self Regulation of subject. The experts confirmed that the items were able to know the Self Regulation of standard VIII students. Hence the scale has face validity

Reliability.

Reliability of the test was established using test-retest method. The test was administered to a sample of 52 students and after a period of three weeks the same test was administered to the same sample. The reliability coefficient thus obtained is 0.884. The internal consistency of the scale was established by calculating Cronbach's alpha. The obtained Cronbach alpaha of the scale is 0.93 suggesting very high internal consistency of the scale. Hence the

Adapted Self Regulation Questionnaire is a valid and reliable tool with good psychometric properties to assess Self Regulation of Standard VIII students .

A copy of the final tool of the self regulation questionnaire adapted in given as Appendix K1.

Verbal Group Test of Intelligence - VGTI (Kumar, Hameed, & Prasanna, 1997).

For the study, verbal intelligence was measured using the Verbal Group Test of Intelligence (VGTI) developed by Kumar, Hameed and Prasanna (1997). The test consists of five sub-exams of twenty multiple-choice items (100 items in total), which belong to five components: Verbal Analogy, Verbal Classification, Numerical Thinking, Verbal Reasoning and Comprehension, which could not be completed by more than one hour. The test is meant for subjects with an age group of 10-15 years. High score was 100 and minimum, zero. A composite score obtained for the five subtests is treated as the point value of the verbal intelligence of the subjects.

The validity of the VGTI test constructors has been determined on the basis of the criteria - related technique. The Intelligence Test of the Verbal Group of Kerala University (Nair, Pillai, &Amma, 1968) was used as the external criterion. The obtained validity coefficients of verbal analogy, verbal classification, numerical reasoning, verbal reasoning, comprehension, and intelligence total are 0.54, 0.54, 0.52, 0.40, 0.46, and 0.65, respectively, and have a high degree Content validity, as reported by the test designers.

The reliability of the VGTI test designers determined their reliability using the split-half method and the reliability coefficient was corrected using the Spearman Brown Prophecy formula. The reliability coefficients of verbal analogy, verbal classification, numerical thinking, verbal reasoning, comprehension and intelligence-total are 0.66, 0.56, 0.72, 0.63, 0.47 and 0.82,

respectively, which are significant. A copy of the response sheet VGTI given in Appendix L.

Standard Progressive Matrices Test -SPMT (Raven, 1958)

The non-verbal intelligence of the subjects was measured by the standard form of the Raven's Progressive Matrices Test (Raven, 1958). This intelligence test was used to estimate the subject's ability to recognize and use a logical relationship presented by non-verbal materials. The test consists of five subtests of twelve items each. Each element lacks a part of the geometric design. Six or eight alternatives are given for each design. All this fits the missing part, but only one is logically correct. The test is a popular measure of the g-factor of intelligence.

Students were allowed to work quietly at their own pace. It was ensured that those who participated in the test understood what they had to do and therefore clarification was made in the meantime regarding the test. In the case of Standard Progressive Matrices, the score is equal to the number of correctly answered items. The maximum score of each set is 12, as there are 12 problems. Therefore, the maximum total score is 60 because there are five sets. The test gives the following classification of participants based on the performance of this test.

Intellectually superior:

If the subjects' results are at or above the 95th percentile for their age group, they are considered intellectually superior.

Above-average intellectual capacity:

If the results of the subjects are in the 25th and 75th percentile, they are considered average intellectual.

Below average intellectual capacity:

If the score is below the 25th percentile, they are considered intellectually lower.

Reliability coefficients as reported by Raven (1958) vary from 0.80 to 0.90. The validity of the test was estimated in several common ways. When the Stanford Binet test was used as a criterion, the correlation varied from 0.50 to 0.86. In a study by Nair (1967) in Kerala, it was found that the reliability coefficient varies from 0.70 to 0.86 in the split-half method and from 0.84 to 0.91 in the test-retest method. A copy of the response sheet is given in Appendix M.

Classroom Environment Inventory -CEI (Aruna, Sureshan & Unnikrishnan, 1998).

This inventory is intended for assessment of the Classroom Environment, developed and standardized by Aruna, Sureshan and Umnnikrishnan (1998). The Classroom Environment Inventory was based primarily on the dimensions in the Classroom Environment Instrument, which was developed by Fraser & Fischer (1982). The individual dimensions used to construct the inventory are material environment, cohesion, task orientation, innovation, participation, teacher support, personalization, independence, order and organization, teacher control, friction and competition.

The validity of the inventory was estimated by a Criterion -based technique, which turned out to be 0.536. To determine the reliability of the inventory, a Test-Retest Method was used which, according to the authors, was 0.85. Yes / No options are given as the answers and a score of '1' for yes and '0' for No answer. A copy of the English version of the response sheet is given in Appendix N.

General Data Sheet for Assessing Socio-Economic Status (SES) To assess the Socio-Economic Status of the subjects of two Experimental groups and Control group, this General Data Sheet was used. In order to collect the information regarding Income, Education and Occupation of parents, nine columns each for father and mother are included in the General Data Sheet. The sub divisions and weightage of three categories are given in Table 21.

Table 21

Weightage given for Monthly Income of Parents, Parental Education and Parental Occupation

Monthly Income Level of Parents	Weightage	Parental Education	Weightage	Parental Occupation	Weightage
Upto 5000 5001-10000 10001-15000 15001-20000 20001-25000 Above 25000	5 10 15 20 25 30	Not received formal schooling Standard I - IV Standard V - VII Standard VIII-X PDC/Plus Two, TTC BA/ BSc/ B Com MBBS/M Ed/Engg / MBA/ PhD/ CA	5 10 15 20 25 30 35	Unemployed Unskilled Semi skilled Skilled Semi Professional Professional Highly Professional	5 10 15 20 25 30 35

A copy of the General Data sheet is given as Appendix O.

Execution of the Experiment

The present study was conducted in two main phases. In the first phase a preliminary survey was done to explore the Secondary School English Teachers' Attitude towards Instructional Strategies in general and to measure their attitude to cooperative learning and TBLT in the English classroom in particular. It was employed to justify the need for co-operative learning and

technology Enriched task-based language teaching in teaching English. The necessary information from the survey helps the researcher to recognize the important information regarding the Instructional Strategies.

After the preliminary survey, as the next step in the experiment, the investigator contacted the heads of the schools where the experimental treatments and the control treatment were carried out, and prepared a detailed schedule for its effective working. In the second phase the study conducted using quasi experimental Designs for the Non Equivalent Groups Pretest-Posttest Control and Comparison Groups Design was utilised. Three intact classes of standard VIII were selected from two different schools. Among them, two intact classes were assigned to experimental groups and another intact class was assigned to the control group. Experiment group-I was taught through the Student Teams Achievement Divisions(STAD) Strategy and Experimental group II taught through Technology Enriched Task Based Language Teaching (TETBLT) the control group was taught through the Activity Oriented Method of Teaching (AOMT).

Administration of the Pretest on Achievement in English (Total and Skill Wise Scores).

Before starting the experiment, Experimental Group I (STAD) and Experimental Group II (TETBLT) and the Control group (AOMT) were administered the Achievement Test in English as the Pretest to measure the initial status of the subjects with regard to Achievement in English language and the response sheets were collected.

After that, Skill-wise Tests on Listening, Speaking, Reading and Writing were administered to measure the initial status of the subjects of the subjects in terms of language Skills in English.

Administration of the Pretest on Self -Regulation

Prior to the start of the experiment, the experimental group I (STAD) and the experimental group II (TETBLT) and the control group (AOMT) were given the Scale of Self- Regulation as the pretest in order to measure the initial status of the subjects with regard to Self-regulation and the response sheets were collected.

Experimental Treatment

Experimental Group I (STAD) and Experimental Group II (TETBLT) were used for experimentation. Horse-shoe method of seating arrangement used in the experimental group I (STAD).

Treatment in Experimental Group I.

Experimental Group I was taught through the STAD strategy of Cooperative Learning. The topics selected for treatment in the present study were from the syllabus prescribed for standard VIII students of Kerala state for the year 2014. Two units were selected for the experimentation. Each units have four sub units and were taught through the STAD Strategy. Thus 2 units were taught using 24 periods, (8 period for poem and 16 period for prose for two units) each for a time duration of 45 minutes. Therefore 20 hours were taken to complete the experimental treatment in Experimental Group I. The investigator tried to make it sure that the classroom activities in the Experimental group were developed through the four phases suggested by Slavin (1995) as followed in the Lesson Transcripts for the STAD Strategy of Cooperative Learning Strategy.

Treatment in Experimental Group II.

Experimental Group II (TETBLT) was taught through the Technology Enriched Task Based Language Teaching. For the purpose of treatment, in

TETBLT group, smart classroom and available technological devices were incorporated to teach effectively. Thus 2 units were taught using 24 periods, (8 period for poem and 16 period for prose for two units) each for a time duration of 45 minutes. Therefore 20 hours were taken to complete the experimental treatment in Experimental Group II also. The investigator have tried to make it sure that the classroom activities in the Experimental group II were developed through the four phases suggested by Willis (1996) as described in the Lesson Transcripts for Technology Enriched Task Based Language Teaching (TETBLT)

Control Treatment

The nature of the classroom seating arrangement (Conventional) was not changed in the Control group. Activity Oriented Method of Teaching was employed to teach the select topics. The existing seating arrangement in the classroom is followed. The topics selected for treatment, the time duration of each period (45 minutes) and the total time duration taken for the treatment (20 hours) were the same for the Experimental and Control groups.

Administration of the Achievement Test in English Total and Skill wise (Hameed and Sabna, 2014)

On the following days after the completion of the treatments, the subjects in both the Experimental Groups and Control group were given the same Achievement Test in English and Skill wise Tests in Listening, Speaking, Reading and writing in order, prepared and standardized by Hameed and Sabna, (2014) which were already used as Pretests. These tests were administered to measure the outgoing behaviour or the post-treatment status of the subjects in terms of Achievement in in English (Total and Skill wise). During the period, the Scale of Self Regulation (Brown & Miller 1988), already used as pretest, was employed as posttest to measure the post

Treatment Status of subjects with regard to Self Regulation. Before the administration of the test, its purpose was made clear to the students and all necessary guidelines were given to the subjects.

Data on Other Variables

During the period of treatment (in between the Pretest and Posttest) the data on the other Independent Variable; Metacognitive Awareness and , Control Variables, viz., Verbal Intelligence and Non-verbal Intelligence and Classroom Environment and on the basal variable Socio- Economic Status were collected from both the Experimental Groups and the Control group using the respective tools. During the first week of the treatment, the Scale of Metacognitive Awareness was administered. This scale was followed by the Verbal Group Test of Intelligence in the second week of the treatment, and the Standard Progressive Matrices Test (to measure Non-verbal Intelligence) in the third week. The General Data Sheet was also given to the subjects with a view to quantify the Socio-Economic Status and the Classroom Environment Inventory was employed to collect data .

Scoring and Consolidation of Data

Specific direction given in the respective test manuals were strictly followed for scoring the response sheets collected. Response sheets of Achievement Test in English (Total) and skill wise scores separately, i.e. Test of Listening Skill in English, Test of Peaking Skill in English, Test of Reading Skill in English, and Test of Writing Skill in English were scored according to the scoring key provided. Response sheets for the Scale of Metacognitive Awareness was scored by giving a sequence of scores, 3, 2, 1 for positive items and 1, 2, 3 for negative items. Scale of Self Regulation was scored as per the guidelines. Punched scoring keys were used for scoring the Verbal and Nonverbal Intelligence Tests. By giving appropriate weightage

assigned to each aspect in the General Data Sheet, the Socio-Economic Status of the subjects was quantified. In the Classroom Environment Inventory, the items were 'Yes' or 'No' type. Score for each question are 1 for 'Yes' and 0 for 'No'. Response sheets, which were correct in all respects were only taken into consideration. Thus 135 standard VIII Students were obtained as the final sample for the study. After scoring the response sheets, the scores obtained in each test were tabulated and consolidated separately for the Experimental Group I, II and the Control group.

The following break-up shows the actual number of subjects included in the final sample.

Sample	Experimental Group I (STAD)	Experimental Group II (TETBLT)	Control Group (AOMT)	Total
Boys	21	24	20	62
Girls	24	21	25	73
Total	45	45	45	135

Statistical Techniques Used for Analysis

The present experimental study required the use of the following statistical techniques.

Percentage analysis

Percentage analysis was done to identify the level Secondary School English Teachers' attitude towards instructional strategies used for teaching , especially Cooperative Learning Strategies and Technology Enriched Task Based Language Teaching.

Basic Descriptive Statistics

Basic Descriptive Statistics such as Mean, Median, Mode, Standard Deviation, Skewness and Kurtosis of each variable like Pretests and Post test scores of Achievement in English (Total and Skill Wise scores -Listening, Speaking, Reading and Writing skills) and Self Regulation, Verbal and Non Verbal Intelligence, Metacognitive Awareness, Socio Economic Scale, and Classroom Environment were calculated. Descriptive Statistics were calculated for Total Sample and separately for Boys and Girls. Nature of the distribution was identified using the measured descriptive statistics.

One Way Analysis of Variance (ANOVA).

One Way ANOVA was used to compare the relevant variables between the Experimental group I (STAD), Experimental groups II (TETBLT) and the Control group on the select variables. This statistical technique was mainly used to test whether the Experimental groups and Control group differ in Achievement in English (Total and Skill Wise-listening, speaking, reading and writing) and Self Regulation. It was also used to compare the Gain scores with regard to Achievement in English (Total and Skill Wise Scores) and Self Regulation without controlling the effects of the Covariates such as Pre Experimental Status of the Participants in terms of Achievement in Mathematics (Total and Skill Wise Scores) and Self Regulation, Verbal Intelligence, Nonverbal Intelligence and Classroom Environment of the students. This technique was also used establish the equivalence of Experimental group I, Experimental group II and the Control group in the study.

Two way Analysis of Variance (ANOVA) with 3 x 3 Factorial Design.

Two-way ANOVA was employed to examine the main and interaction effects of Independent Variables (Instructional Strategies and Metacognitive Awareness) on Dependent Variables (Achievement in English Language-Total and Skill-wise scores) and Self Regulation. In the study, 3 x 3 Factorial ANOVA consists of three levels of Instructional Strategies and three levels of Metacognitive Awareness. Instructional Strategies were classified into three level ie. Student Teams Achievement Divisions (STAD) strategy of Cooperative Learning, Technology Enriched Task Based Language Teaching (TETBLT) and Activity Oriented Method of Teaching (AOMT). The three levels of Metacognitive Awareness are Above Average Metacognitive Awareness - AAMA, Average Metacognitive Awareness – AMA and Below Average Metacognitive Awareness - BAMA. Hence, Two Way ANOVA with 3X3 Factorial Design, in which two Independent Variables at three levels, were used to analyse the data. The significant F – values were subjected to Scheffe test of Post hoc Comparison.

Two-way Factorial Analysis of Covariance (ANCOVA).

This statistical technique was utilised to examine the effectiveness of STAD Strategy of Cooperative Learning and Technology Enriched Task Based Language Teaching (TETBLT) over the Activity Oriented Method of Teaching English for standard VIII Students in case of Achievement in English Language (Total and Skill-wise scores) and Self Regulation. Analysis of Covariance is a statistical technique used to control for the effects of one or more uncontrolled variables and permit thereby a valued evaluation of the outcomes of the experiment (Ferguson, 1971). This technique is applied when there are one or more correlated variables existed with the Dependent Variable. It can control the effects of any of the Covariates on the Dependent

Variable using ANCOVA. In the study Two-way Factorial Analysis of Covariance (ANCOVA) was employed to remove statistically the effect of four Confounding Variables or Covariates namely Pre-experimental Status in terms of Achievement in English and Self Regulation , Verbal Intelligence, Non-verbal Intelligence and Classroom Environment singly and in combination of the four at a time. The significant F values were subjected to Sheffe's test of post hoc comparison.

Scheffe' Test of Post-hoc Comparison

Scheffe' Test of Post-hoc Comparison was used in the study to compare the adjusted criterion means of the Experimental Groups I & II and the Control group after ANCOVA procedure to determine the advantageous group (Scheffe', 1959). When the F values shows significance, this procedure is attempted to locate the exact levels of independent variables which differ in their mean Achievement scores (Ferguson, 1976). The same procedure is used to compare the relevant groups, which shows significant F- values in the One Way ANOVA and Two Way ANOVA.

Effect size.

Effect Size is simply a way of quantifying the effectiveness of a particular intervention, relative to some comparison, and may therefore be said to be a true measure of the significance of the difference. It is an important tool in reporting and interpreting effectiveness (Coe, 2000). It is knowledgeable to find the effect size along with the significance. In the present study the effect size was found to know how much is the effect of Student Teams Achievement Divisions (STAD) strategy of Cooperative Learning, Technology Enriched Task Based Language Teaching (TETBLT) in Achievement in English (Total and Skill wise tests) and Self Regulation.

Effect size is determined using the formula

$$\text{Cohen's d} = \frac{\text{Mean of Experimental group} - \text{Mean of Control Group}}{\text{Standard Deviation of Control Group}}$$

Coe, (2000) considers the interpretation result as

0 - 0.20   implies weak effect

0.21- 0.50   implies modest effect

0.51 –1.0   implies moderate effect

> 1   implies strong effect

Effect size calculation in SPSS is inferred as partial η^2 and this can be interpreted as follows

0.01   very small effect

0.06   moderate effect

0.14   very large effect   (Cohen, 1988)

All the related statistical calculations were measured using the SPSS package.

Summary of Procedure

The whole procedure adopted for the experiment is summarised in the following flow chart.

Flow Chart showing the Summary of Procedure

```
                              ┌─────────────────┐
                              │    VARIABLES    │
                              └─────────────────┘
```

Independent Variables		Dependent Variables	

Instructional Strategies	Metacognitive Awareness	Achievement in English	Self Regulation

STAD	TETBLT	AOMT	Control Variables	Total	Listening, Speaking, Reading, Writing

Pre- Experimental Status	Verbal Intelligence	Non Verbal Intelligence	Socio-Economic Status	Classroom Environment

Selection of the Sample (Standard VIII Students)

Selection of the Experimental group I & II and Control group

Selection of Topics for Treatment

Preparation of Lesson Transcripts for STAD, TETBLT and Control

Tools Used

The Scale of Self Regulation	Scale of Meta Cognitive	Verbal Group Test of Intelligence	Standard Progressive Matrices Test	General Data Sheet	Achievement Test in English	Classroom Environment Inventory

Treatment

Listening	Speaking	Reading	Writing

Experiment

Pre Tests

Experimental Group I (STAD)	Experimental Group II (TETBLT)	Control Group (AOMT)

Experiment

Achievement in English (Total and Skill wise Scores)	Self regulation

Scoring & Consolidation

Analysis

CHAPTER **FOUR**

ANALYSIS

The present study is conducted to examine the relative effectiveness of Student Teams Achievement Divisions (STAD) Strategy and Technology Enriched Task Based Language Teaching (TETBLT) over Activity Oriented Method of Teaching (AOMT), in terms of Achievement in English (Total and Skill wise scores) and Self Regulation of standard VIII students. The design used in the study was the Non-Equivalent Groups Pre-test – Post-test Control and Comparison Groups Design. The result of the present study was analysed in three major phases. In the First phase, a preliminary survey was conducted to find out the attitude of Secondary School English language towards Instructional Strategies used in Classrooms. In the Second phase, relative effectiveness of Student Teams Achievement Divisions Strategy (STAD) of Cooperative Learning, and Technology Enriched Task Based Language Teaching (TETBLT) over Activity Oriented Method of Teaching (AOMT), in terms of Achievement in English (Total and Skill wise scores) and Self Regulation was analyzed.

Third phase was focused to investigate the main and interaction effects of Instructional Strategies (Student Teams Achievement Divisions (STAD) Strategy, Technology Enriched Task Based Language Teaching -TETBLT and Activity Oriented Method of Teaching -AOMT) and Metacognitive Awareness on Achievement in English (Total and Skill wise scores) and Self Regulation of standard VIII Students. The collected and tabulated data were analysed using the statistical techniques like Percentage Analysis, One –Way Analysis of Variance (ANOVA), Effect Size, Two- Way Analysis of Variance (ANOVA), Two- Way Factorial Analysis of Covariance (ANCOVA), and Scheffe' Test of Post-hoc Comparison. The statistical analysis of the consolidated data has been done based on the Objectives set for the study using the software SPSS (Statistical Package for Social Science). The entire analysis of the data has been done, classified and presented in the following order.

Results of Preliminary Survey

Preliminary Analysis

Important Statistical Constants

Establishing the Equivalence of the Groups

Major Analysis – Part I

One Way ANOVA for Achievement in English

One Way ANOVA for Self Regulation

Two Way Factorial ANCOVA for Achievement in English

Two Way Factorial ANCOVA for Self Regulation

Major Analysis – Part II

Two Way ANOVA for Achievement in English

Two Way ANOVA for Self Regulation

Results of the Preliminary Survey

Percentage Analysis was used to find out the attitude of Secondary School English language towards Instructional Strategies used in Classrooms. The classification of the sample of preliminary Survey into Teachers with High, Moderate and Low attitude toward Instructional Strategies, is done on the basis of conventional procedure of σ distance from the mean. Teachers with a score of mean $+\sigma$ and above were treated as teachers with High attitude, those with scores of mean $-\sigma$ and below were treated as Teachers with Low attitude and those having scores in between mean $+/- \sigma$ as Teachers with Average attitude. Percentage Analysis is used to find out the percentage of teachers falling in the three groups. The data and results are shown in Table 22.

Table 22

Data and Results of the Analysis of Preliminary Survey

Sl. No.	Sections	High (%)	Average (%)	Low (%)
1	SECTION –I General attitude towards novel Instructional Strategies in English teaching	14	70	16
2.	SECTION –II Attitude towards Cooperative Learning Strategies	30	56	14
3.	SECTION-III Attitude towards Technology Enriched Task Based Language Teaching Strategy	20	68	12

Table 22 shows that in Section I, out of 50 teachers, 14%of teachers are having high and positive attitude, 70 % of teachers are having moderate attitude, and 16 % of teachers are having low and negative attitude towards Instructional Strategies in teaching English.

Table 22 also indicates that, in Section II, out of 50 teachers, 30 % of teachers are having high and positive attitude, 56 % of teachers are moderate attitude, 14 % of teachers have low and negative attitude towards the towards Cooperative Learning Strategies in English.

From the Table 22, in section III, out of 50 teachers; 20% of teachers are having high and positive attitude, 68 % of teachers are having moderate attitude and 12 % teachers are having low and negative attitude towards implementing Task based language teaching in English language teaching

The findings of the study revealed that the majority of the teachers have moderate attitude towards instructional strategies, Cooperative learning strategies and Task Based Language Teaching.

Preliminary Analysis

The statistical constants of the variables in the study and establishing the equivalence of groups by comparison of the mean scores of relevant variables for the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) for the Total Sample, Boys and Girls are presented in the following section.

Important Statistical Constants

As a part of the preliminary analysis, the important statistical constants like mean, median, mode, standard deviation, Skewness and Kurtosis for the Pretest, Posttest and Gain scores of Achievement in English (Total and Skill wise scores) and Self- Regulation, Socio-Economic Status, Metacognitive Awareness, Non-verbal Intelligence, Verbal Intelligence and Classroom Environment were examined separately (N = 45 each) for the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (Total sample, Boys and Girls). Details are presented in Table 23, 24 and 25 respectively.

Table 23

Statistical Constants for the Experimental Group I - STAD (Total Sample, Boys and Girls)

Variable	Total Sample (N = 45)						Boys (N = 21)						Girls (N = 24)					
	Mean	Median	Mode	S.D	Skewness	Kurtosis	Mean	Median	Mode	S.D	Skewness	Kurtosis	Mean	Median	Mode	S.D.	Skewness	Kurtosis
Pretest																		
Achievement in English (Total)	24.27	24	21	4.047	0.675	0.974	24.19	23	21	5.231	0.75	0.087	24.33	24	25	2.745	0.073	0.412
Listening Skill	8.47	9	9	1.272	-0.407	0.402	8.62	9	9	1.161	-0.213	0.392	8.33	8.5	9	1.373	-0.444	0.4
Speaking Skill	6.56	6	5	1.374	0.428	-1.092	6.43	6	5	1.287	0.641	-0.425	6.67	6	5	1.465	0.275	-1.433
Reading Skill	14.53	14	14	2.427	0.137	-0.704	14	14	12	2.049	0.385	-0.982	15	15	14	2.67	-0.179	-0.561
Writing Skill	24.78	24	24	2.938	0.471	0.311	23.9	24	24	3.015	0.403	0.098	25.54	25	24	2.702	0.952	0.507
Self Regulation	142.7	142	125	14.301	0.214	-0.113	143.38	141	126	15.81	0.257	0.398	142.1	142	142	13.16	0.105	-0.963
Postest																		
Achievement in English (Total)	38.98	39	37	5.115	-0.072	-0.357	36.81	37	38	4.905	0.009	-0.151	40.88	41.5	37	4.59	-0.001	-0.678
Listening Skill	17.49	17	17	2.66	-0.108	-0.277	17.33	17	17	3.055	-0.315	-0.565	17.63	17.5	16	2.318	0.431	-0.221
Speaking Skill	14.33	14	13	2.384	0.238	-0.599	14.24	14	16	2.682	0.029	-0.982	14.42	14	13	2.145	0.673	-0.092
Reading Skill	28.6	29	28	3.84	-0.267	-0.04	27.24	27	24	3.754	-0.118	-0.224	29.79	29.5	28	3.575	-0.425	0.861
Writing Skill	41.4	41	41	5.782	0.062	-0.538	41.48	41	40	4.523	0.075	-0.247	41.33	41	41	6.793	0.076	-0.923
Self Regulation	232.29	233	233	29.754	-0.315	-0.666	225.62	225	225	28.88	-0.488	-0.585	238.13	238	238	29.86	-0.285	-0.885
Gain Score																		
Achievement in English (Total)	14.71	14	12	4.501	0.161	-0.913	12.62	12	14	4.08	0.895	0.856	16.54	17.5	19	4.096	-0.323	-0.664
Listening Skill	9.02	9	9	2.179	0.025	0.682	8.71	9	8	2.572	0.019	0.517	9.29	9	9	1.781	0.576	-0.104
Speaking Skill	7.78	8	7	1.857	0.519	1.13	7.81	8	6	2.182	-0.05	-0.089	7.75	7.5	7	1.567	1.783	1.551
Reading Skill	14.07	15	15	2.734	-0.576	-0.228	13.24	13	12	3.064	-0.329	-0.632	14.79	15	17	2.226	-0.437	-0.618
Writing Skill	16.62	16	17	5.801	0.437	-0.261	17.57	17	15	5.363	0.765	0.367	15.79	15.5	17	6.15	0.402	-0.566
Self Regulation	89.53	90	122	30.752	-0.286	-0.607	82.24	82	121	32.30	0.07	-0.193	95.92	103.5	102	28.46	-0.597	-0.562
Metacognitive Awareness	106.2	100	95	15.849	0.873	-0.367	105.76	100	95	15.06	1.295	0.087	106.7	100.5	95	16.82	0.641	-0.476
Verbal Intelligence	56.93	57	56	5.738	0.247	-0.08	60.76	60	57	4.504	0.822	-0.396	53.58	52	52	4.5	0.18	-0.576
SES	63.13	63	55	8.303	0.466	-0.691	63.33	63	62	8.737	0.499	-0.669	62.96	63.5	55	8.089	0.454	-0.615
Non-Verbal Intelligence	34.78	33	32	4.999	0.471	-0.487	35.14	32	32	4.83	0.66	-0.794	34.46	33.5	31	5.225	0.406	-0.223
Class room Environment	33.78	34	32	4.194	-0.282	-1.107	33.14	32	32	4.362	0.141	-1.007	34.33	36	37	4.05	-0.705	-0.763

Table 24

Statistical Constants for the Experimental Group II – TETBLT (Total Sample, Boys and Girls)

Variable	Total Sample (N = 45)						Boys (N = 24)						Girls (N = 21)					
	Mean	Median	Mode	S.D	Skewness	Kurtosis	Mean	Median	Mode	S.D	Skewness	Kurtosis	Mean	Median	Mode	S.D	Skewness	Kurtosis
Pre-test-Achievement in English (Total)	23.56	23	22	3.805	0.743	0.926	23.92	23.5	26	4.169	0.696	1.225	23.14	23	22	3.395	0.72	0.123
Listening Skill	7.82	8	8	1.655	1.492	7.403	7.63	8	8	1.377	-0.992	1.081	8.05	8	7	1.936	2.394	8.101
Speaking Skill	6.44	6	6	1.575	-0.533	1.301	6.42	6	6	1.613	-0.413	1.186	6.48	6	6	1.569	-0.724	2.223
Reading Skill	13.33	14	17	4.062	0.035	-0.554	13.67	14	14	4.114	-0.177	-0.179	12.95	12	17	4.068	0.284	-0.641
Writing Skill	24.36	24	27	2.595	-0.044	-1.043	23.96	24	21	2.579	0.199	-0.913	24.81	25	27	2.6	-0.335	-0.848
Self Regulation	145.5	145	152	12.317	-0.168	-0.357	143.54	143	152	13.56	0.274	-0.26	147.7	149	160	10.60	-0.825	0.405
Post-test Achievement in English (Total)	35	35	35	2.121	0.179	-0.43	34.17	34	34	1.903	0.153	-0.617	35.95	36	35	1.987	0.199	-0.599
Listening Skill	13.82	13	13	2.377	0.338	-0.423	14	14	13	2.322	0.091	-1.143	13.62	13	13	2.479	0.637	0.627
Speaking Skill	12.96	13	13	2.142	-0.404	-0.542	13.04	13	13	2.255	-0.429	-0.131	12.86	13	14	2.056	-0.437	-1.063
Reading Skill	25.13	25	25	3.829	-0.285	-0.291	25.13	25	25	3.327	-0.397	-0.195	25.14	25	25	4.419	-0.236	-0.478
Writing Skill	37.73	38	38	3.313	0.065	-0.401	39.17	39	37	3.002	-0.185	0.245	36.1	36	34	2.914	0.379	0.134
Self Regulation	215.58	215	208	19.637	-0.268	-0.673	211.08	211	210	18.74	-0.173	-1.044	220.7	222	222	19.82	-0.527	0.057
Gain Score-Achievement in English (Total)	11.44	11	11	3.609	0.071	-0.351	10.25	10	10	3.326	0.202	0.203	12.81	13	11	3.502	-0.157	-0.3
Listening Skill	6	6	4	2.067	0.42	-0.859	6.38	6	5	2.203	0.223	-0.978	5.57	5	4	1.859	0.598	-0.687
Speaking Skill	6.51	7	7	1.984	-0.246	-0.67	6.63	7	7	2.163	-0.228	-0.695	6.38	7	8	1.802	-0.41	-0.709
Reading Skill	11.8	12	11	2.04	0.25	-0.445	11.46	11	11	1.793	0.271	-0.9	12.19	12	13	2.272	0.051	-0.312
Writing Skill	13.38	15	16	4.169	-0.546	-0.469	15.21	16	16	3.23	-0.328	1.268	11.29	10	7	4.197	0.164	-1.115
Self Regulation	70.07	70	72	23.392	-0.01	-0.393	67.54	68	57	25.41	0.022	-0.485	72.95	72	71	21.08	0.132	-0.279
Meta cognitive Awareness	102.9	99	95	19.788	-0.074	-0.294	103.96	108	99	20.01	-0.585	0.079	101.7	95	95	19.96	0.517	-0.159
Verbal Intelligence	56.27	56	52	5.549	0.327	0.27	57.67	57	56	5.647	0.229	1.07	54.67	54	52	5.102	0.381	-0.529
SES	64.56	64	64	6.462	0.199	0.359	64.33	64	52	8.626	0.184	-1.064	64.81	64	64	2.482	2.929	9.888
Non-Verbal Intelligence	33.07	33	30	5.466	0.298	-0.285	34.5	33.5	31	5.453	0.519	-0.431	31.43	32	30	5.124	-0.025	-0.991
Class room Environment	32.56	34	28	5.03	-0.281	-1.5	31.17	30.5	28	4.715	0.174	-1.529	34.14	36	38	5.013	-0.951	-0.551

Table 25

Statistical Constants for Control Group (Total Sample, Boys and Girls)

Variable	Total Sample (N = 45)						Boys (N = 20)						Girls (N = 25)					
	Mean	Median	Mode	S.D	Skewness	Kurtosis	Mean	Median	Mode	S.D	Skewness	Kurtosis	Mean	Median	Mode	S.D	Skewness	Kurtosis
Pre test																		
Achievement in English (Total)	23.67	24	25	4.39	0.066	-0.067	22.65	21.5	18	5.788	0.524	-0.748	24.48	24	25	2.694	0.052	0.5
Listening Skill	8.73	9	9	1.268	-0.099	-0.334	8.95	9	9	1.276	-0.404	0.154	8.56	9	9	1.261	0.124	-0.209
Speaking Skill	6.24	6	5	1.19	0.517	-0.947	6.35	6	5	1.309	0.521	-1.008	6.16	6	5	1.106	0.462	-1.103
Reading Skill	13.84	14	14	1.918	0.333	-0.036	14	14	14	1.589	0	-0.551	13.72	14	14	2.17	0.525	0.036
Writing Skill	23.93	24	24	1.935	-0.236	-0.257	24.25	24.5	24	1.682	-1.175	1.104	23.68	24	24	2.116	0.258	-0.261
Self Regulation	139.5	142	142	10.672	-0.632	0.147	136.3	139.5	142	9.766	-0.695	0.45	142.1	144	137	10.84	-0.899	0.688
Post test																		
Achievement in English (Total)	26.84	27	26	3.766	0.033	-0.431	26.05	24.5	23	4.807	0.468	-0.94	27.48	27	26	2.6	-0.192	0.381
Listening Skill	12.09	12	11	1.769	0.607	-0.412	12.25	12	11	1.618	0.543	-0.832	11.96	12	11	1.904	0.732	-0.105
Speaking Skill	9.22	9	8	1.731	0.632	-0.229	9.3	9	8	1.895	0.603	-0.125	9.16	9	8	1.625	0.67	-0.269
Reading Skill	18.47	18	17	2.599	0.572	0.637	18.05	18	17	2.139	-0.395	0.403	18.8	18	17	2.915	0.719	0.099
Writing Skill	28.18	28	28	2.682	0.437	0.011	28.4	28	27	2.604	0.464	1.44	28	28	26	2.784	0.479	-0.554
Self Regulation	173.8	172	169	19.62	0.123	-0.605	169.5	169	169	22.293	0.351	-0.51	177.2	176	176	16.89	0.223	-0.919
Gain Scores																		
Achievement in English (Total)	3.22	3	3	1.412	1.106	2.095	3.5	3	3	1.732	0.945	1.174	3	3	2	1.08	0.647	0.989
Listening Skill	3.36	3	3	1.026	0.409	-0.354	3.3	3	2	1.081	0.161	-1.228	3.4	3	3	1	0.707	0.619
Speaking Skill	2.98	3	3	0.917	0.045	-0.08	2.95	3	3	1.05	-0.195	-0.217	3	3	3	0.816	0.499	-0.043
Reading Skill	4.62	4	3	2.114	0.764	1.314	4.05	4	3	1.317	0.667	-0.289	5.08	4	3	2.515	1.49	1.547
Writing Skill	4.18	4	4	1.6	1.335	1.74	4	3.5	2	2.103	1.548	1.581	4.32	4	4	1.069	0.624	0.161
Self Regulation	34.27	33	12	21.088	0.276	-0.823	33.25	39.5	12	22.706	0.148	-1.005	35.08	32	35	20.13	0.473	-0.622
Meta cognitive Awareness	97.24	101	85	19.668	-0.484	-0.651	103.65	107	85	18.25	-0.854	0.612	92.12	98	89	19.59	-0.289	-1.023
Verbal Intelligence	56.82	56	52	6.675	0.53	-0.411	62.05	60.5	56	5.365	0.46	-1.105	52.64	52	52	4.232	0.717	0.447
SES	63.89	64	64	6.863	0.468	0.255	63.6	63.5	79	8.605	0.679	-0.436	64.12	64	64	5.255	-0.087	1.361
Non-Verbal Intelligence	34.33	33	31	4.538	0.043	0.954	34.65	34.5	36	3.884	0.438	0.378	34.08	33	31	5.066	-0.026	1.015
Class room Environment	33.38	34	28	4.663	-0.438	-1.282	35	36	28	3.685	-0.919	-0.237	32.08	34	28	5.016	-0.006	-1.615

Establishing the Equivalence of Groups

The design selected for the present study was the Non-Equivalent Groups Pre-test – Post-test Control and comparison Groups Design of the Quasi Experimental Design. This design incorporates two experimental groups and one control group. Experimental Group I was taught through Students Teams Achievement Division (STAD) Strategy of Cooperative Learning and Experimental Group II was taught through Technology Enriched Task Based Language teaching (TETBLT). The Control group was taught through the Activity Oriented Method of Teaching (AOMT) employed in secondary school classes of Kerala State. Using this design, the equivalence of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) was provided initially by random assignment of intact classrooms to Experimental and Control treatments. Since the sample of the study consisted of 45 students each in three intact class groups from two schools, as Experimental Group I, Experimental Group II and the Control Group, the investigator made it convenient to establish the equivalence of both groups statistically. Equivalence between the three groups was established for the Total Sample, Boys and Girls in each of the group regarding Pre-experimental Status in terms of Achievement in English (Total and Skill wise Scores) and Self- Regulation, Verbal Intelligence, Non-verbal Intelligence, Classroom Environment and Socio-Economic Status.

In the present study equivalence of the groups was established statistically. For this purpose, One-way ANOVA for the scores on the Pre-experimental Status in terms of Achievement in English (Total and Skill wise Scores ie. Listening, Speaking, Reading and Writing) and Self- Regulation, Verbal Intelligence, Non-verbal Intelligence, and Socio-Economic Status between the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) was used. The comparison was

done separately for the Total sample, Boys and Girls with regard to these variables.

The F-values for the comparison of select variables on the Pre-experimental Status in terms of Achievement in English (Total and Skill wise Scores ie. Listening, Speaking, Reading and Writing) and Self- Regulation, Verbal Intelligence, Non-verbal Intelligence, Classroom Environment and Socio-Economic Status between the relevant groups were calculated and subjected to One-way ANOVA. The data and results of the One-way ANOVA procedure for the Total sample is presented in Table 26.

Table 26

Data and results of the One-way ANOVA for the Comparison of Select Variables between the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) for the Total sample.

Variable			Source	SS	Df	MS	F	
Pre- Experimental Status	Achievement in English (Total)		Between Groups	22.237	2	11.119		n.s.
			Within Groups	2055.733	132	15.574	0.714	
			Total	2077.970	134			
	Skill wise Scores	Listening	Between Groups	8.237	2	4.119		n.s.
			Within Groups	265.067	132	2.008	2.051	
			Total	273.304	134			
		Speaking	Between Groups	1.733	2	.867		n.s.
			Within Groups	258.000	132	1.955	0.443	
			Total	259.733	134			
		Reading	Between Groups	27.037	2	13.519		n.s.
			Within Groups	1186.222	132	8.987	1.504	
			Total	1213.259	134			
		Writing	Between Groups	26.311	2	13.156		n.s.
			Within Groups	830.622	132	6.293	2.091	
			Total	856.933	134			
	Self Regulation		Between Groups	805.348	2	402.674		n.s.
			Within Groups	20685.244	132	156.706	2.570	
			Total	21490.593	134			
Verbal Intelligence			Between Groups	11.481	2	5.741		n.s.
			Within Groups	4764.178	132	36.092	0.159	
			Total	4775.659	134			
Non- Verbal Intelligence			Between Groups	70.948	2	35.474		n.s.
			Within Groups	3320.578	132	25.156	1.410	
			Total	3391.526	134			
Socio- Economic Status			Between Groups	45.570	2	22.785		n.s.
			Within Groups	6942.756	132	52.597	0.433	
			Total	6988.326	134			
Classroom Environment			Between Groups	34.948	2	17.474		n.s.
			Within Groups	2843.467	132	21.541	0.811	
			Total	2878.415	134			

n.s. = *Not Significant*

The obtained F-values for the comparison of Pre-experimental Status in terms of Achievement in English (Total and Skill wise Scores) and Self Regulation, Verbal Intelligence, Non Verbal Intelligence, Classroom Environment and Socio Economic Status for Total sample between 3 groups are not found significant (p = n.s.). Hence, no significant difference is noticed between the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) in case of the select variables. It can be said that the three groups were equivalent with respect to the aforesaid variables, before treatment.

The F-values for the comparison of the select variables between the 3 groups for the subsample Boys, were calculated and subjected to One-way ANOVA. The data and results of the One Way ANOVA procedure for Boys is presented in Table 27.

Table 27

Data and Results of the One-way ANOVA for the Comparison of Select Variables between the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) for the Boys

Variable			Source	SS	Df	MS	F	p
		Achievement in English (Total)	Between Groups	27.763	2	13.882		
			Within Groups	1583.621	62	25.542	0.543	n.s.
			Total	1611.385	64			
Pre- Experimental Status	Skill wise Scores	Listening	Between Groups	21.334	2	10.667		
			Within Groups	101.527	62	4.638	1.514	n.s.
			Total	122.862	64			
		Speaking	Between Groups	.074	2	.037		
			Within Groups	125.526	62	2.025	0.018	n.s.
			Total	125.600	64			
		Reading	Between Groups	1.682	2	.841		
			Within Groups	521.333	62	8.409	0.100	n.s.
			Total	523.015	64			
		Writing	Between Groups	1.421	2	.710		
			Within Groups	388.518	62	6.266	0.113	n.s.
			Total	389.938	64			
		Self Regulation	Between Groups	711.443	2	355.722		
			Within Groups	11037.111	62	178.018	1.998	
			Total	11748.554	64			n.s.
		Verbal Intelligence	Between Groups	226.892	2	113.446		
			Within Groups	1686.093	62	27.195	2.172	
			Total	1912.985	64			n.s.
		Non- Verbal Intelligence	Between Groups	4.940	2	2.470	0.107	
			Within Groups	1437.121	62	23.179		n.s.
			Total	1442.062	64			
		Socio- Economic Status	Between Groups	12.185	2	6.092	0.081	
			Within Groups	4644.800	62	74.916		n.s.
			Total	4656.985	64			
		Classroom Environment	Between Groups	161.080	2	80.540	2.343	
			Within Groups	1149.905	62	18.547		
			Total	1310.985	64			n.s.

n.s. = Not Significant

The F-values obtained for the comparison of Pre-experimental Status in terms of Achievement in English (Total and Skill wise Scores) and Self-Regulation, Verbal Intelligence, Non-verbal Intelligence, Classroom Environment and Socio-Economic Status for Boys between 9 groups are not

found significant. Hence, no significant difference is noticed between Boys in the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT). It can be said that the three groups were equivalent with respect to the aforesaid variables, for Boys before the treatment.

The F-values for the comparison of the select variables between the tree groups for the subsample Girls, were also calculated and subjected to One-way ANOVA. The data and results of the One-way ANOVA procedure for Girls is presented in Table 28.

Table 28

Data and results of the One-way ANOVA for the Comparison of Select Variables between the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) for Girls.

		Variable	Source	SS	Df	MS	F	p
Pre- Experimental Status		Achievement in English (Total)	Between Groups	23.798	2	11.899	1.379	
			Within Groups	578.145	67	8.629		n.s.
			Total	601.943	69			
	Skill wise Scores	Listening	Between Groups	2.997	2	1.499	0.642	
			Within Groups	156.446	67	2.335		n.s.
			Total	159.443	69			
		Speaking	Between Groups	3.211	2	1.606	0.841	
			Within Groups	127.931	67	1.909		n.s.
			Total	131.143	69			
		Reading	Between Groups	48.650	2	24.325	2.681	
			Within Groups	607.992	67	9.075		n.s.
			Total	656.643	69			
		Writing	Between Groups	43.135	2	21.568	2.519	
			Within Groups	410.636	67	9.129		n.s.
			Total	453.771	69			
		Self Regulation	Between Groups	464.160	2	232.080	1.717	
			Within Groups	9055.783	67	135.161		n.s.
			Total	9519.943	69			
		Verbal Intelligence	Between Groups	46.883	2	23.441	1.109	
			Within Groups	1416.260	67	21.138		
			Total	1463.143	69			n.s.
		Non- Verbal Intelligence	Between Groups	120.045	2	60.022	2.273	
			Within Groups	1768.941	67	26.402		
			Total	1888.986	69			n.s.
		Socio- Economic Status	Between Groups	39.806	2	19.903	0.582	
			Within Groups	2290.836	67	34.192		
			Total	2330.643	69			n.s.
		Classroom Environment	Between Groups	75.698	2	37.849	1.709	
			Within Groups	1483.745	67	22.145		
			Total	1559.443	69			n.s.

n.s. = *Not Significant*

The obtained F-values for the comparison of Pre-experimental Status in terms of Achievement in English (Total and Skill wise Scores) and Self-Regulation, Verbal Intelligence, Non-verbal Intelligence, Classroom Environment and Socio-Economic Status for Girls between 3 groups are not found significant. Hence, no significant difference is noticed between the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) in case Girls. It can be said that the three groups were equivalent in case of the subsample Girls, with respect to the aforesaid variables, for Girls.

Major Analysis -Part I

In this part of the chapter, the statistical techniques like One-way ANOVA, followed by Scheffe' Test of Post-hoc Comparison were used for analysis. In this section, Comparison of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) in terms of the Posttest and Gain Scores of Achievement in English (Total and Skill wise Scores) and Self Regulation of Standard VIII students is presented. The results obtained are described in detail in the following sections.

One Way Analysis of Variance for Achievement in English and Self Regulation.

To investigate the difference in Posttest and Gain Scores of Achievement in English (Total and Skill wise scores) and Self Regulation between the STAD, TETBLT and the Control groups, One Way ANOVA was employed. The investigation was done for the Total sample and Subsamples based on Gender.

One Way Analysis of Variance for Achievement in English (Total and skill wise scores)

Posttest and Gain Scores of Achievement in English (Total and Skill wise Scores) between the STAD, TETBLT and the Control groups, were compared using the One Way ANOVA. The investigation done for the Total sample and Subsamples based on Gender is presented in this section.

Effect of Instructional Strategies (STAD, TETBLT and Control)) on Achievement in English (Total and Skill wise Scores) of for the Total Sample, Boys and Girls.

Mean scores of Achievement in English (Total and Skill wise scores) were compared among STAD, TETBLT and the Control groups using One-way ANOVA to check whether there exists any significant difference among the three groups after the treatment. Results of One Way ANOVA are presented in the followings sections.

Effect of Instructional Strategies (STAD, TETBLT and Control) on Achievement in English (Total and Skill wise Scores) for the Total Sample.

For the Total sample, One Way ANOVA was employed to study whether the STAD, TETBLT and the Control groups differ in Achievement in English (Total and Skill wise Scores) or not. Results of One Way ANOVA done for the Total sample is presented in Table 29.

Table 29

ANOVA for Achievement in English (Total and Skill wise Scores) by Levels of Instructional Strategies for the Total Sample

Sample	*n*	Dependent variable	Source	SS	*df*	MS	*F*
		Achievement in English(Total)	Between Groups	3443.30	2	1721.65	115.19**
			Within Groups	1972.88	132	14.94	
			Total	5416.19	134		
		Listening	Between Groups	684.13	2	342.06	64.73**
			Within Groups	697.46	132	5.28	
			Total	1381.60	134		
		Speaking	Between Groups	629.39	2	314.69	71.16**
Total Sample	135	Skill wise Scores	Within Groups	583.68	132	4.422	
			Total	1213.08	134		
		Reading	Between Groups	2387.20	2	1193.60	99.01**
			Within Groups	1591.20	132	12.055	
			Total	3978.40	134		
		Writing	Between Groups	4193.70	2	2096.85	121.92**
			Within Groups	2270.17	132	17.198	
			Total	6463.88	134		

**indicates *p*< .01

From Table 29, the main effect of Instructional Strategies (STAD, TETBLT and Control) on Achievement in English (Total Score) for Girls is significant, *F* (2,132) = 115.19, *p*< .01. Main effect of Instructional Strategies (STAD, TETBLT and Control) on Achievement in English (Skill wise scores) for the Total Sample in Listening, (*F* = 64.73); Speaking, (*F* = 71.16); Reading, (*F* = 99.01) and Writing (*F* = 121.92), are found significant (*df* 2,132, *p*< .01). Mean Scores of Achievement in English (Total and Skill wise scores -Listening, Speaking, Reading and Writing) differ significantly among the STAD, TETBLT and Control groups (See Tables 23, 24, and 25).

From the result, the STAD and TETBLT groups reported significantly higher Achievement in English (Total and Skill wise Scores -Listening, Speaking, Reading and Writing) than the Control group. Likewise, STAD

group reported significantly higher Achievement in English (Total and Skill wise Scores) than the TETBLT group.

The individual performance of the subjects in the STAD, TETBLT and Control on the Achievement test in English (Total and Skill wise Scores - Listening, Speaking, Reading and Writing) for the Total Sample was graphically examined and presented in Figure 2.

Achievement in English (Total Score)

Listening Skill

Speaking Skill

Reading Skill

Writing Skill

Figure 2 Comparison of the Individual Achievement in English (Total and Skill wise Scores) of STAD, TETBLT and Control Groups - Total Sample

A visual examination of the graphical representation of the Individual Achievement (Total and Skill wise Scores -Listening, Speaking, Reading and Writing) between STAD, TETBLT and Control –(AOMT) Groups for the Total sample points that the individual performance of the subjects in the three groups on the Achievement Test (Skill wise Scores**)** is dissimilar. Statistically significant difference in this case observed through one Way ANOVA is ascertained by the graphical representation. From the Figure Performance of STAD and TETBLT groups is higher than that of the Control group. In all comparison, performance of the STAD group is higher than that of the TETBLT group.

Results of Scheffe' Test of Post-hoc Comparison- Total sample.

In the present study, Scheffe' Test of Post-hoc Comparison (Ferguson, 1971) was employed to compare the criterion means of the three groups of Instructional Strategies (STAD, TETBLT and Control). Scheffe' Test Post-hoc Comparison was used to determine which one of the three groups of Instructional Strategies, cause difference in terms of variation in the Criterion variable. This was done on the basis of significant F- values obtained for the effect of Instructional Strategies on Achievement in English (Total and Skill wise scores) for Total Sample.

In the One-Way ANOVA, significant main effect of Instructional Strategies on Achievement in English (Total and Skill wise Scores) was found. Details of the Scheffe' Test of Post-hoc Comparison is given in Table 30.

Table 30

Result of the Scheffe' Test of Post hoc Comparison between the Means of Achievement in English (Total and Skill wise Scores) Based on Three Groups of Instructional Strategies for the Total Sample.

Sample	*n*	Dependent variable	Group (I)	Group (J)	Mean Difference (I-J)	Std. Error	*F*
Total sample	135	Achievement in English (Total	STAD	Control	12.13	0.815	14.88**
			TETBLT	Control	8.15	0.815	10.00**
			STAD	TETBLT	3.97	0.815	4.87**
		Skill wise Scores — Listening	STAD	Control	5.40	0.485	11.13**
			TETBLT	Control	3.66	0.485	3.56**
			STAD	TETBLT	1.73	0.485	7.54**
		Speaking	STAD	Control	5.11	0.443	11.53**
			TETBLT	Control	3.73	0.443	8.41**
			STAD	TETBLT	1.37	0.443	3.11*
		Reading	STAD	Control	10.13	0.732	13.83**
			TETBLT	Control	6.66	0.732	9.09**
			STAD	TETBLT	3.46	0.732	4.72**
		Writing	STAD	Control	13.22	0.874	15.12**
			TETBLT	Control	9.55	0.874	10.92**
			STAD	TETBLT	3.66	0.874	4.18**

**indicates p < .01; *indicates p < .05

From Table 30, it is clear that the *F* ratios obtained for the comparison of the variable Achievement in English (Total Score) for the Total sample between the groups; STAD – Control F= (14.88), TETBLT-Control, (10.00), and STAD-TETBLT, (4.87) are statistically significant (*p* < .01).

F- ratios obtained for the comparison of the variable Achievement in English (Listening) for the Total sample between the groups; STAD – Control (11.13),   TETBLT-Control, (3.56) and STAD- TETBLT (7.54**)** are statistically significant (*p* < .01).

F- ratios obtained for the comparison of the variable Achievement in English (Speaking) for the Total sample between the groups; STAD – Control (11.53), and TETBLT- (Control, (8.41) are statistically significant (*p* < .01). But the *F*- value for the comparison between STAD- TETBLT groups (3.11**)**

is statistically significant ($p < .05$).

F ratios obtained for the comparison of the variable Achievement in English (Reading) for the Total sample between the groups; STAD – Control (13.83), TETBLT-Control, (9.09), and STAD- TETBLT (4.72**)** are statistically significant ($p < .01$).

F ratios obtained for the comparison of the variable Achievement in English (Writing) for the Total sample between the groups; STAD – Control (15.12), TETBLT- Control, (10.92), and STAD- TETBLT (4.18**)** are statistically significant ($p < .01$).

Thus, it can be inferred that there exists significant difference between the three levels of Instructional Strategies (STAD - Control, TETBLT-Control and STAD- TETBLT) with reference to the mean Achievement in English (Total and Skill wise Scores- Listening, Speaking, Reading and Writing)

From the Scheffe' Test, STAD and TETBLT groups reported significantly higher Achievement in English (Total and Skill wise Scores - Listening, Speaking, Reading and Writing) than the Control group. In all comparisons, STAD group reported significantly higher Achievement in English (Total and Skill wise Scores- Listening, Speaking, Reading and Writing) than the TETBLT group.

Effect size.

Effect Size was calculated using Cohen's *d* for Achievement in English (Total and Skill wise Scores) to measure the magnitude of effect as the mean difference were found significant for Total sample. The details are given in Table 31.

Table 31.

Data and result of Effect Size between STAD and TETBLT in Achievement in English (Total and Skill wise Scores)

	Dependent Variable	Group	Mean	*SD*	*t*	Effect Size	Cohen's Category
Skill wise Scores	Achievement in English Total	STAD	38.98	5.115	4.83**	1.03	Large
		TETBLT	35.00	2.121			
	Listening Skill	STAD	17.49	2.66	6.89**	1.47	Large
		TETBLT	13.82	2.377			
	Speaking Skill	STAD	14.33	2.384	2.86*	0.61	Medium
		TETBLT	12.96	2.142			
	Reading Skill	STAD	28.6	3.84	4.32**	0.92	Large
		TETBLT	25.13	3.829			
	Writing Skill	STAD	41.4	5.782	3.71**	0.79	Medium
		TETBLT	37.73	3.313			

**indicates $p < .01$; *indicates $p < .05$

From the Table 31, it is clear that Cohen's d for Achievement in English (Total score) is greater than 0.8 and these come under the category 'Large'. Hence it can be inferred that STAD Strategy has Large effect in enhancing Achievement in English (Total score) of standard VIII students when compared to TETBLT.

The value of Cohen's d for Achievement in English (Listening Skill) is greater than 0.8. So the effect size come under the Cohen's category' Large' and hence it can be inferred that STAD strategy has large effect in enhancing Listening Skill of standard VIII students compared to TETBLT.

From the Table it is clear that Cohen's d for Achievement in English (Speaking Skill) is greater than 0.5 and these come under the category 'Medium'. Hence it can be inferred that STAD strategy has medium effect in enhancing Speaking Skill of standard VIII students when compared to TETBLT.

The obtained value of Cohen's d for Achievement in English (Reading) is greater than 0.8. So the effect size come under the Cohen's category' Large' and hence it can be inferred that STAD strategy has large effect in enhancing Reading Skill when compared to TETBLT.

The value of Cohen's d for Achievement in English (Writing Skill) is greater than 0.8. So the effect size come under the Cohen's category 'Large' and hence it can be inferred that STAD Strategy has large effect in enhancing Writing Skill of standard VIII students when compared to TETBLT.

Effect of Instructional Strategies (STAD, TETBLT and Control) on Achievement in English (Total Skill wise Scores) for Boys.

For Boys, One Way ANOVA was employed to study whether the STAD, TETBLT and the Control groups differ in Achievement in English (Total and Skill wise Scores) or not. Results of One Way ANOVA done for Boys is presented in Table 32.

Table 32

ANOVA for Achievement in English (Total and Skill wise Scores) by Levels of Instructional Strategies for Boys.

Sample	*n*	Dependent variable		Source	SS	*df*	MS	*F*
		Achievement in English(Total)		Between Groups	1288.694	2	644.347	
				Within Groups	1003.521	62	16.186	39.80**
				Total	2292.215	64		
			Listening	Between Groups	275.737	2	137.869	23.71**
				Within Groups	360.417	62	5.813	
				Total	636.154	64		
Boys	65	Skill wise Scores	Speaking	Between Groups	272.048	2	136.024	25.63**
				Within Groups	328.968	62	5.306	
				Total	601.015	64		
			Reading	Between Groups	949.754	2	474.877	47.23**
				Within Groups	623.385	62	10.055	
				Total	1573.138	64		
			Writing	Between Groups	2002.229	2	1001.11	83.27**
				Within Groups	745.371	62	12.022	
				Total	2747.600	64		

**indicates *p*< .01

From Table 32, the main effect of Instructional Strategies (STAD, TETBLT and Control) on Achievement in English (Total Score) for Boys is significant, F (2, 62) = 39,80, p< .01. Main effect of Instructional Strategies (STAD, TETBLT and Control) on Achievement in English (Skill wise Scores) for Boys in Listening, (F = 23.71); Speaking, (F = 25.63); Reading, (F = 47.23) and Writing (F = 83.27), are found significant (*df 2, 62, p*< .01). Mean Scores of Achievement in English (Total and Skill wise scores - Listening, Speaking, Reading and Writing) differ significantly among the STAD, TETBLT and Control groups (See Tables 1, 2, and 3).

From the result, the STAD and TETBLT groups reported significantly higher Achievement in English (Total and Skill wise Scores -Listening, Speaking, Reading and Writing) than the Control group. Likewise, STAD group reported significantly higher Achievement in English (Total and Skill wise scores) than the TETBLT group.

The individual performance of the subjects in the STAD, TETBLT and Control on the Achievement Test in English (Total and Skill wise scores) for Boys was graphically examined and presented in Figure 3.

Achievement in English (Total score)

Listening Skill

Speaking Skill

Reading Skill

Writing Skill

Figure 3. Comparison of the Individual Achievement in English (Total Skill wise Scores) of STAD, TETBLT and Control Groups – Boys

A visual examination of the graphical representation of the Individual Achievement (Total and Skill wise Scores -Listening, Speaking, Reading and Writing) between STAD, TETBLT and Control – (AOMT) Groups for Boys points that the individual performance of the subjects in the three groups on the Achievement Test (Total and Skill wise Scores**)** is dissimilar. Statistically significant difference in this case observed through one Way ANOVA is ascertained by the graphical representation. From the Figure, Performance of STAD and TETBLT groups is higher than that of the Control group. In all comparison, performance of the STAD group is higher than that of the TETBLT group.

Results of Scheffe' Test of Post-hoc Comparison-Boys.

For Boys, Scheffe' Test of Post-hoc Comparison (Ferguson, 1971) was employed to compare the criterion means (Achievement in English –Total and Skill wise scores) of the three groups of Instructional Strategies (STAD, TETBLT and Control) wherever the *F* ratios are found statistically significant. Details of the Scheffe' Test of Post-hoc Comparison is given in Table 33.

Table 33

Result of the Scheffe' Test of Post hoc Comparison between the Means of Achievement in English (Total and Skill-wise Score) Based on Three Groups of Instructional Strategies for Boys

Sample	N	Dependent variable		Group (I)	Group (J)	Mean Difference (I-J)	Std. Error	F – Value
Boys	65	Achievement in English (Total Score)		STAD	Control	10.76	1.25	8.60**
				TETBLT	Control	8.11	1.21	6.70**
				STAD	TETBLT	2.64	1.20	2.24*
		Skill wise Scores	Listening Skill	STAD	Control	5.083	.753	6.75**
				TETBLT	Control	1.750	.730	2.39*
				STAD	TETBLT	3.333	.720	4.62**
			Speaking skill	STAD	Control	4.938	.720	6.84**
				TETBLT	Control	3.742	.697	5.36**
				STAD	TETBLT	1.196	.688	1.73$^{n.s.}$
			Reading Skill	STAD	Control	9.188	.991	9.27**
				TETBLT	Control	7.075	.960	7.36**
				STAD	TETBLT	2.113	.947	2.22*
			Writing skill	STAD	Control	13.076	1.083	12.06**
				TETBLT	Control	10.767	1.050	10.2**
				STAD	TETBLT	2.310	1.036	2.24*

**indicates p < .01, *indicates p < .05; n. s.- not significant

From Table 33 , it is clear that the *F* ratios obtained for the comparison of the variable Achievement in English (Total Score) for Boys between the groups; STAD –Control (8.60), and TETBLT-Control, (6.70), are statistically significant (*p* < .01). But the *F*- value for the comparison between STAD-TETBLT groups (2.24), is statistically significant at 0.05 level.

F ratios obtained for the comparison of the variable Achievement in English (Listening) for Boys between the groups; STAD –Control (6.75), (2.39) and STAD- TETBLT (4.62 **)** are statistically significant (*p* < .01). But if F-value for the comparison between TETBLT control group (2.24) is significant (at 0.05 level).

F ratios obtained for the comparison of the variable Achievement in

English (Speaking) for Boys between the groups; STAD – Control (6.84), and TETBLT-control, (5.36) are significant ($p < .01$). But the F- value for the between the comparison groups STAD- TETBLT groups (1.73**)** is not significant ($p = n.s.$).

F ratios obtained for the comparison of the variable Achievement in English (Reading) for Boys between the groups; STAD – Control (9.27), and TETBLT-Control, (7.36), are statistically significant ($p < .01$). But the F-value for the comparison between comparison groups STAD- TETBLT groups (2.22**)** is significant ($p < .05$) at 0.05 level.

F ratios obtained for the comparison of the variable Achievement in English (Writing) for Boys between the groups; STAD – Control (12.06), TETBLT-Control, (10.20), are significant ($p < .01$). But the F- value for STAD, TETBLT groups (2.24) is significant at 0.05 level.

Thus, it can be inferred that there exists significant difference between the three levels of Instructional Strategies (STAD - Control, TETBLT-Control and STAD- TETBLT) with reference to the mean Achievement in English (Total and Skill wise scores-Listening, Speaking, Reading and Writing) except in case of the comparison between STAD- TETBLT groups in Speaking.

From the Scheffe' Test, STAD and TETBLT groups reported significantly higher Achievement in English (Skill wise Scores - Listening, Speaking, Reading and Writing) than the Control group. In all comparisons, STAD group reported significantly higher Achievement in English (Total and Skill wise Scores) than the TETBLT group.

Effect of Instructional Strategies (STAD, TETBLT and Control) on Achievement in English (Total and Skill wise Scores) for Girls.

For the Girls, One Way ANOVA was employed to study whether the STAD, TETBLT and the Control groups differ in Achievement in English (Total and Skill wise Scores) or not. Results of One Way ANOVA done for the Girls students is presented in Table 34.

Table 34

One way *ANOVA for Achievement in English (Total and Skill-wise Score)by Levels of Instructional Strategies among Standard VIII Students for Girls.*

Sample	*n*		Dependent variable	Source	SS	*df*	MS	*F*
Girls	70	Skill wiseTest	Achievement in English (Total)	Between Groups	2250.768	2	1125.384	103.88**
				Within Groups	725.817	67	10.833	
				Total	2976.586	69		
			Listening Skill	Between Groups	411.263	2	205.631	41.30**
				Within Groups	333.537	67	4.978	
				Total	744.800	69		
			Speaking Skill	Between Groups	356.878	2	178.439	47.11**
				Within Groups	253.765	67	3.788	
				Total	610.643	69		
			Reading Skill	Between Groups	1492.913	2	746.457	56.28**
				Within Groups	888.530	67	13.262	
				Total	2381.443	69		
			Writing Skill	Between Groups	2212.857	2	1106.429	52.31**
				Within Groups	1417.143	67	21.151	
				Total	3630.000	69		

**indicates p < .01

From Table 37, the main effect of Instructional Strategies (STAD, TETBLT and Control) on Achievement in English (Total Score) for Girls is significant, $F(2,67) = 103.88$, $p < .01$. Main effect of Instructional Strategies

(STAD, TETBLT and Control) on Achievement in English (Skill wise Scores) in Listening ($F=41.30$), Speaking ($F=47.11$), Reading ($F=56.28$) and Writing ($F= 52.31$), are found significant (*df 2, 67, p< .01*). Mean Scores of Achievement in English (Total and Skill wise Scores -Listening, Speaking, Reading and Writing) differ significantly among the STAD**,** TETBLT and Control groups (See Tables 1, 2, and 3).
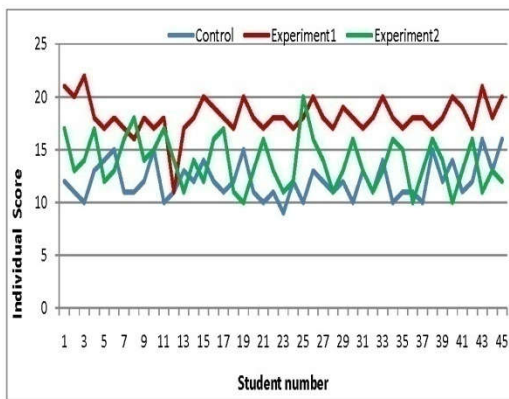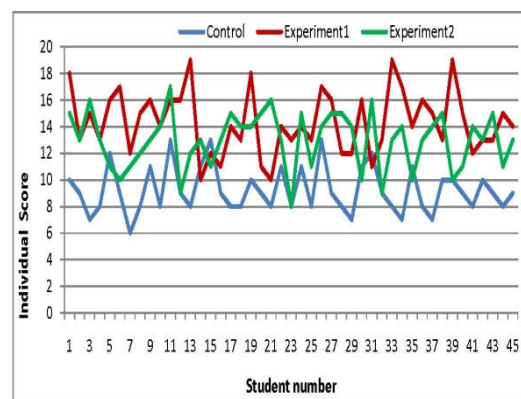
From the result, the STAD and TETBLT groups reported significantly higher Achievement in English (Total and Skill wise Scores -Listening, Speaking, Reading and Writing) than the Control group. Likewise, STAD group reported significantly higher Achievement in English (Total Skill wise scores) than the TETBLT group.

The individual performance of the subjects in the STAD, TETBLT and Control (Girls) on the Achievement in English (Total and Skill wise scores-Listening, Speaking, Reading and Writing) for the Girls was graphically examined and presented in Figure 4.

Achievement in English (Total score)

Listening Skill

Speaking Skill

Reading Skill

Writing Skill

Figure 4 Comparison of the Individual Achievement in English (Total and Skill wise Scores-) of STAD, TETBLT and Control Groups – Girls

A visual examination of the graphical representation of the Individual Achievement Scores (Total) between the Experimental Group I, Experimental Group II and the Control Group for Girls points that the individual performance of the subjects in the three groups on the Achievement Test is dissimilar. Statistically significant difference in this case observed through one Way ANOVA is ascertained by the graphical representation. From the Figure, Performance of STAD and TETBLT groups is higher than that of the Control group. In all comparison, performance of the STAD group is higher than that of the TETBLT group and the Control group.

Results of Scheffe' Test of Post-hoc Comparison- Girls

For Girls, Scheffe' Test of Post-hoc Comparison (Ferguson, 1971) was employed to compare the criterion means (Achievement in English –Total and Skill wise Scores) of the three groups of Instructional Strategies (STAD, TETBLT and Control) wherever the *F* ratios are found statistically significant. Details of the Scheffe' Test of Post-hoc Comparison is given in Table 35.

Table 35

Result of the Scheffe' Test of Post hoc Comparison between the Means of Achievement in English (Total and Skill-wise Score) Based on Three Groups of Instructional Strategies for Girls

Sample	N	Dependent variable	Group (I)	Group (J)	Mean Difference (I-J)	Std. Error	*F –* Value
Girls	70	Achievement in English (Total Score)	STAD	Control	13.39	0.941	14.22**
			TETBLT	Control	8.47	0.974	8.69**
			STAD	TETBLT	4.92	0.983	5.0**
		Skill wise Scores — Listening Skill	STAD	Control	5.665*	0.638	8.87**
			TETBLT	Control	1.659*	0.660	2.5*
			STAD	TETBLT	4.006	0.667	6.0**
		Skill wise Scores — Speaking skill	STAD	Control	5.257	0.556	9.44**
			TETBLT	Control	3.697	0.576	6.41**
			STAD	TETBLT	1.560	0.582	2.68*
		Skill wise Scores — Reading Skill	STAD	Control	10.992	1.041	10.55**
			TETBLT	Control	6.343	1.078	6.36**
			STAD	TETBLT	4.649	1.088	4.26**
		Skill wise Scores — Writing skill	STAD	Control	13.333	1.314	10.17**
			TETBLT	Control	8.095	1.361	5.94**
			STAD	TETBLT	5.238	1.374	3.81**

**indicates p < .01, *indicates p < .05

From Table 35, it is clear that the *F* ratios obtained for the comparison of the variable Achievement in English (Total Score) between the groups STAD - Control, TETBLT- Control and STAD- TETBLT are 14.22**,** 8.69**,** and 5.0 respectively. *F*-values obtained for all these comparisons are significant ($p < .01$**)**.

F ratios obtained for the comparison of the variable Achievement in English (Listening) for Girls between the groups; STAD – Control (8.87), and STAD- TETBLT (6.00**)** are statistically significant ($p < .01$). But the F- value obtained for the comparison groups between TETBLT – Control (2.5) is found significant at 0.05 level.

F ratios obtained for the comparison of the variable Achievement in English (Speaking) for Boys between the groups; STAD – Control (9.44), and TETBLT-Control, (6.41**)** are significant ($p < .01$). The *F*- value for the comparison between STAD- TETBLT groups (2.68**)** is also significant ($p < .05.$).

F ratios obtained for the comparison of the variable Achievement in English (Reading) for Boys between the groups; STAD – Control ($F= 10.55$), and TETBLT-Control, (6.36), STAD – TEBLT (4.26) are statistically significant ($p < .01$).

F ratios obtained for the comparison of the variable Achievement in English (Writing) for Boys between the groups; STAD – Control (10.17), TETBLT-Control, (5.94), and STAD- TETBLT (3.81**)** are significant ($p < .01$).

Thus, it can be inferred that there exists significant difference between the three levels of Instructional Strategies (STAD - Control, TETBLT-Control and STAD- TETBLT) with reference to the mean Achievement in English (Total and Skill wise scores- Listening, Speaking, Reading and Writing).

From the Scheffe' Test, STAD and TETBLT groups reported significantly higher Achievement in English (Skill wise Scores - Listening, Speaking, Reading and Writing) than the Control group. In all comparisons, STAD group reported significantly higher Achievement in English (Total and skill wise Scores) than the TETBLT group.

Effect of Instructional Strategies (STAD, TETBLT and Control)) on Gain Scores of Achievement in English (Total and Skill wise scores) for the Total Sample, Boys and Girls.

Mean Gain scores of Achievement in English (Total score) were compared among STAD, TETBLT and the Control groups using One-way ANOVA to check whether there exists any significant difference among the three groups after the treatment. Results of One Way ANOVA are presented in the following Sections.

Effect of Instructional Strategies (STAD, TETBLT and Control) on Gain Scores of Achievement in English (Total and Skill wise scores) for the Total Sample.

For the Total sample, One Way ANOVA was employed to study whether the STAD, TETBLT and the Control groups differ in Gain Scores of achievement in English (Total and Skill wise Scores) or not. Results of One Way ANOVA done for the Total sample is presented in Table 39.

Table 36

ANOVA for Gain Scores of Achievement in English (Total and Skill wise Scores) by Levels of Instructional Strategies for the Total Sample
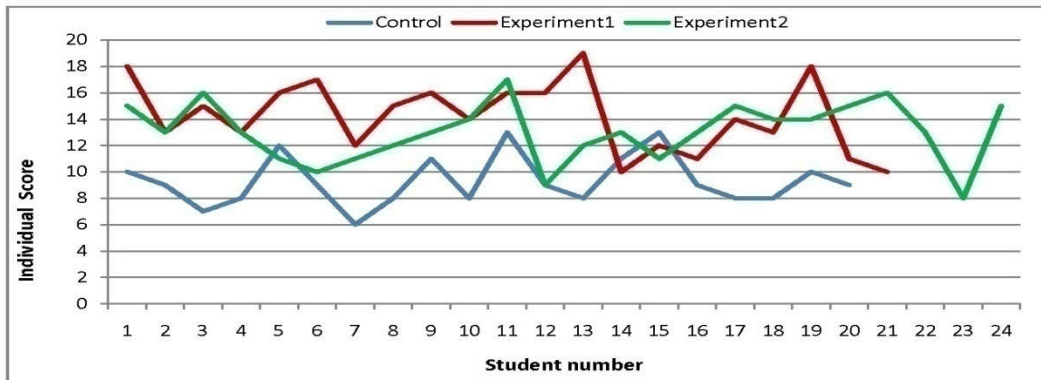
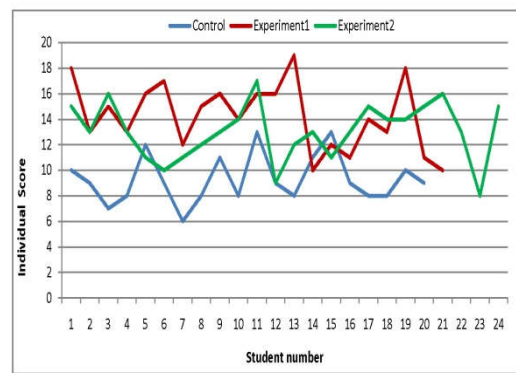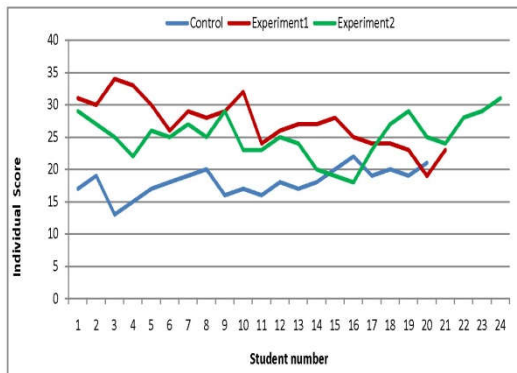| Sample	*n*	Dependent variable		Source	SS	*df*	MS	*F*
Total Sample	135	Gain Scores Achievement in English(Total)		Between Groups	3154.059	2	1577.03	134.11**
				Within Groups	1552.133	132	11.759	
				Total	4706.193	134		
		Skill wise Scores	Listening	Between Groups	723.570	2	361.785	107.73**
				Within Groups	443.289	132	3.358	
				Total	1166.859	134		
			Speaking	Between Groups	556.933	2	278.467	101.54**
				Within Groups	362.000	132	2.742	
				Total	918.933	134		
			Reading	Between Groups	2187.837	2	1093.91	203.78**
				Within Groups	708.578	132	5.368	
				Total	2896.415	134		
			Writing	Between Groups	3750.459	2	1875.23	104.98**
				Within Groups	2357.733	132	17.862	
				Total	6108.193	134		

**indicates *p*< .01

From Table 36 the main effect of Instructional Strategies (STAD, TETBLT and Control**)** on Gain Scores of Achievement in English (Total Score) for the Total Sample is significant, F(2,132)=134.11, *p*< .01. Main effect of Instructional Strategies (STAD, TETBLT and Control**)** on Achievement in English (Skill wise Scores) for the Total Sample in Listening (F =107.73), Speaking (*F*=101.54), Reading (*F*=203.78), and Writing (*F*=104.98), are found significant (*df 2,132, p*< .01). Mean Scores of Gain Achievement in English (Total and Skill wise Scores -Listening, Speaking, Reading and Writing) differ significantly among the STAD**,** TETBLT and Control groups (See Tables 1, 2, and 3).

From the result, the STAD and TETBLT groups reported significantly higher Achievement in English (Total and Skill wise Scores -Listening,

Speaking, Reading and Writing) than the Control group. Likewise, STAD group reported significantly higher Gain Achievement in English (Total and Skill wise Scores) than the TETBLT group.

The individual performance of the subjects in the STAD, TETBLT and Control (Total sample) on the Gain Achievement in English (Total and Skill wise Scores) was graphically examined and presented in Figure 5.
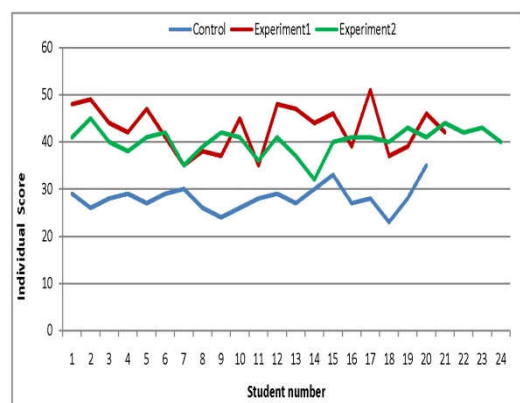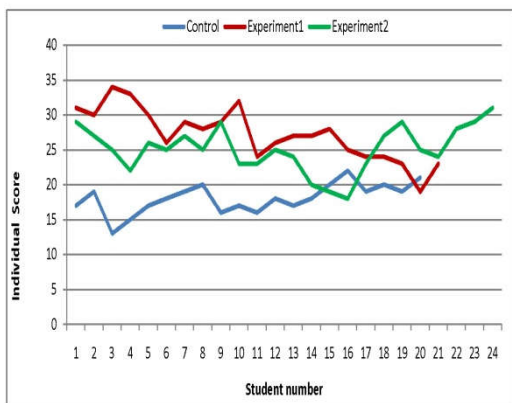
Achievement in English (Total score)

Listening Skill

Speaking Skill

Reading Skill

Writing Skill

Figure 5. Comparison of the Individual Gain Achievement in English (Total and Skill wise scores- of STAD, TETBLT and Control Groups - Total Sample

A visual examination of the graphical representation of the Individual Gain Achievement (Total and Skill wise Scores -Listening, Speaking, Reading and Writing) between STAD, TETBLT and Control – (AOMT) Groups for the Total sample shows that the individual performance of the subjects in the three groups on the Gain Achievement Test (Total and Skill wise Scores**)** is dissimilar. Statistically significant difference in this case observed through one Way ANOVA is ascertained by the graphical representation. From the Figure, Performance of STAD and TETBLT groups is higher than that of the Control group. In all comparison, performance of the STAD group is higher than that of the TETBLT group.

Results of Scheffe' Test of Post-hoc Comparison- Total sample.

In the present study, Scheffe' Test of Post-hoc Comparison (Ferguson, 1971) was employed to compare the criterion means of the three groups of Instructional Strategies (STAD, TETBLT and Control). Scheffe' Test Post-hoc Comparison was used to determine which one of the three groups of Instructional Strategies, cause difference in terms of variation in the Criterion variable. This was done on the basis of significant F- values obtained for the main effect of Instructional Strategies on Gain Achievement in English (Total and Skill wise Scores) for Total Sample.

In the One-Way ANOVA, significant main effect of Instructional Strategies on Gain Achievement in English (Total and Skill wise Scores) was found. Details of the Scheffe' Test of Post-hoc Comparison is given in Table 37.

Table 37

Result of the Scheffe' Test of Post hoc Comparison between the Means of Gain Achievement in English (Total and Skill wise Scores) Based on Three Groups of Instructional Strategies for the Total Sample.

Sample	n	Dependent variable		Group (I)	Group (J)	Mean Difference (I-J)	Std. Error	F
		Gain Achievement in English (Total		STAD	Control	11.489	0.723	15.87**
				TETBLT	Control	8.222	0.723	11.36**
				STAD	TETBLT	3.267	0.723	4.50**
			Listening	STAD	Control	5.66	0.386	14.66**
				TETBLT	Control	2.64	.386	6.83**
				STAD	TETBLT	3.02	.0386	7.82**
Total sample	135	Skill wise Scores	Speaking	STAD	Control	4.80	0.349	13.75**
				TETBLT	Control	3.53	0.349	10.11**
				STAD	TETBLT	1.26	0.349	3.61**
			Reading	STAD	Control	9.44	0.488	19.34**
				TETBLT	Control	7.17	0.488	14.69**
				STAD	TETBLT	2.26	0.488	4.63**
			Writing	STAD	Control	12.44	0.891	13.96**
				TETBLT	Control	9.20	0.891	10.32**
				STAD	TETBLT	3.24	0.891	3.63**

**indicates p < .01; *indicates p < .05

From Table 37 it is clear that the *F* ratios obtained for the comparison of the variable Gain scores of Achievement in English (Total Score) for the Total sample between the groups; STAD - Control ($F=15.87$) , TETBLT-Control ($F=11.36$), and STAD-TETBLT ($F=4.50$) are statistically significant ($p < .01$).

F- ratios obtained for the comparison of the variable Gain scores of Achievement in English (Listening) for the Total sample between the groups; STAD– Control, $F=14.66$; TETBLT-Control, $F=6.83$ and STAD- TETBLT,, $F=7.82$ are statistically significant ($p < .01$).

F-ratios obtained for the comparison of the variable Gain scores of Achievement in English (Speaking) for the Total sample between the groups; STAD – Control ($F=13.75$), TETBLT-Control, ($F=10.11$) and STAD-TETBLT groups ($F=3.61$) are statistically significant ($p < .01$).

F ratios obtained for the comparison of the variable Gain scores of Achievement in English (Reading) for the Total sample between the groups; STAD – Control ($F=19.34$), TETBLT-Control, ($F=14.69$), and STAD-TETBLT ($F=4.63$) are statistically significant ($p < .01$).

F ratios obtained for the comparison of the variable Gain scores of Achievement in English (Writing) for the Total sample between the groups; STAD – Control ($F=13.96$), TETBLT-Control, ($F=10.32$), and STAD-TETBLT ($F=3.63$) are statistically significant ($p < .01$).

Thus, it can be inferred that there exists significant difference between the three levels of Instructional Strategies (STAD - Control, TETBLT-Control and STAD- TETBLT) with reference to the Gain Achievement in English (Total and Skill wise Scores- Listening, Speaking, Reading and Writing).

From the Scheffe' Test, STAD and TETBLT groups reported significantly higher Gain scores of Achievement in English (Total and Skill wise Scores - Listening, Speaking, Reading and Writing) than the Control group. In all comparisons, STAD group reported significantly higher Gain scores of Achievement in English ((Total and Skill wise Scores- Listening, Speaking, Reading and Writing) than the TETBLT group.

Effect of Instructional Strategies (STAD, TETBLT and Control) on Gain Scores of Achievement in English (Total and Skill wise Scores) of Standard VIII students for the Boys.

For the Boys, One Way ANOVA was employed to study whether the STAD, TETBLT and the Control groups differ in Gain Scores of Achievement in English (Total and Skill wise Scores) or not. Results of One Way ANOVA done for the Boys is presented in Table 38.

Table 38

ANOVA for Gain Scores of Achievement in English (Total and Skill wise Scores) by Levels of Instructional Strategies for Boys

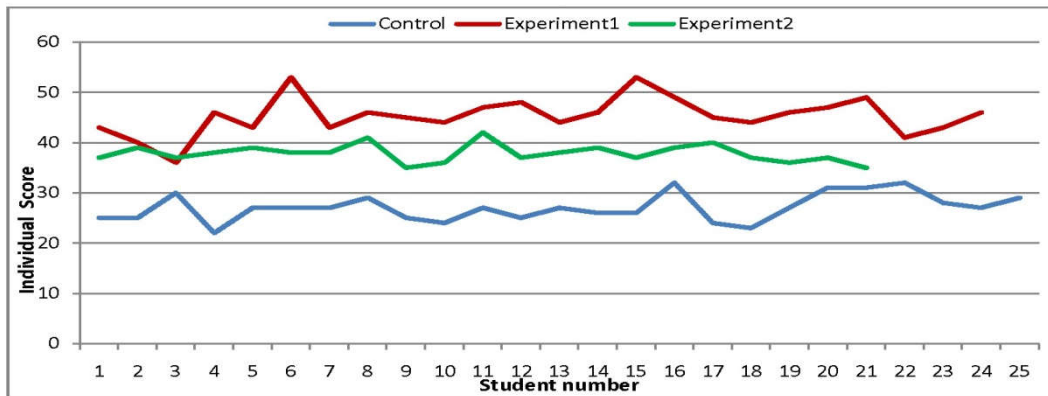| Sample	*n*	Dependent variable	Source	SS	*df*	MS	*F*
		Gain Scores Achievement in English(Total)	Between Groups	917.301	2	458.651	
			Within Groups	644.452	62	10.394	44.12**
			Total	1561.754	64		
		Listening	Between Groups	301.674	2	150.837	
			Within Groups	266.111	62	4.292	35.14**
			Total	567.785	64		
Boys	65	Speaking	Between Groups	263.202	2	131.601	
			Within Groups	223.813	62	3.610	36.45**
			Total	487.015	64		
		Reading	Between Groups	975.344	2	487.672	
			Within Groups	294.718	62	4.754	102.59**
			Total	1270.062	64		
		Writing	Between Groups	2161.114	2	1080.557	
			Within Groups	899.101	62	14.502	74.51**
			Total	3060.215	64		

(Skill wise Scores)

**indicates *p*< .01

From Table 38 the main effect of Instructional Strategies (STAD,

TETBLT and Control**)** on Gain Scores of Achievement in English (Total Score) for the Boys is significant, F(2, 62) =44.12, *p*< .01.
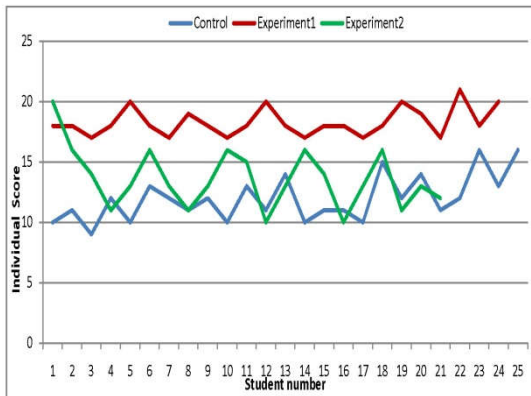
Main effect of Instructional Strategies (STAD, TETBLT and Control**)** on Achievement in English (Skill wise Scores) for the Boys in Listening (*F*=35.14), Speaking (*F*=36.45), Reading (*F*= 102.59), and Writing (*F*=74.51), are found significant (*df 2,132, p*< .01). Mean Scores of Gain Achievement in English (Total and Skill wise Scores -Listening, Speaking, Reading and Writing) differ significantly among the STAD**,** TETBLT and Control groups (See Tables 1, 2, and 3).

From the result, STAD and TETBLT groups reported significantly higher Achievement in English (Total and Skill wise Scores -Listening, Speaking, Reading and Writing) than the Control group. Likewise, STAD group reported significantly higher Gain Achievement in English (Total and Skill wise Scores) than the TETBLT group.

The individual performance of the subjects in the STAD, TETBLT and Control (Boys) on the Gain Achievement in English (Total and Skill wise Scores) was graphically examined and presented in Figure

Achievement in English (Total score)

Listening Skill

Speaking Skill

Reading Skill

Writing Skill

Figure 6. Comparison of the Individual Gain Achievement in English (Total and Skill wise Scores) of STAD, TETBLT and Control Groups - Boys

A visual examination of the graphical representation of the Individual Gain Achievement (Total and Skill wise Scores -Listening, Speaking, Reading and Writing) between STAD, TETBLT and Control –(AOMT) Groups for the Boys sample points that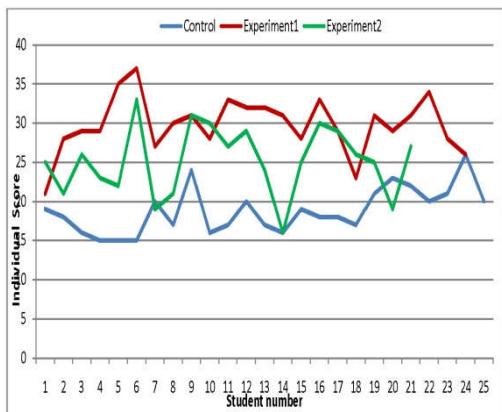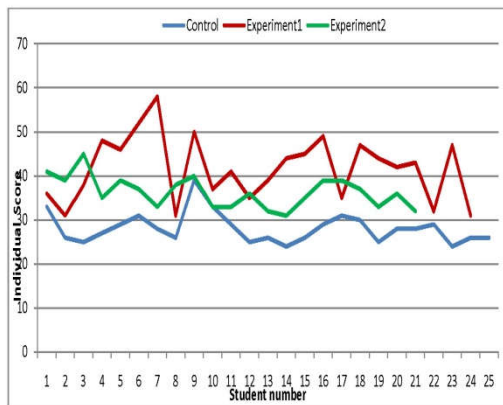 the individual performance of the subjects in the three groups on the Gain Achievement Test (Total and Skill wise Scores**)** is dissimilar. Statistically significant difference in this case observed through one Way ANOVA is ascertained by the graphical representation. From the Figure, Performance of STAD and TETBLT groups is higher than that of the Control group. In all comparison, performance of the STAD group is higher than that of the TETBLT group.

Results of Scheffe' Test of Post-hoc Comparison- Boys.

In the present study, Scheffe' Test of Post-hoc Comparison (Ferguson, 1971) was employed to compare the criterion means of the three groups of Instructional Strategies (STAD, TETBLT and Control). Scheffe' Test Post-hoc Comparison was used to determine which one of the three groups of Instructional Strategies, cause difference in terms of variation in the Criterion variable. This was done on the basis of Significant F- values obtained for the main effect of Instructional Strategies on Gain Achievement in English (Total and Skill wise Scores) for Boys.

In the One-Way ANOVA, significant main effect of Instructional Strategies on Gain Achievement in English (Total and Skill wise Scores) was found. Details of the Scheffe' Test of Post-hoc Comparison is given in Table 39.

Table 39

Result of the Scheffe' Test of Post hoc Comparison between the Means of Gain Achievement in English (Total and Skill wise Scores) Based on Three Groups of Instructional Strategies for Boys.

Sample	N	Dependent variable		Group (I)	Group (J)	Mean Difference (I-J)	Std. Error	F
Boys	65	Gain Achievement in English (Total		STAD	Control	56.069*	7.339	7.63**
				TETBLT	Control	41.533*	7.111	5.84**
				STAD	TETBLT	14.536*	7.019	2.07*
		Skill wise Scores	Listening	STAD	Control	5.41	.647	8.36**
				TETBLT	Control	3.07	.627	4.89**
				STAD	TETBLT	2.33	.619	3.76**
			Speaking	STAD	Control	4.86	.594	8.18**
				TETBLT	Control	3.67	.575	6.38**
				STAD	TETBLT	1.18	.568	2.07*
			Reading	STAD	Control	9.18	.681	13.48**
				TETBLT	Control	7.40	.660	11.21**
				STAD	TETBLT	1.78	.651	2.73*
			Writing	STAD	Control	13.57	1.190	11.40**
				TETBLT	Control	11.20	1.153	9.71**
				STAD	TETBLT	2.36	1.138	2.07*

**indicates p < .01; *indicates p < .05

From Table 39, it is clear that the *F* ratios obtained for the comparison of the variable Gain scores of Achievement in English (Total Score) for Boys between the groups; STAD - Control (*F*=7.63) and TETBLT-Control (*F*=5.84), are statistically significant ($p < .01$). But the F- value obtained for the comparison between STAD-TETBLT groups (*F*=2.07) is significant at 0.05 level.

F-ratios obtained for the comparison of the variable Gain scores of Achievement in English (Listening) for the Boys between the groups; STAD – Control, *F*=8.36; TETBLT- Control, *F*=4.89 and STAD- TETBLT, *F*=3.76 is statistically significant ($p < .01$).

F-ratios obtained for the comparison of the variable Gain scores of

Achievement in English (Speaking) for the Boys between the groups; STAD – Control (F=8.18) TETBLT- Control, (F=6.38) are statistically significant (p < .01). But the F- value obtained for the comparison between STAD-TETBLT groups (F=2.07) is significant at 0.05 level.

F ratios obtained for the comparison of the variable Gain scores of Achievement in English (Reading) for the Boys between the groups; STAD – Control (F=13.48), TETBLT- Control, (F=11.21), But the F- value obtained for the comparison between STAD –TETBL Groups (F=2.73) is significant at 0.05 level.

F ratios obtained for the comparison of the variable Gain scores of Achievement in English (Writing) for the Boys between the groups; STAD – Control (F=11.40), TETBLT-Control, (F=9.71), and STAD- TETBLT (F=2.07**)** are statistically significant (p < .05).

Thus, it can be inferred that there exists significant difference between the three levels of Instructional Strategies (STAD - Control, TETBLT-Control and STAD- TETBLT) with reference to the Gain Achievement in English (Total and Skill wise Scores- Listening, Speaking, Reading and Writing).

From the Scheffe' Test, STAD and TETBLT groups reported significantly higher Gain scores of Achievement in English (Total and Skill wise Scores - Listening, Speaking, Reading and Writing) than the Control group. In all comparisons, STAD group reported significantly higher Gain scores of Achievement in English (Total and Skill wise Scores- Listening, Speaking, Reading and Writing) than the TETBLT group.

Effect of Instructional Strategies (STAD, TETBLT and Control) on Gain Scores of Achievement in English (Total and Skill wise Scores) for Girls.

For Girls, One Way ANOVA was employed to study whether the STAD, TETBLT and the Control groups differ in Gain Scores of Achievement in English (Total and Skill wise Scores) or not. Results of One Way ANOVA done for Girls is presented in Table 40.

Table 40

ANOVA for Gain Scores of Achievement in English (Total and Skill wise Scores) by Levels of Instructional Strategies for Girls

Sample	N	Dependent variable	Source	SS	df	MS	F
Girls	70	Gain Scores Achievement in English(Total)	Between Groups	917.301	2	458.651	
			Within Groups	644.452	62	10.394	44.12**
			Total	1561.754	64		
		Skill wise Scores — Listening	Between Groups	432.542	2	216.271	
			Within Groups	166.101	67	2.479	87.23**
			Total	598.643	69		
		Speaking	Between Groups	292.619	2	146.310	
			Within Groups	137.452	67	2.052	71.31**
			Total	430.071	69		
		Reading	Between Groups	1236.335	2	618.167	
			Within Groups	369.036	67	5.508	112.23**
			Total	1605.371	69		
		Writing	Between Groups	1638.087	2	819.044	
			Within Groups	1249.684	67	18.652	43.91**
			Total	2887.771	69		

**indicates *p*< .01

From Table 40 the main effect of Instructional Strategies (STAD, TETBLT and Control**)** on Gain Scores of Achievement in English (Total Score) for the Girls is significant, F(2,132)= 44.12, *p*< .01. Main effect of Instructional Strategies (STAD, TETBLT and Control**)** on Achievement in English (Skill wise Scores) for the Girls in Listening (F = 87.23), Speaking (*F*= 71.31), Reading (*F*=112.23), and Writing (*F*=43.91), are found significant (*df 2,132, p*< .01). Mean Scores of Gain Achievement in English

(Total and Skill wise Scores -Listening, Speaking, Reading and Writing) differ significantly among the STAD, TETBLT and Control groups (See Tables 23,24 and 25).

From the result, the STAD and TETBLT groups reported significantly higher Achievement in English (Total and Skill wise Scores -Listening, Speaking, Reading and Writing) than the Control group. Likewise, STAD group reported significantly higher Gain Achievement in English (Total and Skill wise Scores) than the TETBLT group.

The individual performance of the subjects in the STAD, TETBLT and Control (Girls) on the Gain Achievement in English (Total and Skill wise Scores) was graphically examined and presented in Figure 7.

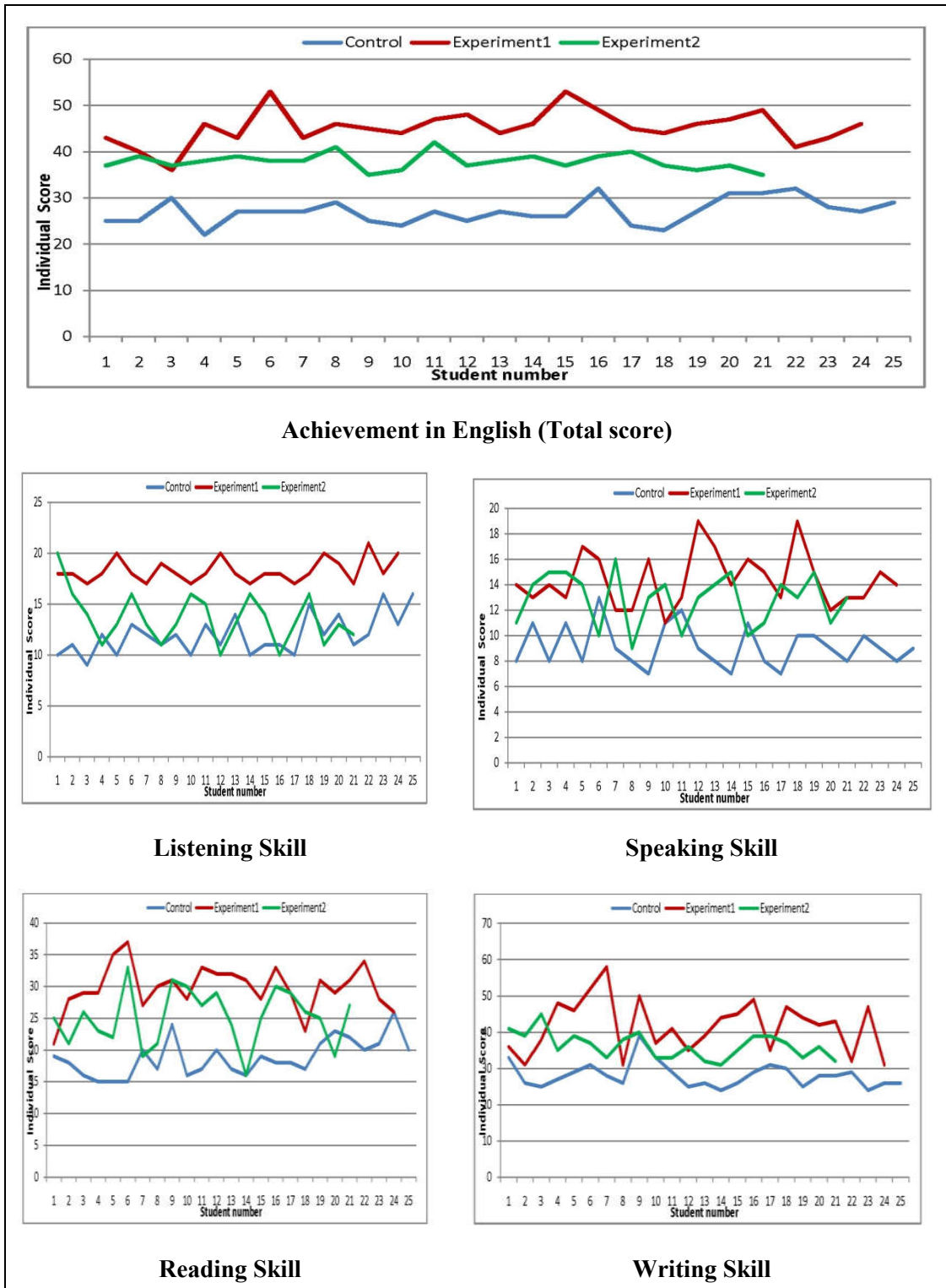**Achievement in English (Total score)**

Listening Skill

Speaking Skill

Reading Skill

Writing Skill

Figure 7. Comparison of the Individual Gain Achievement in English (Total and Skill-wise) of STAD, TETBLT and Control Groups - Girls

A visual examination of the graphical representation of the Individual Gain Achievement (Total and Skill wise Scores -Listening, Speaking, Reading and Writing) between STAD, TETBLT and Control –(AOMT) Groups for the Girls points that the individual performance of the subjects in the three groups on the Gain Achievement Test (Total and Skill wise Scores**)** is dissimilar. Statistically significant difference in this case observed through one Way ANOVA is ascertained by the graphical representation. From the Figure, Performance of STAD and TETBLT groups is higher than that of the Control group. In all comparison, performance of the STAD group is higher than that of the TETBLT group.

Results of Scheffe' Test of Post-hoc Comparison- Girls.

In the present study, Scheffe' Test of Post-hoc Comparison (Ferguson, 1971) was employed to compare the criterion means of the three groups of Instructional Strategies (STAD, TETBLT and Control). Scheffe' Test Post-hoc Comparison was used to determine which one of the three groups of Instructional Strategies, cause difference in terms of variation in the Criterion variable. This was done on the basis of Significant F- values obtained for the main effect of Instructional Strategies on Gain Achievement in English (Total and Skill wise Scores) for Girls.

In the One-Way ANOVA, significant main effect of Instructional Strategies on Gain Achievement in English (Total and Skill wise Scores) was found. Details of the Scheffe' Test of Post-hoc Comparison is given in Table 41.

Table 41

Result of the Scheffe' Test of Post hoc Comparison between the Means of Gain Achievement in English (Total and Skill wise Scores) Based on Three Groups of Instructional Strategies for the Girls.

Sample	*n*	Dependent variable	Group (I)	Group (J)	Mean Difference (I-J)	Std. Error	*F*
		Gain Achievement in English (Total)	STAD	Control	13.54	.896	15.11**
			TETBLT	Control	9.81	.928	10.57**
			STAD	TETBLT	3.73	.937	3.98**
		Listening	STAD	Control	5.89	.450	13.08**
			TETBLT	Control	2.17	.466	4.65**
			STAD	TETBLT	3.72	.470	7.91**
Girls	70	Speaking	STAD	Control	4.75	.409	11.61**
			TETBLT	Control	3.38	.424	7.97**
			STAD	TETBLT	1.36	.428	3.17**
		Reading	STAD	Control	9.71	.671	14.47**
			TETBLT	Control	7.11	.695	10.2**
			STAD	TETBLT	2.60	.701	3.70**
		Writing	STAD	Control	11.47	1.234	9.29**
			TETBLT	Control	6.96	1.278	5.44**
			STAD	TETBLT	4.50	1.290	3.48**

(Skill wise Scores spans Listening, Speaking, Reading, Writing rows)

**indicates $p < .01$

From Table 41 it is clear that the *F* ratios obtained for the comparison of the variable Gain scores of Achievement in English (Total Score) for the Total sample between the groups; STAD - Control (*F*=15.11), TETBLT-Control (*F*=10.57), and STAD-TETBLT (*F*=3.98) are statistically significant ($p < .01$).

F- ratios obtained for the comparison of the variable Gain scores of Achievement in English (Listening) for the Total sample between the groups; STAD– Control, *F*=13.08; TETBLT-Control, *F*=4.65 and STAD- TETBLT,, *F*=7.9 are statistically significant ($p < .01$).

F-ratios obtained for the comparison of the variable Gain scores of Achievement in English (Speaking) for the Total sample between the groups; STAD–Control (F=11.61), TETBLT-Control, (F=7.97) and STAD- TETBLT groups (F=3.17) are statistically significant ($p < .01$).

F ratios obtained for the comparison of the variable Gain scores of Achievement in English (Reading) for the Total sample between the groups; STAD–Control (F=14.47), TETBLT-Control, (F=10.2), and STAD-TETBLT (F=3.70) are statistically significant ($p < .01$).

F ratios obtained for the comparison of the variable Gain scores of Achievement in English (Writing) for the Total sample between the groups; STAD – Control (F=9.29), TETBLT-Control, (F=5.44), and STAD-TETBLT (F=3.48) are statistically significant ($p < .01$).

Thus, it can be inferred that there exists significant difference between the three levels of Instructional Strategies (STAD - Control, TETBLT-Control and STAD- TETBLT) with reference to the Gain Achievement in English (Total and Skill wise Scores- Listening, Speaking, Reading and Writing)

From the Scheffe' Test, STAD and TETBLT groups reported significantly higher Gain scores of Achievement in English (Total and Skill wise Scores - Listening, Speaking, Reading and Writing) than the Control group. In all comparisons, STAD group reported significantly higher Gain scores of Achievement in English (Total and Skill wise Scores- Listening, Speaking, Reading and Writing) than the TETBLT group.

One Way Analysis of Variance for Self Regulation

To investigate the difference in Posttest and Gain Scores of Self Regulation between the STAD, TETBLT and the Control groups, One Way

ANOVA was employed. The investigation done for the Total sample and Subsamples based on Gender is presented in this section.

Effect of Instructional Strategies (STAD, TETBLT and Control)) on Self Regulation (Post test) of Standard VIII Students for the Total Sample, Boys and Girls.

Mean scores of Self Regulation were compared among STAD, TETBLT and the Control groups using One-way ANOVA to check whether there exists any significant difference among the three groups after the treatment. Results of One Way ANOVA are presented in the following Section.

Effect of Instructional Strategies (STAD, TETBLT and Control) on Self Regulation of Standard VIII students for the Total Sample.

For the Total sample, One Way ANOVA was employed to study whether the STAD, TETBLT and the Control groups differ in Self Regulation or not. Results of One Way ANOVA done for the Total sample is presented in Table 42.

Table 42

ANOVA for Self Regulation by Levels of Instructional Strategies for the Total Sample

Sample	n	Dependent variable	Source	SS	df	MS	F
Total Sample	135	Self Regulation	Between Groups	81683.911	2	40841.956	73.996**
			Within Groups	72857.422	132	551.950	
			Total	154541.333	134		

**indicates p < .01

From Table 42, the main effect of Instructional Strategies (STAD, TETBLT and Control**)** on Self Regulation for the Total Sample is significant, $F(2,132)= 73.996$, *p*< .01. Mean Scores of Self Regulation differ significantly among the STAD**,** TETBLT and Control groups (See Tables 23,24, and 25).

From the result, the STAD and TETBLT groups reported significantly higher Self Regulation than the Control group. Likewise, STAD group reported significantly higher Self Regulation than the TETBLT group.

The individual performance of the subjects in the STAD, TETBLT and Control (Total sample) on the Self Regulation scores of standard VIII students was graphically examined and presented in Figure 8.

Figure 8 Comparison of the Individual Self Regulation Score of STAD, TETBLT and Control Groups- Total Sample

A visual examination of the graphical representation of the Individual Self Regulation between STAD, TETBLT and Control –(AOMT) Groups for the Total sample points that the individual performance of the subjects in the three groups on the Self Regulation is dissimilar. Statistically significant difference in this case observed through one Way ANOVA is ascertained by

the graphical representation. From the Figure, Performance of STAD and TETBLT groups is higher than that of the Control group. In all comparison, performance of the STAD group is higher than that of the TETBLT group

Results of Scheffe' Test of Post-hoc Comparison- Total sample.

In the present study, Scheffe' Test of Post-hoc Comparison (Ferguson, 1971) was employed to compare the criterion means of the three groups of Instructional Strategies (STAD, TETBLT and Control). This was done on the basis of Significant F- values obtained for the main effect of Instructional Strategies on Self Regulation for Total Sample.

In the One-Way ANOVA, significant main effect of Instructional Strategies on Self Regulation was found. Details of the Scheffe' Test of Post-hoc Comparison is given in Table 43.

Table 43

Result of the Scheffe' Test of Post hoc Comparison between the Means of Self Regulation Based on Three Groups of Instructional Strategies for the Total Sample.

Sample	n	Group (I)	Group (J)	Mean Difference (I-J)	Std. Error	F
Total Sample	135	STAD	Control	58.48	4.953	11.80**
		TETBLT	Control	41.77	4.953	8.43**
		STAD	TETBLT	16.71	4.953	3.37**

**indicates p < .01

From Table 43 , it is clear that the *F* ratios obtained for the comparison of the variable Self Regulation for the Total sample between the groups; STAD - Control (*F*=11.80), TETBLT-Control (*F*=8.43), and STAD-TETBLT (*F*=3.37) are statistically significant (*p* < .01).

Thus, it can be inferred that there exists significant difference between the three levels of Instructional Strategies (STAD - Control, TETBLT-

Control and STAD- TETBLT) with reference to the Self Regulation.

From the Scheffe' Test, STAD and TETBLT groups reported significantly higher Self Regulation capacity than the Control group. In all comparisons, STAD group reported significantly higher Self Regulation capacity than the TETBLT group.

Effect size.

Effect Size was calculated using Cohen's dfor Self Regulation to measure the magnitude of effect as the mean difference were found significant for Total sample. The details are given in Table 44.

Table 44

Data and result of Effect size between STAD and TETBLT in Self Regulation

Dependent Variable	Group	Mean	*SD*	*t*	Effect Size	Cohen's Category
	Experiment 1 (STAD)	232.29	29.754			
Self Regulation				3.14**	0.67	Medium
	Experiment 2 (TETBLT)	215.58	19.637			

**indicates p < .01; *indicates p < .05

The values of Cohen's d for Self Regulation are greater than 0.5. So the effect size come under the Cohen's category' medium' and hence it can be inferred that Student Teams Achievement Division (STAD) strategy has medium effect in enhancing Self Regulation of standard VIII students when compared to Technology Enriched Task Based Language Teaching (TETBLT).

Effect of Instructional Strategies (STAD, TETBLT and Control) on Self Regulation (Total Score) of Standard VIII students for Boys.

For the Boys, One Way ANOVA was employed to study whether the STAD, TETBLT and the Control groups differ in Self Regulation or not. Results of One Way ANOVA done for the Boys students is presented in Table 45.

Table 45

ANOVA for Self Regulation by Levels of Instructional Strategies for Boys

Sample	*n*	Dependent variable	Source	SS	*df*	MS	*F*
Boys	65	Self Regulation	Between Groups	34690.264	2	17345.132	31.43**
			Within Groups	34205.736	62	551.705	
			Total	68896.000	64		

**indicates p < .01

From Table 45 the main effect of Instructional Strategies (STAD, TETBLT and Control**)** on Self Regulation for Boys is significant, $F(2,62)= 31.43$, *p*< .01. Mean Scores of Self Regulation differ significantly among the STAD**,** TETBLT and Control groups (See Tables 23, 24 and 25).

From the result, the STAD and TETBLT groups reported significantly higher capacity of Self Regulation than the Control group. Likewise, STAD group reported significantly higher Self Regulation capacity than the TETBLT group.

The individual performance of the subjects in the STAD, TETBLT and Control (Boys) on the Self Regulation scores of standard VIII students was graphically examined and presented in Figure 9.

Figure 9. Comparison of the Individual Self Regulation Score of STAD, TETBLT and Control Groups- Boys

A visual examination of the graphical representation of the Individual Self Regulation between STAD, TETBLT and Control –(AOMT) Groups for Boys points that the individual performance of the subjects in the three groups on the Self Regulation is dissimilar. Statistically significant difference in this case observed through one Way ANOVA is ascertained by the graphical representation. From the Figure, Performance of STAD and TETBLT groups is higher than that of the Control group. In all comparison, performance of the STAD group is higher than that of the TETBLT group

Results of Scheffe' Test of Post-hoc Comparison- Boys

In the present study, Scheffe' Test of Post-hoc Comparison (Ferguson, 1971) was employed to compare the criterion means of the three groups of Instructional Strategies (STAD, TETBLT and Control). This was done on the basis of Significant F- values obtained for the main effect of Instructional Strategies on Self Regulation for Boys.

In the One-Way ANOVA, significant main effect of Instructional Strategies on Self Regulation was found. Details of the Scheffe' Test of Post-hoc Comparison is given in Table 46.

Table 46

Result of the Scheffe' Test of Post hoc Comparison between the Means of Self Regulation Based on Three Groups of Instructional Strategies for Boys.

Sample	n	Group (I)	Group (J)	Mean Difference (I-J)	Std. Error	F
Boys	65	STAD	Control	56.069*	7.339	7.63**
		TETBLT	Control	41.533*	7.111	5.84**
		STAD	TETBLT	14.536*	7.019	2.07*

**indicates p < .01, *indicates p < .05

From Table 46, it is clear that the F ratios obtained for the comparison of the variable Self Regulation for Boys between the groups; STAD - Control ($F=7.63$), and TETBLT-Control ($F=5.84$), are statistically significant ($p < .01$).But , in case of STAD-TETBLT ($F=2.07$), the obtained F- value is significant at 0.05 level.

Thus, it can be inferred that there exists significant difference between the three levels of Instructional Strategies (STAD - Control, TETBLT-Control and STAD- TETBLT) with reference to the Self Regulation.

From the Scheffe' Test, STAD and TETBLT groups reported significantly higher Self Regulation capacity than the Control group. In all comparisons, STAD group reported significantly higher Self Regulation capacity than the TETBLT group.

Effect of Instructional Strategies (STAD, TETBLT and Control) on Mean Gain Scores of Self Regulation (Total Score) of Standard VIII students for Girls.

For the Girls, One Way ANOVA was employed to study whether the STAD, TETBLT and the Control groups differ in Self Regulation or not. Results of One Way ANOVA done for the Girls students is presented in Table 47.

Table 47

ANOVA for Self Regulation by Levels of Instructional Strategies for Girls

Sample	*n*	Dependent variable	Source	SS	*df*	MS	*F*
Boys	70	Self Regulation	Between Groups	48199.661	2	24099.830	45.85**
			Within Groups	35210.911	67	525.536	
			Total	83410.571	69		

**indicates p < .01

From Table 47 the main effect of Instructional Strategies (STAD, TETBLT and Control)on Self Regulation for the Girls is significant, $F_{(2,67)}=$ 45.858, *p*< .01. Mean Scores of Self Regulation differ significantly among the STAD, TETBLT and Control groups (See Tables 22, 23, and 25).

From the result, the STAD and TETBLT groups reported significantly higher Self Regulation than the Control group. Likewise, STAD group reported significantly higher Self Regulation than the TETBLT group.

The individual performance of the subjects in the STAD, TETBLT and Control (Boys) on the Self Regulation scores of standard VIII students was graphically examined and presented in Figure 10.

Figure 10. Comparison of the Individual Self Regulation Score of STAD, TETBLT and Control Groups- Girls

A visual examination of the graphical representation of the Individual Self Regulation between STAD, TETBLT and Control –(AOMT) Groups for Girls points that the individual performance of the subjects in the three groups on the Self Regulation is dissimilar. Statistically significant difference in this case observed through one Way ANOVA is ascertained by the graphical representation. From the Figure, Performance of STAD and TETBLT groups is higher than that of the Control group. In all comparison, performance of the STAD group is higher than that of the TETBLT group.

Results of Scheffe' Test of Post-hoc Comparison-Girls.

In the present study, Scheffe' Test of Post-hoc Comparison (Ferguson, 1971) was employed to compare the criterion means of the three groups of Instructional Strategies (STAD, TETBLT and Control). This was done on the basis of Significant F- values obtained for the main effect of Instructional Strategies on Self Regulation for Girls.

In the One-Way ANOVA, significant main effect of Instructional Strategies on Self Regulation was found. Details of the Scheffe' Test of Post-hoc Comparison is given in Table 48.

Table 48

Result of the Scheffe' Test of Post hoc Comparison Between the Means of Self Regulation Based on Three Groups of Instructional Strategies for Girls.

Sample	*n*	Group (I)	Group (J)	Mean Difference (I-J)	Std. Error	*F*
Girls	70	STAD	Control	60.92	6.551	9.29**
		TETBLT	Control	43.51	6.786	6.41**
		STAD	TETBLT	17.41*	6.850	2.54*

**indicates p < .01, *indicates p < .05

From Table 48 it is clear that the *F* ratios obtained for the comparison of the variable Self Regulation for Girls between the groups; STAD - Control (*F*=9.29), and TETBLT-Control (*F*=6.41), are statistically significant (*p* < .01).But , in case of STAD-TETBLT (*F*=2.54), the obtained F- value is significant at 0.01 level.

Thus, it can be inferred that there exists significant difference between the three levels of Instructional Strategies (STAD - Control, TETBLT-Control and STAD- TETBLT) with reference to the Self Regulation.

From the Scheffe' Test, STAD and TETBLT groups reported significantly higher Self Regulation capacity than the Control group. In all comparisons, STAD group reported significantly higher Self Regulation capacity than the TETBLT group.

Effect of Instructional Strategies (STAD, TETBLT and Control) on Mean Gain Scores Self- Regulation for the Total Sample.

For the Total sample, One Way ANOVA was employed to study whether the STAD, TETBLT and the Control groups differ in the gain scores Self Regulation or not. Results of One Way ANOVA done for the Total sample is presented in Table 49.

Table 49

ANOVA for Self Regulation by Levels of Instructional Strategies for the Total Sample

Sample	*n*	Dependent variable	Source	SS	*df*	MS	*F*
Total Sample	135	Self Regulation	Between Groups	70724.933	2	35362.467	54.753**
			Within Groups	85252.800	132	645.855	
			Total	155977.733	134		

**indicates p < .01

From Table 49 the main effect of Instructional Strategies (STAD, TETBLT and Control) on Self Regulation for the Total Sample is significant, $F_{(2,132)}= 54.753$, $p< .01$. Mean Gain scores of Self Regulation differ significantly among the STAD, TETBLT and Control groups (See Tables 1, 2, and 3).

From the result, the STAD and TETBLT groups reported significantly higher Self Regulation than the Control group. Likewise, STAD group reported significantly higher Self Regulation than the TETBLT group.

The individual performance of the subjects in the STAD, TETBLT and Control (Total sample) on the Mean Gain scores of Self Regulation was graphically examined and presented in Figure 11.

Figure 11 Comparison of the Individual Gain Scores of Self Regulation of STAD, TETBLT and Control Groups- Total Sample

A visual examination of the graphical representation of the Individual Gain Self Regulation between STAD, TETBLT and Control –(AOMT) Groups for the Total sample points that the individual performance of the subjects in the three groups on the Gain score of Self Regulation is dissimilar. Statistically significant difference in this case observed through one Way ANOVA is ascertained by the graphical representation. From the Figure, Performance of STAD and TETBLT groups is higher than that of the Control group. In all comparison, performance of the STAD group is higher than that of the TETBLT group

Results of Scheffe' Test of Post-hoc Comparison-Total sample

In the present study, Scheffe' Test of Post-hoc Comparison (Ferguson, 1971) was employed to compare the criterion means of the three groups of Instructional Strategies (STAD, TETBLT and Control). Scheffe' Test Post-hoc Comparison was used to determine which one of the three groups of Instructional Strategies, cause difference in terms of variation in the Criterion variable. This was done on the basis of Significant F- values obtained for the

main effect of Instructional Strategies on Mean Gain Scores of Self Regulation for Total Sample.

In the One-Way ANOVA, significant main effect of Instructional Strategies on Mean Gain Scores of Self Regulation was found. Details of the Scheffe' Test of Post-hoc Comparison is given in Table 50.

Table 50

Result of the Scheffe' Test of Post hoc Comparison between the Mean Gain Scores of Self Regulation Based on Three Groups of Instructional Strategies for the Total Sample.

Sample	*n*	Group (I)	Group (J)	Mean Difference (I-J)	Std. Error	F
Total Sample	135	STAD	Control	55.26	5.358	10.31**
		TETBLT	Control	35.80	5.358	6.68**
		STAD	TETBLT	19.46	5.358	3.63**

**indicates p < .01

From Table 50 it is clear that the *F* ratios obtained for the comparison of the variable Self Regulation for the Total sample between the groups; STAD - Control (*F*=10.31), TETBLT-Control (*F*=6.68), and STAD-TETBLT (*F*=3.63) are statistically significant (*p* < .01).

Thus, it can be inferred that there exists significant difference between the three levels of Instructional Strategies (STAD - Control, TETBLT-Control and STAD- TETBLT) with reference to the Gain Scores of Self Regulation.

From the Scheffe' Test, STAD and TETBLT groups reported significantly higher Gain in Self Regulation capacity than the Control group. In all comparisons, STAD group reported significantly higher Self Regulation capacity than the TETBLT group.

Effect of Instructional Strategies (STAD, TETBLT and Control) on Mean Gain Scores of Self Regulation (Total Score) for Boys.

For the Boys, One Way ANOVA was employed to study whether the STAD, TETBLT and the Control groups differ in Mean Gain Self Regulation or not. Results of One Way ANOVA done for the Boys students is presented in Table 51.

Table 51

ANOVA for Mean Gain Scores of Self Regulation by Levels of Instructional for Boys

Sample	*n*	Dependent variable	Source	SS	*df*	MS	*F*
Boys	65	Self Regulation	Between Groups	25865.036	2	12932.518	17.61**
			Within Groups	45531.518	62	734.379	
			Total	71396.554	64		

**indicates p < .01

From Table 51 the main effect of Instructional Strategies (STAD, TETBLT and Control**)** on Gain Scores of Self Regulation for Boys is significant, $F_{(2,62)}= 17.61$, *p*< .01. Mean Gain Scores of Self Regulation differ significantly among the STAD**,** TETBLT and Control groups (See Tables 1, 2, and 3).

From the result, the STAD and TETBLT groups reported significantly higher capacity of Self Regulation than the Control group. Likewise, STAD group reported significantly higher Gain in Self Regulation capacity than the TETBLT group.

The individual performance of the subjects in the STAD, TETBLT and Control (Boys) on the Mean Gain Scores of Self Regulation for the Boys students was graphically examined and presented in Figure 12.
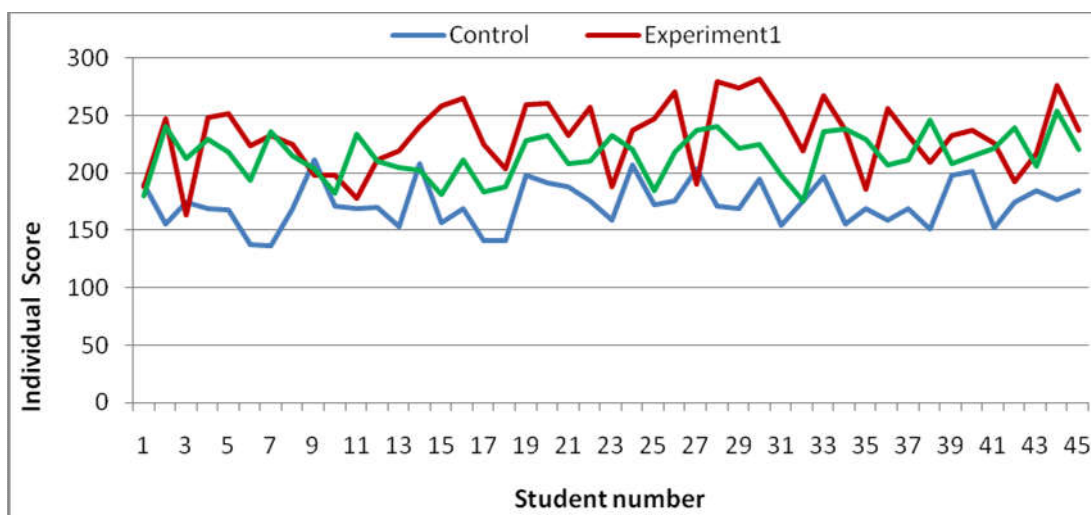
Figure 12 Comparison of the Individual Gain Scores of Self Regulation Score of STAD, TETBLT and Control Groups- Boys

A visual examination of the graphical representation of the Individual Gain Self Regulation between STAD, TETBLT and Control –(AOMT) Groups for Boys points that the individual performance of the subjects in the three groups on the Gain score of Self Regulation is dissimilar. Statistically significant difference in this case observed through one Way ANOVA is ascertained by the graphical representation. From the Figure, Performance of STAD and TETBLT groups is higher than that of the Control group. In all comparison, performance of the STAD group is higher than that of the TETBLT group

Results of Scheffe' Test of Post-hoc Comparison-Boys

In the present study, Scheffe' Test of Post-hoc Comparison (Ferguson, 1971) was employed to compare the criterion means of the three groups of Instructional Strategies (STAD, TETBLT and Control). This was done on the basis of Significant F- values obtained for the main effect of Instructional Strategies on Mean Gain Scores of Self Regulation for Boys.

In the One-Way ANOVA, significant main effect of Instructional Strategies on Mean Gain Scores of Self Regulation was found. Details of the Scheffe' Test of Post-hoc Comparison is given in Table 52.

Table 52

Result of the Scheffe' Test of Post hoc Comparison Between the Means of Self Regulation (Total Score) Based on Three Groups of Instructional Strategies for Boys.

Sample	n	Group (I)	Group (J)	Mean Difference (I-J)	Std. Error	F
Boys	65	STAD	Control	48.98	8.467	5.78**
		TETBLT	Control	34.29	8.205	4.17**
		STAD	TETBLT	14.69	8.098	1.81[ns]

**indicates p < .01, *indicates p < .05

From Table 52 it is clear that the F ratios obtained for the comparison of the variable Self Regulation for Boys between the groups; STAD - Control ($F= 5.78$), and TETBLT-Control ($F=4.17$), are statistically significant ($p < .01$) and F- ratio that of the STAD-TETBLT ($F=1.81$) groups is not significant at 0.05 level.

Thus, it can be inferred that there exists significant difference between the three levels of Instructional Strategies (STAD - Control, TETBLT-Control and STAD- TETBLT) with reference to the Gain Scores of Self Regulation.

From the Scheffe' Test, STAD and TETBLT groups reported significantly higher Gain in Self Regulation capacity than the Control group. In all comparisons, STAD group reported significantly higher Self Regulation capacity than the TETBLT group.

Effect of Instructional Strategies (STAD, TETBLT and Control) on Mean Gain Scores of Self Regulation (Total Score) of Standard VIII students for Girls.

For the Girls, One Way ANOVA was employed to study whether the STAD, TETBLT and the Control groups differ in Self Regulation or not. Results of One Way ANOVA done for the Girls students is presented in Table 53.

Table 53

ANOVA for Self Regulation by Levels of Instructional Strategies for Girls

Sample	*n*	Dependent variable	Source	SS	*df*	MS	*F*
Girls	70	Self Regulation	Between Groups	48899.035	2	24449.518	44.23**
			Within Groups	37033.608	67	552.740	
			Total	85932.643	69		

**indicates p < .01

From Table 53 the main effect of Instructional Strategies (STAD, TETBLT and Control)on Gain Scores of Self Regulation for Girls is significant, $F_{(2,62)} = 44.23$, *p*< .01. Mean Gain Scores of Self Regulation differ significantly among the STAD, TETBLT and Control groups (See Tables 23, 24 and 25).

From the result, the STAD and TETBLT groups reported significantly higher capacity of Self Regulation than the Control group. Likewise, STAD group reported significantly higher Gain in Self Regulation capacity than the TETBLT group.

The individual performance of the subjects in the STAD, TETBLT and Control on the Mean Gain Scores of Self Regulation for the Girls students was graphically examined and presented in Figure 13.
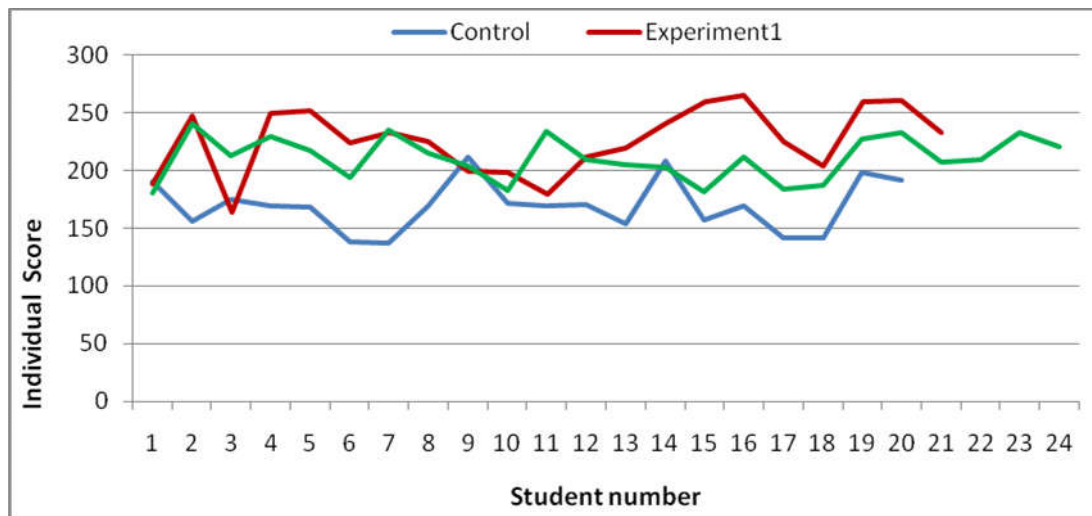

Figure 13. Comparison of the Individual Gain Scores of Self Regulation Score of STAD, TETBLT and Control Groups- Girls

A visual examination of the graphical representation of the Individual Gain Self Regulation between STAD, TETBLT and Control –(AOMT) Groups for Girls points that the individual performance of the subjects in the three groups on the Gain score of Self Regulation is dissimilar. Statistically significant difference in this case observed through one Way ANOVA is ascertained by the graphical representation. From the Figure, Performance of STAD and TETBLT groups is higher than that of the Control group. In all comparisons, performance of the STAD group is higher than that of the TETBLT group.

Results of Scheffe' Test of Post-hoc Comparison-Girls.

In the present study, Scheffe' Test of Post-hoc Comparison (Ferguson, 1971) was employed to compare the criterion means of the three groups of Instructional Strategies (STAD, TETBLT and Control). This was done on the

basis of significant F- values obtained for the main effect of Instructional Strategies on Mean Gain Scores of Self Regulation for Girls.

In the One-Way ANOVA, significant main effect of Instructional Strategies on Mean Gain Scores of Self Regulationwas found. Details of the Scheffe' Test of Post-hoc Comparison is given in Table 58.

Table 54

Result of the Scheffe' Test of Post hoc Comparison between the Means of Self Regulation (Total Score) Based on Three Groups of Instructional Strategies for Girls

Sample	*n*	Group (I)	Group (J)	Mean Difference (I-J)	Std. Error	*F*
		STAD	Control	62.71	6.719	9.33**
Girls	70	TETBLT	Control	37.82	6.959	5.43**
		STAD	TETBLT	24.88	7.025	3.54**

**indicates p < .01

From Table 54 it is clear that the *F* ratios obtained for the comparison of the variable Self Regulation for the Girls between the groups; STAD - Control (*F*= 9.33), TETBLT-Control (*F*=5.43), and (STAD-TETBLT (*F*=3.54) are statistically significant (*p* < .01).

Thus, it can be inferred that there exists significant difference between the three levels of Instructional Strategies (STAD - Control, TETBLT-Control and STAD- TETBLT) with reference to the Gain Scores of Self Regulation.

From the Scheffe' Test, STAD and TETBLT groups reported significantly higher Gain in Self Regulation capacity than the Control group. In all comparisons, STAD group reported significantly higher Self Regulation capacity than the TETBLT group.

Summary and Discussion of One way ANOVA

The results of One- Way ANOVA employed for the comparison of Mean Achievement, and Gain Scores in English (Total and Skill wise scores), Mean Self Regulation and Gain Scores of Self regulation between three levels of Instructional Strategies (STAD, TETBLT and Control) for the Total sample, Boys and Girls are summarized and presented in Table 55.

Table 55

Summary and Discussion of One way ANOVA

Sl. No.	Variable	F-value (Post-test Scores)			F-values(Gain Score)		
		Total Sample	Boys	Girls	Total Sample	Boys	Girls
1.	Achievement in English (Total)	115.19**	39.80**	103.88**	134.11**	44.12**	121.65**
2	Listening Skill	64.73**	23.71**	41.30**	107.73**	35.14**	87.23**
3	Speaking skill	71.16**	25.63**	47.11**	101.54**	36.45**	71.31**
4	Reading skill	99.01**	47.23**	56.28**	203.78**	102.59**	112.23**
5	Writing skill	121.92**	83.27**	52.31**	104.98**	74.51**	43.91**
6	Self Regulation	73.99**	31.43**	45.85**	54.75**	17.61**	44.23*

** indicates $p < .01$

As per Table 55 F –values obtained for Achievement in English (Total Score and Skill-wise) are significant for Total sample, Boys, and Girls. Summarised result of One Way ANOVA points out that there exist a significant difference between two experimental groups and one control group in case of Achievement in English (Total and Skill-wise Score).

It also suggests that the obtained F-value for the gain scores of Achievement in English (Total and Skill wise Scores) for Total sample, Boys and Girls were found to be significant. Results of One Way ANOVA suggest that there exist a significant difference between two experimental groups and

one control group in case of Gain scores of Achievement in English (Total Score and Skill-wise).

Self Regulation scores seen from Table....., suggests that, the Self Regulation (Posttest and Gain scores) for Total Sample, Boys and Girls differentiate the two experimental groups and control groups.

The graphical representation of Posttest scores of Achievement in English (Total and Skill wise Scores) and Self Regulation of the subjects in the Two experimental groups (STAD and TETBLT) and Control Group (Total sample, Boys and Girls) have ascertained the results of One way ANOVA. A general observation of all graphs can be explained in such a way that Experimental group I (STAD), has higher Achievement in English (Total and Skill wise Scores) and Self Regulation compared with Experimental group II (TETBLT) and Control group (AOMT). In addition to that, the result also shows that, Experimental group II (TETBLT) and the Control group (AOMT) significantly differ in Achievement in English (Total and Skill-wise score) and Self Regulation, in favour of the TETBLT group. From the post hoc analysis, it also revealed that there exist significant difference between Experimental group I (STAD) and Experimental group II (TETBLT) for the Total sample, Boys and Girls. Further it's clear that that the STAD Group gained higher Achievement in English (Total and Skill wise Scores) and enhanced Self Regulation capacity than the TETBLT group as revealed from the high Mean Achievement and Self Regulation scores associated with the STAD Strategy of Cooperative Learning. From the Post hoc comparison, there is no significance difference between the groups STAD- TETBLT in speaking skill for Boys.

Two Way Factorial Analysis of Covariance for Achievement in English and Self Regulation

Effectiveness of Instructional Strategies, particularly, Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning and Technology Enriched Task Based Language Teaching (TETBLT) over the Activity Oriented Method of Teaching (AOMT)for standard VIII Student was studied employing the Two-way Factorial ANCOVA with four covariates singly and in combination. Covariates controlled are Pre-experimental Status in terms of Achievement in English (Total and Skill wise Scores)and Self-Regulation, Verbal Intelligence, Non-verbal Intelligence and Classroom Environment. In the ANCOVA procedure, three levels of Instructional Strategies and three levelsof Metacognitive Awareness were incorporated as Independent Variables. Achievement in English (Total and Skill wise Scores) and Self Regulation were treated as Dependent Variables.

Classificatory Technique

For facilitating the Two-way ANCOVA procedure, the two Independent Variables (Instructional Strategies and Metacognitive Awareness) were classified as follows. Instructional Strategies were classified into three levels as Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning, Technology Enriched Task Based Language Teaching (TETBLT) and Activity Oriented Method of Teaching- AOMT (Control). Experimental Group I was taught through the Student the STAD Strategy of Cooperative Learning, Experimental group II was taught through the TETBLTand the Control group was taught through the AOMT. Total number of subjects consisted in each of the three Instructional Strategies (STAD, TETBLT and Control- AOMT) were as follows:

Instructional Strategies	Boys	Girls	Total
STAD	21	24	45
TETBLT	24	21	45
Control (AOMT)	20	25	45
Total	65	70	135

Metacognitive Awareness was classified in to three levels asAbove Average Metacognitive Awareness – AAMA, Average Metacognitive Awareness (AMA) and Below Average Metacognitive Awareness – BAMA using median as the cut-off point. From the Total sample (N = 135), subjects who attained a score above the median (64 in Total sample, 65 in Boys and 70 in Girls) were considered as Above Average Metacognitive Awareness (AAMA) group and those who got a score equal to or below the median as Below Average Metacognitive Awareness (BAMA) group. The same classificatory scheme was utilized for Two-Way ANOVA which is described in Major Analysis Part II. The actual number of subjects falling in each of the two levels were as follows:

Metacognitive awareness	Boys	Girls	Total
Above Average Metacognitive Awareness (AAMA)	14	12	26
Average Metacognitive Awareness (AMA)	44	45	89
Below Average Metacognitive Awareness(BMA)	7	13	20
Total	65	70	135

Prior to ANCOVA, the data used for Analysis is subjected to a thorough examination with a view to know whether the data is sufficient to satisfy the major assumptions suggested by Winer (1977), Ferguson (1971) and Wildt and Ahtola (1978) to carry over the ANCOVA procedure. It is seen that the data is satisfied with the following assumptions (Wildt &Ahtola, 1978).

1.   The scores on the Dependent Variable are a linear combination of four independent components, an overall mean, a treatment effect, a linear covariate effect and an error term.

2.   The error is normally and independently distributed with mean zero and variance o^2E.

3.   The (weighted) sum of all groups of the treatment/group effect is zero.

4.   The coefficient of the covariate (slope of the regression line) is the same for each treatment group.

5.   The covariate is a fixed mathematical variable measured without error, not a stochastic variable.

Entire computations were done using the software, Statistical Package for Social Sciences - SPSS. Since the frequencies in the treatment cells are unequal, the ANCOVA procedure for unequal cell frequencies is utilized for analysis.

Tests for Basic Assumptions

To satisfy the basic assumptions of ANCOVA procedure, the collected data were specifically analysed and examined. The results of this analysis are presented in this section of the report.

a.   Linear Relationship between the Dependent Variable and the Covariates

To satisfy initially the assumption of the existence of linear relationship between the Dependent Variables; Achievement in English (Total and Skill wise Scores) and Self Regulation and the Covariates (Pre-experimental Status in terms of Achievement in English (Total and Skill wise Scores)and Self- Regulation, Verbal Intelligence, Non-verbal Intelligence,

and Classroom Environment), the nature of relationship is studied using the scatter plots of Dependent Variables by Covariates.

Visual examination of the scatter plots of four Covariates against the Dependent Variables (Achievement in English -Total and Skill wise Scores and Self- Regulation), are attempted by the investigator and presented as specimen in Figures 14, 15, 16 and 17.

Achievement in English (Total)

Listening

Speaking

Reading

Writing

Self Regulation

Figure 14. Scatter Plots of Achievement in English (Total and Skill wise) and Self Regulation with Pre- Experimental Status.

Achievement in English (Total)

Listening

Speaking

Reading

Writing

Self Regulation

Figure 15. Scatter Plots of Achievement in English (Total and Skill wise) and Self Regulation with Verbal Intelligence.

Achievement in English (Total)

Listening

Speaking

Reading

Writing

Self Regulation

Figure 16. Scatter Plots of Achievement in English (Total and Skill wise) and Self Regulation with Non-verbal Intelligence.

Achievement in English (Total)

Listening

Speaking

Reading

Writing

Self Regulation

Figure 17. Scatter Plots of Achievement in English (Total and Skill wise) and Self Regulation with Classroom Environment.

The visual examination of the scatter plots revealed that the relationship between the Dependent Variable (Achievement in English (-Total and Skill wise Scores) and Self Regulation with the Covariates (separately and in combination of the covariates at a time) was in a linear way. The scores of the Dependent Variable and the respective Covariates did not depart greatly from the line of good fit. Hence, the assumption of linear relationship between the Criterion Variable and the Covariates was successfully satisfied.

b. Test of Homogeneity of Variance

To satisfy the assumption of homogeneity of variance, separate Analysis of Variance was used, to test whether the slopes of the regression lines are the same (Homogeneity of within-class regression) for the levels of Independent Variables (Instructional Strategies and Metacognitive Awareness).

Separate Tests of Homogeneity of Variance were employed for each ANCOVA for Achievement in English (Total and Skill wise Scores) and Self Regulation with fourCovariates (Pre-experimental Status in terms of Achievement in English(Total and Skill wise Scores)and Self- Regulation, Verbal Intelligence, Non-verbal Intelligence, Classroom Environment**)** separately and in combination. From all the tests of homogeneity, it was inferred that the within-class regression coefficients were homogeneous or the same for three levels of Instructional Strategies and three levelsof Metacognitive Awareness (Tables not attached). The outcome of this test, in part does not rule against pooling the within class regression (Winer, 1977). Thus, the data were found appropriate to suit the ANCOVA model.

Analysis of Variance for Achievement in English (Total and Skill wise Scores) and Self Regulation

Separate Analysis of Variance for each ANCOVA, disregarding the Covariates, was used to study whether the treatments given in the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) create any significant difference in the Criterion Variable (Achievement in English -Total and Skill wise Scores and Self Regulation). For the purpose, the sum of squares, mean square variance along with the corresponding degrees of freedom and the F-ratios were calculated (Tables not attached). From the entire analysis employed, five out of five ANOVA (Four Skill wise Scores and Achievement in English -Total score) as Dependent Variables) yielded significant F-values for Instructional Strategies on Achievement in English (Total and Skill wise Scores) and the only ANOVA for Self Regulation also yielded significant F-values for Instructional Strategies on Self Regulation. This is due to the fact that the treatment means appears to have different Covariate means. If difference between the criterions means remain after a statistical adjustment has been made, the ANCOVA attempts to approximate the difference in which each of the treatment means is equated on the covariate (Winer, 1977).

Two Way Factorial Analysis of Covariance for Achievement in English

Two-way Factorial ANCOVA was employed to study the effectiveness of Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning, Technology Enriched Task Based Language Teaching (TETBLT) and Activity Oriented Method of Teaching, one over another, in case of Achievement in English (Total and Skill wise Scores), of standard VIII Students. Covariance Analysis made use of four Covariates (Pre-experimental Status in terms of Achievement in English(Total and Skill wise

Scores),Verbal Intelligence, Non-verbal Intelligence and Classroom Environment) singly and in combination. The ANCOVA procedure incorporated three levels of Instructional Strategies (STAD, TETBLT, and Control- AOMT) and three levels of Metacognitive Awareness (Above Average Metacognitive Awareness - AAMA, Average Metacognitive Awareness-AMA and Below Average Metacognitive Awareness- BAMA) as independent Variables. Achievement in English (Total and Skill wise Scores) was considered as the Dependent Variable. Scheffe' Test of Post-hoc Comparison was employed with every ANCOVA, which shows significant F-values for Instructional Strategies, to find out the group that causes difference in the criterion means. The ANCOVA procedure was done for the Total sample only. A detailed description of the procedures employed in the ANCOVA is dealt in this section of the report.

Analysis of Covariance for Achievement in English (Total and Skill wise Scores) - Pre Experimental Status of Achievement in English (Total and Skill wise Scores) as Covariate.

Two-way Factorial ANCOVA with Pre Experimental Status of Achievement in English (Total and Skill wise Scores) as covariate was employed to study the relative effectiveness of Student Teams Achievement Divisions (STAD) Strategy and Technology Enriched Task Based teaching (TETBLT) over Activity Oriented Method of Teaching in case of Achievement in English (Total and Skill wise Scores) of standard VIII Students. The data and the results of Covariance Analysis done for Achievement in English (Total and Skill wise scores) is presented in Table 56.

Table 56

Summary of Two -way Factorial ANCOVA for Achievement in English (Total and Skill wise) -Pre Experimental Status of Achievement in English (Total and Skill wise Scores) as Covariate

Sample	Dependent Variable		Source of Variation		
			Instructional strategies	Metacognitive Awareness	Instructional strategies Metacognitive Awareness
Total sample	Achievement in English (Total)	SS	2084.592	8.371	21.486
		df	2	2	4
		MS	1042.296	4.185	5.371
		F	77.906**	0.313	0.401
Skill wise scores	Listening	SS	199.283	7.441	13.284
		MS	2	2	4
		df	99.642	3.721	3.321
		F	25.67**	0.959	0.856
	Speaking	SS	244.029	7.489	18.267
		MS	2	2	4
		df	122.014	3.745	4.567
		F	27.762**	0.852	1.039
	Reading	SS	1013.733	2.656	73.823
		MS	2	2	4
		df	506.866	1.328	18.456
		F	42.353**	0.111	1.542
	Writing	SS	1711.686	21.892	51.613
		MS	2	2	4
		df	855.843	10.946	12.903
		F	39.662**	0.507	0.598

**indicates *p* < .01

From Table 56 *F* values obtained for Instructional Strategies on Achievement in English (Total score) is significant, $F (2, 132) = 77.90$, *p* < .01. The obtained *F* value is greater than the table value for the corresponding the degrees of freedom even after the adjustment is made for the linear effect of the Pre-experimental Status in terms of Achievement in English as Covariate.

From Table 60 F values, obtained for Instructional Strategies on Achievement in English after adjusting the Pre-experimental Status, for *df* (2,132)for the Skill Wise scores in Listening (F =25.67), Speaking (F=27.76), Reading *(F=42.35)* and writing *(F=39.66)* are found significant *(p<.01)*.

Thus, the results show that a statistically significant difference exist between the criterion means in case of Achievement in English (Total and Skill wise scores) even after the adjustment is made for the linear effect of the Covariate that is Pre-experimental Status in terms of Achievement in English. From the Covariance Analysis it can be inferred that, when a linear adjustment is made for the effect of variation due to difference in Pre-experimental Status in terms of Achievement in English (Total and Skill wise scores), there is statistically significant difference still existing between the three types of Instructional Strategies for the Skill wise score -Listening, Speaking, Reading and Writing skills.

These results suggest that the STAD, TETBLT and Control groups differ in their mean Achievement scores (Total and Skill Wise) after the linear adjustment was made for the effect of the Covariate, Pre-experimental Status in terms of Achievement in English (Total and Skill wise scores).

In the Covariance Analysis, the F-values for Metacognitive Awareness and Metacognitive Awareness x Instructional Strategies are not taken into consideration because Metacognitive Awareness is considered as fixed factor (Winer, 1977)

Adjusted Means and Post-hoc Comparison.

Scheffe' Test Post – hoc Comparison was used to determine which one of the three groups of Instructional Strategies (STAD, TETBLT and Control), cause difference in terms of variation in the Criterion means. In the ANCOVA procedure, this comparison is made with adjusted criterion means,

which were adjusted to avoid effect of the covariate. This was done on the basis of the significant *F-* Values obtained for the effect of Instructional Strategies on Achievement in English (Total and Skill wise scores).

Scheffe' Test of Post-hoc Comparison was employed for comparing the adjusted criterion means of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT). Details of the Scheffe' Test of Post-hoc Comparison is given in Table 57

Table 57

Result of the Scheffe' test of post hoc comparison between the Adjusted Criterion Means of Achievement in English (Total and Skill wise scores)- Pre Experimental Status of Achievement in English (Total and Skill wise scores)as Covariate

Sample	Dependent Variable		Groups Compared		Adjusted Means		F
					M_1	M_2	
Total Sample		Achievement in English (Total)	STAD	Control	38.45	26.95	12.27**
			TETBLT	Control	35.57	26.95	9.08**
			STAD	TETBLT	38.45	35.57	3.08**
	Skill-wise Scores	Listening	STAD	Control	17.36	11.70	13.45**
			TETBLT	Control	14.33	11.70	6.26**
			STAD	TETBLT	17.36	14.33	7.21**
		Speaking	STAD	Control	14.20	9.38	10.78**
			TETBLT	Control	12.95	9.38	7.88**
			STAD	TETBLT	14.20	12.95	2.80*
		Reading	STAD	Control	28.04	18.52	12.93**
			TETBLT	Control	25.64	18.52	9.67**
			STAD	TETBLT	28.04	25.64	3.26**
		Writing	STAD	Control	41.21	28.37	15.07**
			TETBLT	Control	37.73	28.37	11.06**
			STAD	TETBLT	41.21	37.73	4.11**

**indicates $p< .01$, *indicates $p< .05$

From Table 57 it is clear that the *F* ratios obtained for the comparison of the variable Achievement in English (Total Score) for the Total sample

between the groups; STAD - Control *(F=12.27)*, TETBLT – Control *(F=9.08)* and STAD – TETBLT group *(F=3.08)* are found significant *(p<.01)*.

As per Table 57, the *F* ratios obtained for the comparison of the variable Achievement in English for Listening skill between STAD and Control groups, *(F=13.45)*, TETBLT- Control groups *(F= 6.26)* and STAD - TETBLT groups*(F=7.21)* are found significant *(p<.01)*.

In the comparison of the variable Achievement in English for Speaking Skill, it is clear that the *F* ratios obtained for the Total sample between the groups; STAD - Control *(F=10.78)* and TETBLT – Control *(F=7.88)* and are found to be significant *(p<.01)*. But the *F* ratio obtained for the Total sample between STAD – TETBLT group *(F=2.8)* is significant at 0.05 level.

In the comparison of the variable Achievement in English (Skill wise-Reading)it is clear that the *F* ratios obtained for the comparison of the variable Achievement in English (Reading skill) for the Total sample between the groups; STAD - Control *(F=12.93)* , TETBLT - Control*(F=9.67)* and STAD – TETBLT group *(F=3.26)* are significant *(p<.01)*.

As per Table 57, the *F* ratios obtained for the comparison of the variable Achievement in English for Writing Skill, between the groups; STAD - Control *(F=15.07)*, TETBLT - Control*(F=11.06)* and STAD – TETBLT group *(F=4.11)* are found significant *(p<.01)*.

From the result, it is clear that there exists significant difference between STAD and TETBLT group with Control group, in case of Achievement in English (Total and Skill wise Scores- Listening, Speaking, Reading and Writing). It is also revealed that the STAD groups differ in mean adjusted scores of Achievement in English (Total and Skill wise Scores) than TETBLT group.

Thus, from the result it can be clearly assumed that when linear adjustment is made for the effect of variation due to the Pre Experimental Status of Achievement in English (Total and Skill wise Scores), there remain statistically significant difference between the three groups of Instructional Strategies.

From the results of the Scheffe' Test, STAD and, TETBLT group reported significantly higher Achievement in English (Total and Skill wise Scores- Listening, Speaking, Reading and Writing) than the Control group. The significantly higher mean score of STAD and TETBLT groups suggests that the Achievement in English (Total Score) is higher in STAD and TETBLT groups than the Control group. This further means that STAD strategy of Cooperative Learning and TETBLT are more effective for higher Achievement in English than the Activity Oriented Method of Teaching.

The result also indicated that the performance of STAD and TETBLT groups is dissimilar in case of Achievement in English (Total and Skill wise Scores). In all comparisons, STAD Group reported significantly higher Achievement in English (Writing skill) than the TETBLT group. The significantly higher mean score of STAD group points that the Achievement in English (Total Score) is higher in STAD group than the TETBLT group. Hence, it can be assumed STAD strategy of Cooperative Learning is more effective for higher Achievement in English than Technology Enriched Task Based Language teaching (TETBLT).

In all the comparisons, among the three instructional strategies, Student Teams Achievement Divisions Strategy is found more effective than the Technology Enriched Task Based Language Teaching and Activity oriented Method of Teaching in case of Achievement in English (Total and Skill wise score)of standard VIII students for the Total sample, even after controlling the effect of Pre Experimental Status of Achievement in English (Total and Skill

wise score) as Covariate. This further reveals that STAD Strategy of Cooperative learning is relatively effective in enhancing Higher Achievement in English, in general, as well as for the higher performance in Listening, Speaking, Reading and Writing Skills than Technology Enriched Task Based Language teaching (TETBLT) and Activity oriented Method of Teaching.

Analysis of Covariance for Achievement in English (Total and Skill wise Scores)– Verbal Intelligence as Covariate.

Two-way Factorial *ANCOVA* with Verbal Intelligenceas covariate was employed to study the effectiveness of Student Teams Achievement Divisions (STAD) Strategy and Technology Enriched Task Based teaching (TETBLT) over Activity Oriented Method of Teaching in case of Achievement in English (Total and Skill wise Scores) of standard VIII Students. The data and the results of covariance analysis of Achievement in English (Total and Skill wise) are presented in Table 58.

Table 58

Summary of Two -way Factorial ANCOVA for Achievement in English (Total and Skill wise) - Verbal Intelligence as Covariate

Sample	Dependent Variable		Source of Variation		
			Instructional Strategies	Metacognitive Awareness	Instructional Strategies x Metacognitive Awareness
x	Achievement in English (Total)	SS	1836.13	36.983	79.82
		df	2	2	4
		MS	918.06	18.492	19.955
		F	47.82**	0.963	1.04
	Skill-wise score — Listening	SS	190.77	7.701	15.366
		MS	2	2	4
		df	95.39	3.85	3.841
		F	24.30**	0.981	0.979
	Speaking	SS	241.61	8.646	18.965
		MS	2	2	4
		df	120.80	4.323	4.741
		F	27.419**	0.981	1.076
	Reading	SS	978.97	1.471	90.662
		MS	2	2	4
		df	489.48	0.736	22.665
		F	41.385**	0.062	1.916
	Writing	SS	1711.414	24.055	56.215
		MS	2	2	4
		df	855.707	12.028	14.054
		F	39.628**	0.557	0.651

**indicates *p*< .01

From Table 58 *F* values obtained for Instructional Strategies on Achievement in English (Total score) of Standard VIII students for the Total sample is significant *F* (2, 132) =47.82, *p* < .01. The obtained *F* value is greater than the table value for the corresponding the degrees of freedom even after the adjustment is made for the linear effect of the Verbal Intelligence as Covariate.

From Table 58 F values, obtained for Instructional Strategies on Achievement in English after adjusting the Verbal Intelligence as covariate,

for *df* 2,132for the Skill Wise score in Listening (*F* =24.30), Speaking (*F*=27.41),Reading *(F=41.38)* and writing (*F*=39.62) are found significant *(p<.01)*.

Thus, the results show that a statistically significant difference exist between the criterion means in case of Achievement in English (Total and Skill wise scores) even after the adjustment is made for the linear effect of Verbal Intelligence as covariate*.* From the Covariance Analysis, it can be inferred that, when a linear adjustment is made for the effect of variation due to difference in Verbal Intelligence as covariate**,** there is statistically significant difference still existing between the three types of Instructional Strategies for Listening, Speaking, Reading and Writing skills.

These results suggest that the STAD, TETBLT and Control groups differ in their mean Achievement scores (Total and Skill Wise scores) even after the linear adjustment was made for the effect of the Covariate, Verbal Intelligence.

In the Covariance Analysis, the F-values for Metacognitive Awareness and Metacognitive Awareness x Instructional Strategies are not taken into consideration because Metacognitive Awareness is considered as fixed factor (Winer, 1977)

Adjusted Means and Post-hoc Comparison.

Scheffe' Test Post – hoc Comparison was used to determine which one of the three groups of Instructional Strategies (STAD, TETBLT and Control), cause difference in terms of variation in the Criterion means. This was done on the basis of the significant *F*- Values obtained for the main effect of Instructional Strategies on Achievement in English (Total and Skill wise scores).

Scheffe' Test of Post-hoc Comparison was employed for comparing the adjusted criterion means of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT). Details of the Scheffe' Test of Post-hoc Comparison is given in Table 59.

Table 59

Result of the Scheffe' test of post hoc comparison between the Adjusted Criterion Means of Achievement in English (*Total and Skill wise scores).-Verbal Intelligence as Covariate.*

Sample	Dependent Variable	Groups Compared		Adjusted Means		F
				M_1	M_2	
Total sample	Skill-wise scores	Achievement in English (Total)	STAD Control	38.99	26.85	14.02**
			TETBLT Control	34.97	26.85	10.04**
			STAD TETBLT	38.99	34.97	3.99**
		Listening	STAD Control	17.49	12.09	11.11**
			TETBLT Control	13.82	1209	3.55**
			STAD TETBLT	17.49	13.82	7.54**
		Speaking	STAD Control	14.33	9.22	11.48**
			TETBLT Control	12.95	9.22	8.38**
			STAD TETBLT	14.33	12.95	3.10**
		Reading	STAD Control	28.61	18.47	3.57**
			TETBLT Control	25.11	18.47	5.03**
			STAD TETBLT	28.61	25.11	2.65**
		Writing	STAD Control	41.40	28.18	15.07**
			TETBLT Control	37.74	28.18	10.88**
			STAD TETBLT	41.40	37.74	4.17**

**indicates $p < .01$

From Table 59 it is clear that the *F* ratios obtained for the comparison of the variable Achievement in English (Total Score) for the Total sample between the groups; STAD - Control *(F=14.02)*, TETBLT – Control *(F=10.04)* and STAD – TETBLT group *(F=3.99)* are significant *(p<.01)*.

As per Table 63 the *F* ratios obtained for the comparison of the variable Achievement in English for the Listening skill between STAD and Control groups, *(F=11.11)*, TETBLT- Control groups and *(F=3.55)*STAD -

TETBLT group *(F=7.54)* are found significant*(p<.01)*.

In the comparison of the variable Achievement in English (Skill wise - Speaking) it is clear that the *F* ratios obtained for the Total sample between the groups; STAD - Control *(F= 11.48)*, TETBLT - Control *(F=8.38)* and STAD – TETBLT group *(F=3.10)* are significant *(p<.01)*.

In the comparison of the variable Achievement in English (Skill wise-Reading)it is clear that the *F* ratios obtained for the comparison of the variable Achievement in English(Reading skill)for the Total sample between the groups; STAD - Control *(F= 3.57)*, TETBLT – Control *(F= 5.03)* and STAD – TETBLT group *(F= 2.65)* are significant*(p<.01)*.

As per Table 63 the *F* ratios obtained for the comparison of the variable Achievement in English (Skill wise- Writing) *F* ratios obtained for the Total sample between the groups; STAD - Control *(F= 15.07.)*, TETBLT - Control *(F= 10.88)* and STAD – TETBLT group *(F= 4.17)* are significant *(p<.01)*.

From the result, it is clear that there exists significant difference between STAD and TETBLT group with Control group, in case of Achievement in English (Total and Skill wise Scores- Listening, Speaking, Reading and Writing). It is also revealed that the STAD groups differ in mean adjusted scores of Achievement in English (Total and Skill wise Scores) than TETBLT group.

Thus, from the result it can be clearly assumed that when linear adjustment is made for the effect of variation due to the Verbal Intelligence as covariate, there remains statistically significant difference between the three groups.

From the results of the Scheffe' Test, STAD group and**,** TETBLT group reported significantly higher Achievement in English (Total and Skill wise Scores- Listening, Speaking, Reading and Writing) than the Control

group. The significantly higher mean score of STAD and TETBLT groups suggests that the Achievement in English (Total and Skill wise Scores) is higher in STAD and TETBLT groups than the Control group. This further means that STAD strategy of Cooperative Learning and TETBLT are more effective for higher Achievement in English and development of Listening, Speaking, Reading and writing skills in English than the Activity Oriented Method of Teaching.

The result also indicated that the performances of STAD and TETBLT groups are dissimilar in case of Achievement in English (Total and Skill wise Scores). In all comparisons, STAD Group reported significantly higher Achievement in English (Total and Skill wise Scores) than the TETBLT group. The significantly higher mean score of STAD group points that the Achievement in English (Total and Skill wise Scores) is higher in STAD group than the TETBLT group. Hence, it can be assumed STAD strategy of Cooperative Learning is more effective for higher Achievement in English and development of language skills like Listening, Speaking, Reading and writing skills than Technology Enriched Task Based Language teaching (TETBLT).

In all the comparisons, among the three instructional strategies, Student Teams Achievement Divisions Strategy is found more effective than the Technology Enriched Task Based Language Teaching and Activity oriented Method of Teaching in case of Achievement in English (Total and Skill wise scores) of standard VIII students for the Total sample, even after controlling the effect of Verbal Intelligence as Covariate. This further reveals that STAD Strategy of Cooperative learning is relatively effective in enhancing Higher Achievement in English, in general, as well as for the higher performance in Listening, Speaking, Reading and Writing Skill than Technology Enriched Task Based Language teaching (TETBLT) and Activity oriented Method of Teaching.

Analysis of Covariance for Achievement in English (Total and Skill wise Scores)– Non-Verbal Intelligence as Covariate.

Two-way Factorial ANCOVA with Non-Verbal Intelligenceas covariate was employed to study the effectiveness of Student Teams Achievement Divisions (STAD) Strategy and Technology Enriched Task Based teaching (TETBLT) over Activity Oriented Method of Teaching in case of Achievement in English (Total and Skill wise Scores)of standard VIII Students. The data and the results of Covariance analysis of Achievement in English (Total and Skill wise scores) is presented in Table 60.

Table 60

Summary of Two -way Factorial ANCOVA for Achievement in English (Total and Skill wise scores) **-** *Non-Verbal Intelligence as Covariate*

Sample	Dependent Variable		Source of Variation		
			Instructional Strategies	Metacognitive Awareness	Instructional Strategies x Metacognitive Awareness
Total sample	Skill-wise score	Achievement in English(Total)	SS 1882.168	43.772	81.97
			df 2	2	4
			MS 941.084	21.886	20.492
			F 47.63**	1.108	1.037
		Listening	SS 192.34	7.197	14.19
			MS 2	2	4
			df 96.17	3.598	3.547
			F 24.51**	0.917	0.904
		Speaking	SS 241.3	8.919	18.799
			MS 2	2	4
			df 120.65	4.459	4.7
			F 27.38**	1.012	1.067
		Reading	SS 980.016	2.842	79.395
			MS 2	2	4
			df 490.008	1.421	19.849
			F 40.99**	0.119	1.66
		Writing	SS 1747.013	22.297	59.323
			MS 2	2	4
			df 873.506	11.149	14.831
			F 41.26**	0.527	0.701

**indicates *p*< .01

From Table 60 F values obtained for Instructional Strategies on Achievement in English (Total score) of Standard VIII students for the Total sample is significant F (2, 132) =47.63, $p < .01$. The obtained F value is greater than the table value for the corresponding the degrees of freedom even after the adjustment is made for the linear effect of the Non-Verbal Intelligence as Covariate.

From Table 65 F values, obtained for Instructional Strategies on Achievement in English after adjusting the Non-Verbal Intelligence as covariate, for df 2,132, for the Skill Wise scores ; Listening ($F = 24.51.$), Speaking ($F= 27.38$), Reading $(F= 40.99)$ and writing ($F= 41.26$) are found significant $(p<.01)$.

Thus, the results show that a statistically significant difference exist between the criterion means in case of Achievement in English (Total and Skill wise scores) even after the adjustment is made for the linear effect of the Covariate that is Non-Verbal Intelligence as covariate. From the Covariance Analysis it can be inferred that, when a linear adjustment is made for the effect of variation due to difference in Non-Verbal Intelligence as covariate, there is statistically significant difference still existing between the three types of Instructional Strategies for the Skill wise-Listening, Speaking, Reading and Writing skills.

These results suggest that the STAD, TETBLT and Control groups differ in their mean Achievement scores (Total and Skill Wise) even after the linear adjustment was made for the effect of the Covariate, Non-Verbal Intelligence.

In the Covariance Analysis, the F-values for Metacognitive Awareness and Metacognitive Awareness x Instructional Strategies are not taken into consideration because Metacognitive Awareness is considered as fixed factor (Winer, 1977).

Adjusted Means and Post-hoc Comparison

Scheffe' Test Post – hoc Comparison was used to determine which one of the three groups of Instructional Strategies (STAD, TETBLT and Control), cause difference in terms of variation in the Criterion means. This was done on the basis of the significant *F*- Values obtained for the main effect of Instructional Strategies on Achievement in English (Total and Skill wise scores).

Scheffe' Test of Post-hoc Comparison was employed for comparing the adjusted criterion means of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT). Details of the Scheffe' Test of Post-hoc Comparison is given in Table 61.

Table 61

Result of the Scheffe' Test of Post Hoc Comparison between the Adjusted Criterion Means of Achievement in English (*Total and Skill wise scores*).*-Non-Verbal Intelligence as Covariate.*

Sample		Dependent Variable	Groups Compared		Adjusted Means		F
					M_1	M_2	
Total sample	Skill wise sores	Achievement in English (Total)	STAD	Control	38.78	26.86	14.01**
			TETBLT	Control	35.33	26.86	9.95**
			STAD	TETBLT	38.78	35.33	4.05**
		Listening	STAD	Control	17.52	12.10	12.97**
			TETBLT	Control	13.78	12.10	4.02**
			STAD	TETBLT	17.52	13.78	8.88**
		Speaking	STAD	Control	14.33	9.22	11.48**
			TETBLT	Control	12.95	9.22	8.38**
			STAD	TETBLT	14.33	12.95	3.09**
		Reading	STAD	Control	28.63	18.48	13.85**
			TETBLT	Control	25.08	18.48	8.97**
			STAD	TETBLT	28.63	25.08	4.84**
		Writing	STAD	Control	41.35	28.16	15.07**
			TETBLT	Control	37.80	28.16	10.97**
			STAD	TETBLT	41.35	37.80	4.02**

**indicates *p*< .01

From Table 61 it is clear that the *F* ratios obtained for the comparison of the variable Achievement in English (Total Score) for the Total sample

between the groups; STAD - Control *(F= 14.01)*, TETBLT - Control *(F= 9.95)* and STAD – TETBLT group *(F=4.05)* are significant *(p<.01)*.

As per Table 66 the *F* ratios obtained for the comparison of the variable Achievement in English for the Skill wise (Listening skill) between STAD and Control groups, *(F=12.97)*, TETBLT- Control groups and *(F= 4.02)* STAD - TETBLT group *(F=8.88)* are found significant *(p<.01)*.

In the comparison of the variable Achievement in English (Skill wise-Speaking), it is clear that the *F* ratios obtained for the Total sample between the groups; STAD - Control *(F=11.48)*, TETBLT - Control *(F=8.38)* and STAD – TETBLT group *(F=3.09)* are significant *(p<.01)*.

In the comparison of the variable Achievement in English (Skill wise-Reading)it is clear that the *F* ratios obtained for the comparison of the variable Achievement in English (Reading skill)for the Total sample between the groups; STAD - Control *(F=13.85)* , TETBLT - Control*(F=8.97)* and STAD –TETBLT group *(F=4.84)* are significant*(p<.01)*.

As per Table 66 the *F* ratios obtained for the comparison of the variable Achievement in English (Skill wise-Writing) *F* ratios obtained for the Total sample between the groups; STAD - Control *(F=15.07)*, TETBLT - Control *(F=10.97)* and STAD - TETBLT group *(F=4.02)* are significant *(p<.01)*.

From the result, it is clear that there exists significant difference between STAD and TETBLT group with Control group, in case of Achievement in English (Total and Skill wise Scores- Listening, Speaking, Reading and Writing). It is also revealed that the STAD groups differ in mean adjusted scores of Achievement in English (Total and Skill wise Scores) than TETBLT group.

Thus, from the result it can be clearly assumed that when linear adjustment is made for the effect of variation due to the Non- Verbal Intelligence as covariate, there remains statistically significant difference between the three groups.

From the results of the Scheffe' Test, STAD group and**,** TETBLT group reported significantly higher Achievement in English (Total and Skill wise Scores- Listening, Speaking, Reading and Writing) than the Control group. The significantly higher mean score of STAD and TETBLT groups suggests that the Achievement in English (Total Score) is higher in STAD and TETBLT groups than the Control group. This further means that STAD strategy of Cooperative Learning and TETBLT are more effective for higher Achievement in English and enhances skills in Listening, Speaking, Reading and Writing skills than the Activity Oriented Method of Teaching.

The result also indicated that the performances of STAD and TETBLT groups are dissimilar in case of Achievement in English (Total and Skill wise Scores). In all comparisons, STAD Group reported significantly higher Achievement in English (Total and Skill wise Scores) than the TETBLT group. The significantly higher mean score of STAD group points that the Achievement in English (Total Score) is higher in STAD group than the TETBLT group. Hence, it can be assumed STAD strategy of Cooperative Learning is more effective for higher Achievement in English and higher performance in English Language skills like Listening, Speaking, Reading and Writing skills than Technology Enriched Task Based Language teaching (TETBLT).

In all the comparisons, among the three instructional strategies, Student Teams Achievement Divisions Strategy is found more effective than the Technology Enriched Task Based Language Teaching and Activity oriented Method of Teaching in case of Achievement in English (Total and Skill wise

score) of standard VIII students for the Total sample, even after controlling the effect of Non- Verbal Intelligence as Covariate. This further reveals that STAD Strategy of Cooperative learning is relatively effective in enhancing Higher Achievement in English, in general, as well as for the higher performance in Listening, Speaking, Reading and Writing Skill than Technology Enriched Task Based Language teaching (TETBLT) and Activity oriented Method of Teaching.

Analysis of Covariance for Achievement in English (Total and Skill wise Scores) – Classroom Environment as Covariate.

Two-way Factorial ANCOVA with Classroom Environment as covariate was employed to study the effectiveness of Student Teams Achievement Divisions (STAD) Strategy and Technology Enriched Task Based teaching (TETBLT) over Activity Oriented Method of Teaching in case of Achievement in English (Total and Skill wise scores)of standard VIII Students. The data and the results of covariance analysis of Achievement in English (Total and Skill wise) are presented in Table 62.

Table 62

Summary of Two -way Factorial ANCOVA for Achievement in English (Total and Skill wise scores)-Classroom Environment as Covariate

Sample	Dependent Variable		Source of Variation		
			Instructional Strategies	Metacognitive Awareness	Instructional Strategies x Metacognitive Awareness
	Achievement in English (Total)	SS	1849.643	41.027	102.444
		df	2	2	4
		MS	924.821	20.514	25.611
		F	47.98**	1.064	1.329
Total sample	Listening	SS	191.822	6.976	14.1
		MS	2	2	4
		df	95.911	3.488	3.525
		F	24.30**	0.884	0.893
	Speaking	SS	242.065	8.896	18.501
		MS	2	2	4
		df	121.033	4.448	4.625
		F	27.46**	1.01	1.05
	Reading	SS	1000.607	3.107	74.405
		MS	2	2	4
		df	500.304	1.553	18.601
		F	41.44**	0.129	1.541
	Writing	SS	1708.748	23.878	55.102
		MS	2	2	4
		df	854.374	11.939	13.775
		F	39.55**	0.553	0.638

**indicates $p < .01$

From Table 62 *F* values obtained for Instructional Strategies on Achievement in English (Total score) of Standard VIII students for the Total sample is significant $F (2, 132) = 47.98$, $p < .01$. The obtained *F* value is greater than the table value for the corresponding the degrees of freedom even after the adjustment is made for the linear effect of the Classroom Environment as Covariate.

From Table 62 F values, obtained for Instructional Strategies on Achievement in English after adjusting the Classroom Environment as covariate, for *df* 2,132 for the Skill Wise ; Listening (F =24.30), Speaking (F=27.46), Reading (F=41.44) and writing (F=39.55) are found significant *(p<.01)*.

Thus, the results show that a statistically significant difference exist between the criterion means in case of Achievement in English (Total and Skill wise scores) even after the adjustment is made for the linear effect of Classroom Environment as covariate. From the Covariance Analysis it can be inferred that, when a linear adjustment is made for the effect of variation due to difference in Classroom Environment as covariate, there is statistically significant difference still existing between the three types of Instructional Strategies for the Skill wise-Listening, Speaking, Reading and Writing skills.

These results suggest that the STAD, TETBLT and Control groups differ in their mean Achievement scores (Total and Skill Wise) even after the linear adjustment was made for the effect of the Covariate, Classroom Environment as covariate.

In the Covariance Analysis, the F-values for Metacognitive Awareness and Metacognitive Awareness x Instructional Strategies are not taken into consideration because Metacognitive Awareness is considered as fixed factor (Winer, 1977)

Adjusted Means and Post-hoc Comparison.

Scheffe' Test Post – hoc Comparison was used to determine which one of the three groups of Instructional Strategies (STAD, TETBLT and Control), cause difference in terms of variation in the Criterion means. This was done on the basis of the significant *F*- Values obtained for the main effect of

Instructional Strategies on Achievement in English (Total and Skill wise scores).

Scheffe' Test of Post-hoc Comparison was employed for comparing the adjusted criterion means of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT). Details of the Scheffe' Test of Post-hoc Comparison is given in Table 63.

Table 63

Result of the Scheffe' test of post hoc comparison between the Adjusted Criterion Means of Achievement in English (Total and Skill wise scores).-Classroom Environment as Covariate.

Sample	Dependent Variable	Groups Compared		Adjusted Means		F
				M_1	M_2	
Total sample	Achievement in English (Total)	STAD	Control	38.94	26.84	14.83**
		TETBLT	Control	35.05	26.84	10.06**
		STAD	TETBLT	38.94	35.05	4.74**
	Skill-wise sores — Listening	STAD	Control	17.48	12.09	11.09**
		TETBLT	Control	13.84	3.60	3.60**
		STAD	TETBLT	17.48	13.84	7.44**
	Speaking	STAD	Control	14.33	9.22	11.48**
		TETBLT	Control	12.94	9.22	8.34**
		STAD	TETBLT	14.33	12.94	3.10**
	Reading	STAD	Control	28.60	18.46	13.79**
		TETBLT	Control	25.12	18.46	9.04**
		STAD	TETBLT	28.60	25.12	4.71**
	Writing	STAD	Control	42.24	28.11	14.58**
		TETBLT	Control	38.39	28.11	10.61**
		STAD	TETBLT	42.24	38.39	3.95**

**indicates $p< .01$

From Table 63 it is clear that the *F* ratios obtained for the comparison of the variable Achievement in English (Total Score) for the Total sample between the groups; STAD - Control *(F=14.83)*, TETBLT – Control *(F=10.06)* and STAD – TETBLT group *(F=4.74)* are found to be significant at *(p<.01)*.

As per Table 68 the *F* ratios obtained for the comparison of the variable Achievement in English for the Listening skill between STAD and Control groups, *(F=11.09)*, TETBLT- Control groups *(F=3.60)* STAD - TETBLT groups *(F=7.44)* are found significant *(p<.01)*.

In the comparison of the variable Achievement in English (Skill wise-Speaking)it is clear that the *F* ratios obtained for the comparison of the variable Achievement in English (Speaking skill)for the Total sample between the groups; STAD - Control *(F=11.48)* , TETBLT - Control*(F=8.34)* and STAD – TETBLT group *(F=3.10)* are found to be significant at*(p<.01)*.

In the comparison of the variable Achievement in English (Skill wise-Reading)it is clear that the *F* ratios obtained for the comparison of the variable Achievement in English(Reading skill)for the Total sample between the groups; STAD - Control *(F=13.79)* , TETBLT - Control*(F=9.04)* and STAD – TETBLT group *(F=4.71)* are found to be significant at *(p<.01)*.

As per Table 68 the *F* ratios obtained for the comparison of the variable Achievement in English (Skill wise-Writing) *F* ratios obtained for the comparison of the variable Achievement in English (Writing skill) for the Total sample between the groups; STAD - Control *(F=14.58)*, TETBLT - Control *(F=10.61)* and STAD – TETBLT group *(F=3.95)* are found to be significant at *(p<.01)*.

From the result, it is clear that there exists significant difference between STAD and TETBLT group with Control group, in case of Achievement in English (Total and Skill wise Scores- Listening, Speaking, Reading and Writing). It is also revealed that the STAD groups differ in mean adjusted scores of Achievement in English (Total and Skill wise Scores) than TETBLT group.

Thus, from the result it can be clearly assumed that when linear

adjustment is made for the effect of variation due to the Classroom Environment as covariate, there remain statistically significant differences between the three groups.

From the results of the Scheffe' Test, STAD group and**,** TETBLT group reported significantly higher Achievement in English (Total and Skill wise Scores- Listening, Speaking, Reading and Writing) than the Control group. The significantly higher mean score of STAD and TETBLT groups suggests that the Achievement in English (Total and Skill wise Scores) is higher in STAD and TETBLT groups than the Control group. This further means that STAD strategy of Cooperative Learning and TETBLT are more effective for higher Achievement in English and higher performance in Language skills like Listening, Speaking, Reading and Writing than the Activity Oriented Method of Teaching.

The result also indicated that the performance of STAD and TETBLT groups is dissimilar in case of Achievement in English (Total and Skill wise Scores). In all comparisons, STAD Group reported significantly higher Achievement in English (Total and Skill wise Scores) than the TETBLT group. The significantly higher mean score of STAD group points that the Achievement in English (Total Score and Skill wise scores) is higher in STAD group than the TETBLT group. Hence, it can be assumed STAD strategy of Cooperative Learning is more effective for higher performance in Achievement in English than Technology Enriched Task Based Language teaching (TETBLT).

In all the comparisons, among the three instructional strategies, Student Teams Achievement Divisions Strategy is found more effective than the Technology Enriched Task Based Language Teaching and Activity oriented Method of Teaching in case of Achievement in English (Total and Skill wise score) of standard VIII students for the Total sample, even after controlling

the effect of Classroom Environment as Covariate. This further reveals that STAD Strategy of Cooperative learning is relatively effective in enhancing Higher Achievement in English, in general, as well as for the higher performance in Listening, Speaking, Reading and Writing Skill than Technology Enriched Task Based Language teaching (TETBLT) and Activity oriented Method of Teaching.

Analysis of Covariance for Achievement in English (Total and Skill-wise Scores Four Covariates in Combination

Two-way Factorial ANCOVA with Pre-experimental Status (Total and Skill wise Scores)*,* Verbal Intelligence, Non-verbal Intelligence and Classroom Environment as Covariates in Combination was employed to study the effectiveness of Student Teams Achievement Divisions (STAD) Strategy, Technology Enriched Task Based teaching (TETBLT) over Activity Oriented Method of Teaching in case of Achievement in English (Total and Skill wise Scores) of standard VIII Students. The data and the results of Covariance Analysis of Achievement in English (Total and Skill wise) is presented in Table 64.

Table 64

Summary of Two -way Factorial ANCOVA for Achievement in English (Total and Skill wise)-Four Covariates in Combination.

Sample	Dependent Variable		Source of Variation		
			Instructional strategies	Metacognitive Awareness	Instructional strategies * Metacognitive Awareness
Total sample	Achievement in English Total	SS	1973.617	13.376	28.142
		df	2	2	4
		MS	986.809	6.688	7.036
		F	81.058*	0.549	0.578
	Skill wise scores — Listening	SS	193.55	8.72	15.367
		MS	2	2	4
		df	96.775	4.36	3.842
		F	24.676*	1.112	0.98
	Speaking	SS	240.385	7.103	17.735
		MS	2	2	4
		df	120.193	3.552	4.434
		F	26.695*	0.789	0.985
	Reading	SS	965.547	1.787	96.576
		MS	2	2	4
		df	482.773	0.894	24.144
		F	40.678*	0.075	2.034
	Writing	SS	1744.73	20.626	52.422
		MS	2	2	4
		df	872.365	10.313	13.105
		F	40.307*	0.477	0.606

**indicates $p < .01$

From Table 64 F values obtained for Instructional Strategies on Achievement in English (Total score) of Standard VIII students for the Total sample is significant $F(2, 132) = 81.05$, $p < .01$. The obtained F value is greater than the table value for the corresponding the degrees of freedom even after the adjustment is made for the linear effect of the Pre-experimental Status (Total and Skill- wise Scores), Verbal Intelligence, Non-verbal Intelligence and Classroom Environment as Covariates in Combination .

From Table 64 F values, obtained for Instructional Strategies on Achievement in English after adjusting the Pre-experimental Status (Total and Skill- wise Scores), Verbal Intelligence, Non-verbal Intelligence and Classroom Environment as Covariates in Combination, for *df* 2,132 for the Skill Listening (*F* =24.67), Speaking (*F*=26.69),Reading *(F*=40.67) and Writing (*F*=40.30) are found significant at *(p<.01)*.

Thus, the results show that a statistically significant difference exist between the criterion means in case of Achievement in English (Total and Skill wise scores) even after the adjustment is made for the linear effect of the Covariates that is Pre-experimental Status (Total and Skill- wise Scores)*,* Verbal Intelligence, Non-verbal Intelligence and Classroom Environment as Covariates in Combination*.* From the Covariance Analysis, it can be inferred that, when a linear adjustment is made for the effect of variation due to difference in Covariates in Combination*,* there is statistically significant difference still existing between the three types of Instructional Strategies for the Skill Listening, Speaking, Reading and Writing skills.

These results suggest that the STAD, TETBLT and Control groups are equal in their mean Achievement scores (Total and Skill Wise) after the linear adjustment was made for the effect of the Covariates in Combination.

In the Covariance Analysis, the F-values for Metacognitive Awareness and Metacognitive Awareness x Instructional Strategies are not taken into consideration because Metacognitive Awareness is considered as fixed factor (Winer, 1977)

Adjusted Means and Post-hoc Comparison.

Scheffe' Test Post – hoc Comparison was used to determine which one of the three groups of Instructional Strategies (STAD, TETBLT and Control),cause difference in terms of variation in the Criterion means. This was done on the basis of the significant *F*- Values obtained for the main effect of Instructional Strategies on Achievement in English (Total and Skill wise scores).

Scheffe' Test of Post-hoc Comparison was employed for comparing the adjusted criterion means of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT). Details of the Scheffe' Test of Post-hoc Comparison is given in Table 65.

Table 65

Result of the Scheffe' test of post hoc comparison between the Adjusted Criterion Means of Achievement in English (Total and Skill wise scores).-Four Covariates in Combination.

Sample		Dependent Variable	Groups Compared		Adjusted Means		F
					M_1	M_2	
Total sample		Achievement in English (Total)	STAD	Control	42.13	26.85	20.76**
			TETBLT	Control	37.48	26.85	14.44**
			STAD	TETBLT	42.13	37.48	6.25**
	Skill-wise sores	Listening	STAD	Control	18.05	11.80	17.56**
			TETBLT	Control	14.20	11.80	6.49**
			STAD	TETBLT	18.05	14.20	10.55**
		Speaking	STAD	Control	14.19	938	13.63**
			TETBLT	Control	12.94	9.38	10.08**
			STAD	TETBLT	14.19	12.94	3.51**
		Reading	STAD	Control	28.09	18.54	19.61**
			TETBLT	Control	25.58	18.54	14.40**
			STAD	TETBLT	28.09	25.58	5.05**
		Writing	STAD	Contro	42.07	28.17	14.36**
			TETBLT	Control	38.51	28.17	10.68**
			STAD	TETBLT	42.07	38.51	3.67**

**indicates *p*< .01

From Table 65 it is clear that the *F* ratios obtained for the comparison of the variable Achievement in English (Total Score) for the Total sample between the groups; STAD - Control *(F=20.76)*, TETBLT - Control *(F=14.44)* and STAD – TETBLT groups *(F=6.25)* are significant *(p<.01)*.

As per Table 65 the *F* ratios obtained for the comparison of the variable Achievement in English for Listening skill between STAD and Control groups, *(F=17.56)*, TETBLT- Control groups and *(F= 6.49)*STAD - TETBLT group *(F=10.55)* are found significant *(p<.01)*.

In the comparison of the variable Achievement in English (Skill wise-Speaking) it is clear that the *F* ratios obtained for the comparison of the variable Achievement in English (Speaking skill) for the Total sample between the groups; STAD - Control *(F=13.63)*, TETBLT – Control *(F=10.08* and STAD - TETBLT groups *(F=3.51)* are significant *(p<.01)*.

In the comparison of the variable Achievement in English (Skill wise-Reading)it is clear that the *F* ratios obtained for the comparison of the variable Achievement in English (Reading skill) for the Total sample between the groups; STAD - Control *(F=19.61)* , TETBLT - Control*(F=14.40)* and STAD – TETBLT groups *(F=5.05)* are significant*(p<.01)*.

As per Table 65 the *F* ratios obtained for the comparison of the variable Achievement in English (Writing skill) *F* ratios obtained for the comparison of the variable Achievement in English (Writing skill) for the Total sample between the groups; STAD - Control *(F=14.36)*, TETBLT - Control *(F=10.68)* and STAD – TETBLT groups *(F=3.67)* are found to be significant at *(p<.01)*.

From the result, it is clear that there exists significant difference between STAD and TETBLT group with Control group, in case of Achievement in English (Total and Skill wise Scores- Listening, Speaking,

Reading and Writing). It is also revealed that the STAD groups differ in mean adjusted scores of Achievement in English (Total and Skill wise Scores) than TETBLT group.

Thus, from the result it can be clearly assumed that when linear adjustment is made for the effect of variation due to the Pre-experimental Status (Total and Skill- wise Scores), Verbal Intelligence, Non-verbal Intelligence and Classroom Environment as Covariates in Combination, there remain statistically significant difference between the three groups.

From the results of the Scheffe' Test, STAD group and**,** TETBLT groups reported significantly higher Achievement in English (Total and Skill wise Scores- Listening, Speaking, Reading and Writing) than the Control group. The significantly higher mean score of STAD and TETBLT groups suggests that the Achievement in English (Total Score) is higher in STAD and TETBLT groups than the Control group. This further means that STAD strategy of Cooperative Learning and TETBLT are more effective for higher Achievement in English than the Activity Oriented Method of Teaching.

The result also indicated that the performance of STAD and TETBLT groups is dissimilar in case of Achievement in English (Total and Skill wise Scores). In all comparisons, STAD Group reported significantly higher Achievement in English (Total and Skill wise Scores) than the TETBLT group. The significantly higher mean score of STAD group points that the Achievement in English (Total Score) is higher in STAD group than the TETBLT group. Hence, it can be assumed STAD strategy of Cooperative Learning is more effective for higher Achievement in English and Skill wise scores performance in Listening, Speaking, Reading and Writing than Technology Enriched Task Based Language teaching (TETBLT).

In all the comparisons, among the three instructional strategies, Student

Teams Achievement Divisions Strategy is found more effective than the Technology Enriched Task Based Language Teaching and Activity oriented Method of Teaching in case of Achievement in English (Total and Skill wise score) of standard VIII students for the Total sample, even after controlling the effect of four Covariates in combination. This further reveals that STAD Strategy of Cooperative learning is relatively effective in enhancing Higher Achievement in English, in general, as well as for the higher performance in Listening, Speaking, Reading and Writing Skill than Technology Enriched Task Based Language teaching (TETBLT) and Activity oriented Method of Teaching.

Summary and Discussion of ANCOVA for Achievement

Results of ANCOVA undertaken to study the effectiveness of Instructional Strategies, particularly Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) create any significant difference in the Criterion Variable (Achievement in English - Total and Skill wise Scores) of of standard VIII students are summarised and discussed in this section.

The F-values obtained for ANCOVA are consolidated and presented in Table 66.

Table 66

Summary of F-values of ANCOVA for Achievement

Independent variable	Dependent variable		Previous Knowledge	Verbal Intelligence	Covariates Non-Verbal Intelligence	Classroom Environment	Four Covariate in Combination
					F-values		
Instructional strategies	Achievement test in English (Total)		77.90**	47.82**	47.63**	47.98**	81.05**
	Skill-wise score	Listening	25.67**	24.30**	24.51**	24.30**	24.67**
		Speaking	27.76**	27.41**	27.38**	27.46**	26.69**
		Reading	42.35**	41.38**	40.99**	41.44**	40.67**
		Writing	39.66**	39.62**	41.26**	39.55**	40.30**

**indicates $p < .01$

ANCOVA with the Dependent Variable, Achievement in English (Total and Skill wise Scores) considering 'four Covariates' singly and in combination were undertaken to study the relative effectiveness of STAD, TETBLT over Control-AOMT. In the ANCOVA for Achievement in English (Total and Skill wise Scores), significant F-values were obtained for Instructional Strategies when Pre-Experimental status in terms of Achievement in English (Total and Skill wise Scores), Verbal Intelligence, Non-verbal Intelligence and Classroom Environment, were removed singly and jointly. These significant F-ratios for Instructional Strategies are further subjected to Scheffe' Test of Post-hoc Comparison to identify the group (STAD, TETBT and Control) which causes the difference.

Results of the Post-hoc comparison of adjusted criterion means between the Experimental and Control groups also yielded significant difference in favour of the Experimental groups (STAD and TETBLT). In all comparisons the Experimental groups (STAD, TETBLT) has advantage over the Control Group as signified by the high adjusted mean scores. From the result, the effectiveness of Student Teams Achievement Division (STAD) and Technology Enriched Task Based Language Teaching (TETBLT) over Activity Oriented Method of Teaching (AOMT) highly evident in case of (Achievement in English -Total and Skill wise Scores). In all these comparisons, as higher means are associated with the STAD Strategy of Cooperative Learning (Experimental Group I), they were found advantageous over the TETBLT and the Control- AOMT. Experimental Group II (TETBLT) is superior to the Control group- AOMT, as evident from their high mean adjusted scores. The superiority of STAD over TETBLT and Control-AOMT is highly evident in case of Achievement in English (Total and Skill wise Scores) of standard VIII students.

Two Way Factorial Analysis of Covariance for Self-Regulation

In this section of the report, the procedure of the Two-way Factorial ANCOVA employed to examine the effectiveness of Instructional Strategies on Self-regulation after controlling the single and joint effects of the Covariates, is presented. In the ANCOVA procedure for Self-regulation, three levels of Instructional Strategies (Experimental group I-STAD and Experiment Group II (TETBLT) and Control-AOMT, three levels of Metacognitive Awareness *(*AAMA, AMA and BAMA*)* were included as the Independent Variables**.** The Covariates of the ANCOVA procedure consists of four variables namely pre-Experimental status in terms of Self Regulation, Verbal Intelligence**,** Non-Verbal Intelligence and Classroom Environment separately and in combination. Self Regulation was utilized as the Dependent Variable**.**

Scheffe[1] Test of Post-hoc Comparison was done for the comparison of adjusted means to find out the group which creates any significant difference in the criterion means wherever significant F-values obtained.

Analysis of Covariance for Self-regulation- Pre-experimental Status in terms of Self Regulation

Two-way Factorial ANCOVA with Pre Experimental Status of Self Regulation as covariate was employed to study the relative effectiveness of Student Teams Achievement Divisions (STAD) Strategy and Technology Enriched Task Based teaching (TETBLT) over Activity Oriented Method of Teaching in case of Self Regulation of standard VIII Students. The data and the results of Covariance Analysis done for Self Regulation is presented in Table 67.

Table 67

Summary of Two -way Factorial ANCOVA for Self Regulation - Pre-Experimental Status as Covariate.

Sample	Dependent Variable		Source of Variation		
			Instructional strategies	Metacognitive Awareness	Instructional Strategies x Metacognitive Awareness
Total Sample	Self Regulation	SS	52649.52	616.976	564.155
		df	2	2	4
		MS	26324.76	308.488	141.039
		F	43.479**	0.51	0.233

**indicates p < .01

From Table 67 *F* values obtained for Instructional Strategies on Self Regulation for the Total sample is significant, $F(2, 132) = 43.47$, $p < .01$. The obtained *F* value is greater than the table value for the corresponding the degrees of freedom even after the adjustment is made for the linear effect of the Pre-experimental Status in terms of Self Regulation as Covariate.

Thus, the results show that a statistically significant difference exist between the criterion means in case of Self Regulation even after the adjustment is made for the linear effect of the Covariate that is Pre-experimental Status in terms of Self Regulation. From the Covariance Analysis it can be inferred that, when a linear adjustment is made for the effect of variation due to difference in Pre-experimental Status in terms of Self Regulation, there is statistically significant difference still existing between the three types of Instructional Strategies for Self Regulation

These results suggest that the STAD, TETBLT and Control groups differ in their mean Self Regulation after the linear adjustment was made for the effect of the Covariate, Pre-experimental Status in terms of Self Regulation.

In the Covariance Analysis, the F-values for Metacognitive Awareness and Metacognitive Awareness x Instructional Strategies are not taken into consideration because Metacognitive Awareness is considered as fixed factor (Winer, 1977)

Adjusted Means and Post-hoc Comparison

Scheffe' Test Post – hoc Comparison was used to determine which one of the three groups of Instructional Strategies (STAD, TETBLT and Control),cause difference in terms of variation in the Criterion means. In the ANCOVA procedure, this comparison is made with adjusted criterion means, which were adjusted to avoid effect of the covariate. This was done on the basis of the significant *F*- Values obtained for the main effect of Instructional Strategies on Self Regulation).

Scheffe' Test of Post-hoc Comparison was employed for comparing the adjusted criterion means of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT). Details of the Scheffe' Test of Post-hoc Comparison is given in Table 68.

Table 68

Result of the Scheffe' test of post hoc comparison between the Adjusted Criterions Means of Self-regulation. *-Pre-experimental Status of Self-regulation scores as Covariate.*

Sample	Dependent Variable	Groups Compared		Adjusted Means		F
				M_1	M_2	
Total sample	Self Regulation	STAD	Control	231.89	174.19	11.30**
		TETBLT	Control	216.32	174.19	8.14**
		STAD	TETBLT	231.89	216.32	3.05**

**indicates $p < .01$

As per Table 68 the *F* ratios obtained for the comparison of the variable Self Regulation, for the Total sample between the groups; STAD -

Control *(F=11.30)*, TETBLT – Control *(F=8.14)* and STAD - TETBLT group *(F=3.05)* are found significant *(p<.01*

From the result, it is clear that there exists significant difference between STAD and TETBLT group with Control group, in case of Self Regulation. It is also revealed that the STAD groups differ in mean adjusted scores of Self Regulation than TETBLT group.

Thus, from the result it can be clearly assumed that when linear adjustment is made for the effect of variation due to the Pre Experimental Status of Self Regulation, there remains statistically significant difference between the three groups.

From the results of the Scheffe' Test, STAD group and TETBLT group reported significantly higher Self Regulation than the Control group. The significantly higher mean score of STAD and TETBLT groups suggests that the Self Regulation is higher in STAD and TETBLT groups than the Control group. This further means that STAD strategy of Cooperative Learning and TETBLT are more effective for higher Self Regulation than the Activity Oriented Method of Teaching.

The result also indicated that the performance of STAD and TETBLT groups are dissimilar in case of Self Regulation. In all comparisons, STAD Group reported significantly higher Self Regulation than the TETBLT group. The significantly higher mean score of STAD group points that the Self Regulation is higher in STAD group than the TETBLT group. Hence, it can be assumed STAD strategy of Cooperative Learning is more effective for higher Self Regulation than Technology Enriched Task Based Language teaching (TETBLT).

In all the comparisons, among the three instructional strategies, STAD, TETBLT and Activity oriented Method of Teaching in case of Self

Regulation of standard VIII students, even after controlling the effect of Pre Experimental Status of Self Regulation as Covariate. This further reveals that STAD Strategy of Cooperative learning is relatively effective in enhancing Higher Self Regulation, than Technology Enriched Task Based Language teaching (TETBLT) and Activity oriented Method of Teaching.

Analysis of Covariance for Self Regulation - Verbal Intelligence as Covariate

Two-way Factorial ANCOVA with Verbal Intelligence as covariate was employed to study the relative effectiveness of Student Teams Achievement Divisions (STAD) Strategy and Technology Enriched Task Based teaching (TETBLT) over Activity Oriented Method of Teaching in case of Self Regulation of standard VIII Students. The data and the results of Covariance Analysis done for Self Regulation is presented in Table 69.

Table 69

Summary of Two -way Factorial ANCOVA for Self-regulation- Verbal Intelligence Status as Covariate.

Sample	Dependent Variable		Source of Variation		
			Instructional strategies	Metacognitive Awareness	Instructional strategies Metacognitive Awareness
Total Sample	Self Regulation	SS	60373.27	2.646	1005.631
		df	2	2	4
		MS	30186.64	1.323	251.408
		F	47.92**	0.002	0.399

**indicates p < .01

From Table 69 *F* values obtained for Instructional Strategies on Self Regulation for the Total sample is significant, $F(2, 132) = 47.92$, $p < .01$. The obtained *F* value is greater than the table value for the corresponding the

degrees of freedom even after the adjustment is made for the linear effect of the Verbal Intelligence as covariate.

Thus, the results show that a statistically significant difference exist between the criterion means in case of Self Regulation even after the adjustment is made for the linear effect of the Covariate that is Verbal Intelligence. From the Covariance Analysis, it can be inferred that, when a linear adjustment is made for the effect of variation due to difference in Verbal Intelligence**,** there is statistically significant difference still existing between the three types of Instructional Strategies for Self Regulation.

These results suggest that the STAD, TETBLT and Control groups differ in their mean Self Regulation after the linear adjustment was made for the effect of the Covariate, Verbal Intelligence.

In the Covariance Analysis, the F-values for Metacognitive Awareness and Metacognitive Awareness x Instructional Strategies are not taken into consideration because Metacognitive Awareness is considered as fixed factor (Winer, 1977)

Adjusted Means and Post-hoc Comparison

Scheffe' Test Post – hoc Comparison was used to determine which one of the three groups of Instructional Strategies (STAD, TETBLT and Control),cause difference in terms of variation in the Criterion means. This was done on the basis of the significant *F*- Values obtained for the main effect of Instructional Strategies on Self Regulation).

Scheffe' Test of Post-hoc Comparison was employed for comparing the adjusted criterion means of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT). Details of the Scheffe' Test of Post-hoc Comparison is given in Table 70.

Table 70

Result of the Scheffe' test of Post hoc Comparison between the Adjusted Criterion Means of Self Regulation. - Verbal Intelligence as Covariate.

Sample	Dependent Variable	Groups Compared		Adjusted Means		F
				M_1	M_2	
Total sample	Self-regulation	STAD	Control	232.44	173.88	11.54**
		TETBLT	Control	215.35	173.88	8.45**
		STAD	TETBLT	232.44	215.35	3.09**

**indicates p < .01

As per Table 70 the *F* ratios obtained for the comparison of the variable Self Regulation, for the Total sample between the groups; STAD - Control *(F=11.54)*, TETBLT - Control*(F=8.45)* and STAD - TETBLT group *(F=3.09)* are found significant*(p<.01*

From the result, it is clear that there exists significant difference between STAD and TETBLT group with Control group, in case of Self Regulation. It is also revealed that the STAD groups differ in mean adjusted scores of Self Regulation than TETBLT group.

Thus, from the result it can be clearly assumed that when linear adjustment is made for the effect of variation due to the Verbal Intelligence of Self Regulation, there remains statistically significant difference between the three groups.

From the results of the Scheffe' Test, STAD group and**,** TETBLT groups reported significantly higher Self Regulation than the Control group. The significantly higher mean score of STAD and TETBLT groups suggests that the Self Regulation is higher in STAD and TETBLT groups than the Control group. This further means that STAD strategy of Cooperative Learning and TETBLT are more effective for higher Self Regulation than the Activity Oriented Method of Teaching.

The result also indicated that the performance of STAD and TETBLT groups are dissimilar in case of Self Regulation. In all comparisons, STAD Group reported significantly higher Self Regulation than the TETBLT group. The significantly higher mean score of STAD group points that the Self Regulation is higher in STAD group than the TETBLT group. Hence, it can be assumed STAD strategy of Cooperative Learning is more effective for higher Self Regulation than Technology Enriched Task Based Language teaching (TETBLT).

In all the comparisons, among the three instructional strategies, STAD Strategy is found more effective than the TETBLT and Activity oriented Method of Teaching in case of Self Regulation of standard VIII students for the Total sample, even after controlling the effect of Verbal Intelligence as Covariate. This further reveals that STAD Strategy of Cooperative learning is relatively effective in enhancing Higher Self Regulation than Technology Enriched Task Based Language teaching (TETBLT) and Activity oriented Method of Teaching.

Analysis of Covariance for Self-regulation- Non-Verbal Intelligence as Covariate.

Two-way Factorial ANCOVA with Non-Verbal Intelligence as covariate was employed to study the relative effectiveness of Student Teams Achievement Divisions (STAD) Strategy, Technology Enriched Task Based teaching (TETBLT) over Activity Oriented Method of Teaching in case of Self Regulation of standard VIII Students. The data and the results of Covariance Analysis done for Self Regulation is presented in Table 71.

Table 71

Summary of Two -way Factorial ANCOVA for Self-regulation- Non-Verbal Intelligence as Covariate.

Sample	Dependent Variable		Source of Variation		
			Instructional strategies	Metacognitive Awareness	Instructional strategies Metacognitive Awareness
Total sample	Self Regulation	SS	60566.96	68.365	730.354
		df	2	2	4
		MS	30283.48	34.183	182.588
		F	48.01**	0.054	0.289

**indicates p < .01

From Table 71 *F* values obtained for Instructional Strategies on Self Regulation for the Total sample is significant, $F(2, 132) = 48.01$, $p < .01$. The obtained *F* value is greater than the table value for the corresponding the degrees of freedom even after the adjustment is made for the linear effect of the Non-Verbal Intelligences as covariate.

Thus, the results show that a statistically significant difference exist between the criterion means in case of Self Regulation even after the adjustment is made for the linear effect of the Covariate that is Non-Verbal Intelligence. From the Covariance Analysis it can be inferred that, when a linear adjustment is made for the effect of variation due to difference in Non-Verbal Intelligence, there is statistically significant difference still existing between the three types of Instructional Strategies for Self Regulation

These results suggest that the STAD, TETBLT and Control groups differ in their mean Self Regulation after the linear adjustment was made for the effect of the Covariate, Non-Verbal Intelligence.

In the Covariance Analysis, the F-values for Metacognitive Awareness and Metacognitive Awareness x Instructional Strategies are not taken into

consideration because Metacognitive Awareness is considered as fixed factor (Winer, 1977)

Adjusted Means and Post-hoc Comparison

Scheffe' Test Post – hoc Comparison was used to determine which one of the three groups of Instructional Strategies (STAD, TETBLT and Control), cause difference in terms of variation in the Criterion means. This was done on the basis of the significant *F*- Values obtained for the main effect of Instructional Strategies on Self Regulation.

Scheffe' Test of Post-hoc Comparison was employed for comparing the adjusted criterion means of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT). Details of the Scheffe' Test of Post-hoc Comparison is given in Table 72.

Table 72

Result of the Scheffe' test of Post hoc Comparison between the Adjusted Criterion Means of Self-regulation- Non-Verbal Intelligences Covariate.

Sample	Dependent Variable	Groups Compared		Adjusted Means		F
				M_1	M_2	
Total sample	Self Regulation	STAD	Control	231.56	173.67	11.42**
		TETBLT	Control	217.17	173.67	8.55**
		STAD	TETBLT	231.56	217.17	2.81**

**indicates p < .01

As per Table 72 the *F* ratios obtained for the comparison of the variable Self Regulation, for the Total sample between the groups; STAD - Control *(F=11.42)*, TETBLT – Control *(F=8.55)* and STAD - TETBLT group *(F=2.81)* are found significant *(p<.01)*.

From the result, it is clear that there exists significant difference between STAD and TETBLT group with Control group, in case of Self

Regulation. It is also revealed that the STAD groups differ in mean adjusted scores of Self Regulation than TETBLT group.

Thus, from the result it can be clearly assumed that when linear adjustment is made for the effect of variation due to the Non-Verbal Intelligence, there remain statistically significant difference between the three groups.

From the results of the Scheffe' Test, STAD group and**.** TETBLT group reported significantly higher Self Regulation than the Control group. The significantly higher mean score of STAD and TETBLT groups suggests that the Self Regulation is higher in STAD and TETBLT groups than the Control group. This further means that STAD strategy of Cooperative Learning and TETBLT are more effective for higher Self Regulation than the Activity Oriented Method of Teaching.

The result also indicated that the performance of STAD and TETBLT groups are dissimilar in case of Self Regulation. In all comparisons, STAD Group reported significantly higher Self Regulation than the TETBLT group. The significantly higher mean score of STAD group points that the Self Regulation is higher in STAD group than the TETBLT group. Hence, it can be assumed STAD strategy of Cooperative Learning is more effective for higher Self Regulation than TETBLT.

In all the comparisons, among the three instructional strategies, STAD Strategy is found more effective than the Technology Enriched Task Based Language Teaching and Activity oriented Method of Teaching in case of Self Regulation of standard VIII students for the Total sample, even after controlling the effect of Non-Verbal Intelligence as Covariate. This further reveals that STAD Strategy of Cooperative learning is relatively effective in enhancing Higher Self Regulation, than Technology Enriched Task Based

Language teaching (TETBLT) and Activity oriented Method of Teaching.

Analysis of Covariance for Self Regulation- Classroom Environment as Covariate

Two-way Factorial ANCOVA with Classroom Environment as covariate was employed to study the relative effectiveness of Student Teams Achievement Divisions (STAD) Strategy and Technology Enriched Task Based teaching (TETBLT) over Activity Oriented Method of Teaching in case of Self Regulation of standard VIII Students. The data and the results of Covariance Analysis done for Self Regulation is presented in Table 73.

Table 73

Summary of Two -way Factorial ANCOVA for Self Regulation- *Classroom Environment as Covariate.*

Sample	Dependent Variable		Source of Variation		
			Instructional strategies	Metacognitive Awareness	Instructional strategies x Metacognitive Awareness
Total	Self-regulation	SS	62152.93	76.148	517.241
		df	2	2	4
		MS	31076.46	38.074	129.31
		F	47.76**	0.059	0.199

**indicates p < .01

From Table 73 *F* values obtained for Instructional Strategies on Self Regulation for the Total sample is significant, *F*(2, 132) =47.76, *p* < .01. The obtained *F* value is greater than the table value for the corresponding the degrees of freedom even after the adjustment is made for the linear effect of the Classroom Environment as covariate.

Thus, the results show that a statistically significant difference exist between the criterion means in case of Self Regulation even after the adjustment is made for the linear effect of the Covariate that is Classroom

Environment**.** From the Covariance Analysis it can be inferred that, when a linear adjustment is made for the effect of variation due to difference in Classroom Environment**,** there is statistically significant difference still existing between the three types of Instructional Strategies for Self Regulation.

These results suggest that the STAD, TETBLT and Control groups differ in their mean Self Regulation after the linear adjustment was made for the effect of the Covariate, Classroom Environment.

In the Covariance Analysis, the F-values for Metacognitive Awareness and Metacognitive Awareness x Instructional Strategies are not taken into consideration because Metacognitive Awareness is considered as fixed factor (Winer, 1977)

Adjusted Means and Post-hoc Comparison

Scheffe' Test Post – hoc Comparison was used to determine which one of the three groups of Instructional Strategies (STAD, TETBLT and Control), cause difference in terms of variation in the Criterion means. This was done on the basis of the significant *F*- Values obtained for the main effect of Instructional Strategies on Self Regulation.

Scheffe' Test of Post-hoc Comparison was employed for comparing the adjusted criterion means of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT). Details of the Scheffe' Test of Post-hoc Comparison is given in Table 74.

Table 74

Result of the Scheffe' test of post hoc comparison between the Adjusted Criterion Means of Self Regulation - Classroom Environments as Covariate.

Sample	Dependent Variable	Groups Compared		Adjusted Means		F
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				M_1	M_2	
		STAD	Control	232.02	173.73	11.77**
Total sample	Self Regulation	TETBLT	Control	215.92	173.73	8.50**
		STAD	TETBLT	232.02	232.02	3.23**

**indicates p < .01

As per Table 74, the *F* ratios obtained for the comparison of the variable Self Regulation, for the Total sample between the groups; STAD - Control *(F*=11.77), TETBLT – Control *(F*=8.50) and STAD - TETBLT group *(F*=3.23) are found significant*(p<.01*

From the result, it is clear that there exists significant difference between STAD and TETBLT group with Control group, in case of Self Regulation. It is also revealed that the STAD groups differ in mean adjusted scores of Self Regulation than TETBLT group.

Thus, from the result it can be clearly assumed that when linear adjustment is made for the effect of variation due to the Classroom Environment, there remains statistically significant difference between the three groups.

From the results of the Scheffe' Test, STAD group and**,** TETBLT group reported significantly higher Self Regulation than the Control group. The significantly higher mean score of STAD and TETBLT groups suggests that the Self Regulation is higher in STAD and TETBLT groups than the Control group. This further means that STAD strategy of Cooperative Learning and TETBLT are more effective for higher Self Regulation than the Activity Oriented Method of Teaching.

The result also indicated that the performance of STAD and TETBLT groups are dissimilar in case of Self Regulation. In all comparisons, STAD Group reported significantly higher Self Regulation than the TETBLT group. The significantly higher mean score of STAD group points that the Self Regulation is higher in STAD group than the TETBLT group. Hence, it can be assumed STAD strategy of Cooperative Learning is more effective for higher Self Regulation than Technology Enriched Task Based Language teaching (TETBLT).

In all the comparisons, among the three instructional strategies, STAD Strategy is found more effective than the TETBLT and Activity oriented Method of Teaching in case of Self Regulation of standard VIII students for the Total sample, even after controlling the effect of Classroom Environment as Covariate. This further reveals that STAD Strategy of Cooperative learning is relatively effective in enhancing Higher Self Regulation, in general, as well as for the higher performance Self Regulation than Technology Enriched Task Based Language teaching (TETBLT) and Activity oriented Method of Teaching.

Analysis of Covariance for Self Regulation (Total and Skill-wise Scores*) - Four Covariates in Combination*

Two-way Factorial ANCOVA with Pre-experimental Status of Self Regulation, Verbal Intelligence, Non-verbal Intelligence and Classroom Environment as Covariates in Combination was employed to study the effectiveness of Student Teams Achievement Divisions (STAD) Strategy, Technology Enriched Task Based teaching (TETBLT) over Activity Oriented Method of Teaching in case of Self Regulation of standard VIII Students. The data and the results of covariance analysis of Self Regulation is presented in Table 75.

Table 75

Summary of Two -way Factorial ANCOVA for Achievement Self Regulation *-Four Covariates in Combination.*

Sample	Dependent Variable		Source of Variation		
			Instructional Strategies	Metacognitive Awareness	Instructional Strategies * Metacognitive Awareness
Total	Self-regulation	SS	59316.12	7.359	1424.081
		df	2	2	4
		MS	29658.06	3.68	356.02
		F	47.71**	0.006	0.573

**indicates p < .01

From Table 75 *F* values obtained for Instructional Strategies on Achievement Self Regulation) of Standard VIII students for the Total sample is significant $F(2, 132) = 47.71$, $p < .01$. The obtained *F* value is greater than the table value for the corresponding the degrees of freedom even after the adjustment is made for the linear effect of the Pre-experimental Status in terms of Self Regulation, Verbal Intelligence, Non-verbal Intelligence and Classroom Environment as Covariates in Combination .

Thus, the results show that a statistically significant difference exist between the criterion means in case of Self Regulation even after the adjustment is made for the linear effect of the four Covariate in Combination . From the Covariance Analysis it can be inferred that, when a linear adjustment is made for the effect of variation due to difference in Covariates in Combination, there is statistically significant difference still existing between the three types of Instructional Strategies for Self Regulation.

These results suggest that the STAD, TETBLT and Control groups are differ in their mean Self Regulation after the linear adjustment was made for the effect of the Covariates in Combination .

In the Covariance Analysis, the F-values for Metacognitive Awareness and Metacognitive Awareness x Instructional Strategies are not taken into consideration because Metacognitive Awareness is considered as fixed factor (Winer, 1977)

Adjusted Means and Post-hoc Comparison

Scheffe' Test Post – hoc Comparison was used to determine which one of the three groups of Instructional Strategies (STAD, TETBLT and Control), cause difference in terms of variation in the Criterion means. This was done on the basis of the significant *F*- Values obtained for the main effect of Instructional Strategies on Self Regulation.

Scheffe' Test of Post-hoc Comparison was employed for comparing the adjusted criterion means of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT). Details of the Scheffe' Test of Post-hoc Comparison is given in Table 76.

Table 76

Result of the Scheffe' Test of Post hoc Comparison between the Adjusted Criterion Means of Achievement in Self Regulation.-Four Covariates in Combination.

Sample	Dependent Variable	Groups Compared		Adjusted Means		F
				M_1	M_2	
Total sample	Self Regulation	STAD	Control	266.84	178.05	17.51**
		TETBLT	Control	219.24	178.05	7.99**
		STAD	TETBLT	266.84	219.24	9.33**

**indicates $p < .01$

From the result, it is clear that there exists significant difference between STAD and TETBLT group with Control group, in case of From Table, it is clear that the *F* ratios obtained for the comparison of the variable Self Regulation for the Total sample between the groups; STAD - Control

(F=17.51) , TETBLT – Control *(F=7.99)* and STAD - TETBLT group *(F=9.33)* are significant *(p<.01)*.

From the result, it is clear that there exists significant difference between STAD and TETBLT group with Control group, in case of Self Regulation. It is also revealed that the STAD groups differ in mean adjusted scores of Self Regulation than TETBLT group.

Thus, from the result it can be clearly assumed that when linear adjustment is made for the effect of variation due to the Pre-experimental Status in terms of Self Regulation, Verbal Intelligence, Non-verbal Intelligence and Classroom Environment as Covariates in Combination, there remains statistically significant difference between the three groups.

From the results of the Scheffe' Test, STAD group and TETBLT group reported significantly higher Self Regulation than the Control group. The significantly higher mean score of STAD and TETBLT groups suggests that the Self Regulation is higher in STAD and TETBLT groups than the Control group. This further means that STAD strategy of Cooperative Learning and TETBLT are more effective for higher Self Regulation than the Activity Oriented Method of Teaching.

The result also indicated that the performance of STAD and TETBLT groups are dissimilar in case of Self Regulation. In all comparisons, STAD Group reported significantly higher Self Regulation than the TETBLT group. The significantly higher mean score of STAD group points that the Self Regulation is higher in STAD group than the TETBLT group. Hence, it can be assumed STAD strategy of Cooperative Learning is more effective for higher Self Regulation than Technology Enriched Task Based Language teaching (TETBLT).

In all the comparisons, among the three instructional strategies, STAD

Strategy is found more effective than the TETBLT and Activity oriented Method of Teaching in case of Self Regulation of standard VIII students for the Total sample, even after controlling the effect of four Covariates in combination. This further reveals that STAD Strategy of Cooperative learning is relatively effective in enhancing Higher Self Regulation than Technology Enriched Task Based Language teaching (TETBLT) and Activity oriented Method of Teaching.It is also revealed that the STAD groups differ in mean adjusted scores of Self Regulation than TETBLT group.

Thus, from the result it can be clearly assumed that when linear adjustment is made for the effect of variation due to the Pre-experimental Status of Self Regulation, Verbal Intelligence, Non-verbal Intelligence and Classroom Environment as Covariates in Combination, there remains statistically significant difference between the three groups.

From the results of the Scheffe' Test, STAD group and**,** TETBLT group reported significantly higher Self Regulation than the Control group. The significantly higher mean score of STAD and TETBLT groups suggests that the Self Regulation is higher in STAD and TETBLT groups than the Control group. This further means that STAD strategy of Cooperative Learning and TETBLT are more effective for higher Self Regulation than the Activity Oriented Method of Teaching.

The result also indicated that the performance of STAD and TETBLT groups are dissimilar in case of Self Regulation. In all comparisons, STAD Group reported significantly higher Self Regulation than the TETBLT group. The significantly higher mean score of STAD group points that the Self Regulation is higher in STAD group than the TETBLT group. Hence, it can be assumed STAD strategy of Cooperative Learning is more effective for higher Self Regulation than Technology Enriched Task Based Language teaching (TETBLT).

In all the comparisons, among the three instructional strategies, Student Teams Achievement Divisions Strategy is found more effective than the Technology Enriched Task Based Language Teaching and Activity oriented Method of Teaching in case of Self Regulation of standard VIII students for the Total sample, even after controlling the effect of four Covariates in combination. This further reveals that STAD Strategy of Cooperative learning is relatively effective in enhancing Higher Self Regulation, than Technology Enriched Task Based Language teaching (TETBLT) and Activity oriented Method of Teaching.

Summary and Discussion of Analysis of Covariance for Self Regulation

Results of ANCOVA undertaken to study the effectiveness of Instructional Strategies, particularly Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) create any significant difference in the Criterion Variable Self Regulation of standard VIII students are summarised and discussed in this section.

The F-values obtained for ANCOVA are consolidated and presented in Table 77.

Table 77

Summary of F-values of ANCOVA for Self-regulation

Independent Variable	Dependent Variable	Covariates				
		Previous Knowledge	Verbal Intelligence	Non-verbal Intelligence	Classroom Environment	Four Covariate in Combination
		F-values				
Instructional strategies	Self-regulation	43.47**	47.92**	48.01**	47.76**	47.71**

** Significant at 0.01 level

15 ANCOVA with the Dependent Variable, Self Regulation with 'four Covariates' were undertaken to study the relative effectiveness of STAD Strategy , TETBLT over Activity Oriented Method of Teaching. In the ANCOVA for Self Regulation, significant F-values were obtained for Instructional Strategies when Pre-Experimental status in terms of Self Regulation, Verbal Intelligence, Non-verbal Intelligence and Classroom Environment are controlled singly and in combination. These significant F-ratios for Instructional Strategies are further subjected to Scheffe' Test of Post-hoc Comparison to identify the group (Experimental / Control) which causes the difference.

Results of the Post-hoc comparison of adjusted criterion means between the Experimental Groups and the Control group also yielded significant difference in favour of the Experimental groups (STAD and TETBLT). In all comparisons the Experimental groups (STAD, TETBLT) has advantage as signified by the high mean scores. This indicated the effectiveness of Student Teams Achievement Division (STAD) -Technology Enriched Task Based Language Teaching (TETBLT) over Activity Oriented Method of Teaching (AOMT). In all these comparisons, as higher means are associated with the STAD Strategy of Cooperative Learning (Experimental Group I), they were found advantageous over the (TETBLT) and the Control-

AOMT**.** Experimental Group II (TETBLT) is superior to the Control group, as evident from their high mean adjusted scores. In 15 out of 15 ANCOVA, the superiority of STAD over TETBLT and Control group is highly evident in case of Self Regulation of standard VIII students.

Major Analysis - Part II

In this section of the chapter, the main and interaction effects of Independent Variables (Instructional Strategies and Metacognitive Awareness) on Dependent Variables (Achievement in English Total and Skill wise Scores and Self Regulation) employing the statistical technique, Two-way Analysis of Variance was done and presented. The results obtained are described in detail in the following sections, which will help to understand whether variation in the Instructional Strategies and Metacognitive Awareness singly and jointly causes changes in the Dependent Variables.

Two way Analysis of Variance (ANOVA) for Achievement in English (Total and Skill wise Scores) and Self Regulation.

The main and interaction effects of Instructional Strategies and Metacognitive Awareness on Achievement in English (Total and Skill wise Scores) and Self Regulation of standard VIII students were examined employing Two-way ANOVA with 3 x 3 Factorial design. This was done separately for Total sample, Boys and Girls.

Two-way ANOVA with 3 x 3 Factorial design include**s** three levels of Instructional Strategies *(*Student Teams Achievement Divisions (STAD) Strategy, Technology Enriched Task Based Language Teaching (TETBLT) and Activity Oriented Method of Teaching (AOMT))and three levels of Metacognitive Awareness *(*Above Average Metacognitive Awareness – AAMA**,** Average Metacognitive Awareness (AMA*)* and Below Average Metacognitive Awareness - BAMA*)*.The whole computations were done

using the computer programme, Statistical Package for Social Science **-** SPSS (Einspruch, 1998).As a preliminary step, before proceeding with ANOVA, the investigator has checked the data to understand whether the assumptions of ANOVA as suggested by Scheffe' (1959), Hays (1973), Guilford and Fruchter (1978**)** and Fox (1984) have been followed and found reasabl*y* satisfied.

Two way Analysis of Variance (ANOVA) for Achievement in English (Total and Skill wise Scores).

The results of Two Way ANOVA undertaken to investigate the main and interaction effects of Independent Variables, Instructional Strategies (STAD, TETBLT, and Control) and Metacognitive Awareness on Achievement in English (Total and Skill wise Scores) are summarised and discussed in this part of the chapter. Two way ANOVA consists five ANOVA each in three samples - Total sample, Boys and Girls. 3 x 3 ANOVA was utilized to observe whether Achievement in English (Total and Skill wise Scores) vary due to the single or combined effect of the Independent Variables.

Main and of interaction effects of Instructional Strategies and Metacognitive Awareness on Achievement in English (Total and Skill wise Scores) for Total Sample.

Five Two-way ANOVA were employed to study the main and interaction effects of Instructional Strategies and Metacognitive Awareness on Achievement in English (Total and Skill wise Scores) separately for the Total sample.

Summary of Two-way ANOVA for Total sample is given in Table 78.

Table 78

Summary of Two-way ANOVA for Achievement in English (Total and Skill wise Scores) by Instructional Strategies by Metacognitive Awareness in Total sample

Sample	Number of Students	Dependent Variable		Source of Variation		
				Instructional Strategies	Metacognitive Awareness	Instructional Strategies x Metacognitive Awareness
Total Sample	135	Achievement in English (Total Score)	SS	1882.279	44.095	80.889
			df	2	2	4
			MS	941.139	22.047	20.222
			F	47.972**	1.124^{ns}	1.031^{ns}
		Skill wise Scores / Listening	SS	193.111	6.987	14.033
			MS	2	2	4
			df	96.555	3.493	3.508
			F	24.659**	0.892^{ns}	0.896^{ns}
		Speaking	SS	242.652	8.918	18.938
			MS	2	2	4
			df	121.326	4.459	4.735
			F	27.755**	1.02^{ns}	1.083^{ns}
		Reading	SS	1001.208	3.103	74.453
			MS	2	2	4
			df	500.604	1.552	18.613
			F	41.791**	0.13^{ns}	1.554^{ns}
		Writing	SS	1712.097	23.909	55.592
			MS	2	2	4
			df	856.048	11.954	13.898
			F	39.947**	0.558^{ns}	0.649^{ns}

**indicates $p < .01$

Main Effect of Instructional Strategies.

As per Table 78 the *F*-value, obtained for the main effect of Instructional Strategies on Achievement in English (Total Score) is significant, $F (2, 132) = 47.97$, $p < .01$. Hence, it can be inferred that Achievement in English (Total Score) for Total sample changes with regard to the changes in the levels of Instructional Strategies - STAD, TETBLT, and Control.

Table 78 also shows that the *F*-values, for *df* 2,132, obtained for the main effect of Instructional Strategies for on Achievement in English (Skill wise Scores) in Listening (24.659), Speaking (27.75), Reading (41.79), and Writing (39.94) are significant ($p < .01$). The result indicates that changes in the levels of Instructional Strategies can make significant variation in the scores of Achievement in English (Skill wise Scores) of standard VIII students.

Main Effect of Metacognitive Awareness.

The *F*-value, obtained for the main effect of Metacognitive Awareness on Achievement in English (Total score) English for Total sample is not significant, $F(2,132) = 1.12$, $p = ns$. The result indicates that changes in the levels of Metacognitive Awareness cannot make any significant variation in the scores of Achievement in English (Total score) of standard VIII students.

The *F*-values, for *df* 2,132, obtained for the main effect of Metacognitive Awareness on Achievement in English (Skill wise Scores) in Listening (0.89), Speaking (1.02), Reading (0.13), and writing (0.55) are not significant ($p< .05$). The result indicates that changes in the levels of Metacognitive Awareness cannot make any significant variation in the scores of Achievement in English (Skill wise Scores) of standard VIII students.

Interaction Effect of Instructional Strategies and Metacognitive Awareness.

The *F*-value obtained for the interaction effect of Instructional Strategies and Metacognitive Awareness on Achievement in English (Total score) for Total sample is not significant, $F= (2,132)\ 1.03$, ($p = $ ns). The obtained result thus suggests that Achievement in English (Total score) for the Total sample is not influenced by the combined effect of the Instructional Strategies and Metacognitive Awareness.

From Table 78, *F*- values, for *df* 2,132, for the interaction effect of Instructional Strategies and Metacognitive Awareness on Achievement in English (Skill wise Scores) in Listening (0.89), Speaking (1.08), Reading, (1.55), and Writing (0.64) are not significant($p<$ .05). The obtained result thus suggests that Achievement in English (Skill wise Scores) for Total sample is not influenced by the combined effect of the Instructional Strategies and Metacognitive Awareness.)

Scheffe' Test of Post-hoc Comparison Based on Three Groups of Instructional Strategies- Total Sample.

Scheffe' Test of Post-hoc Comparison was done to determine the group difference between the three groups based on Instructional Strategies (STAD, TETBLT and AOMT). This was done on the basis of the significant *F*-values obtained for the main effect of Instructional Strategies on Achievement (Total and Skillwise Scores). The procedure of post-hoc comparison has already been described in the ANCOVA section**.**

In the comparison of the variable Achievement in English (Total and for relevant skills) for the Total Sample, the F ratio obtained for the comparison beween three groups of Instructional strategies (STAD- Control, STAD-TETBLT and TETBLT) are found significant, except for some skills **(**See Table 30)

From the result it is revealed that there exists significant difference between the three levels of Instructional Strategies (STAD Strategy, TETBLT and AOMT) with reference to the mean Achievement in Englis (Total scores and relevant skills) for the Total sample.

From the Scheffe' Test, STAD and TETBLT groups reported significantly higher Achievement in English (Total and for relevant Skillwise Scores) than the Control Group for Total sample. In all comparisons, STAD

Group reported significantly higher Achievement in English (Total and for relevant Skillwise Scores) than the TETBLT group. Among the three Instructional Strategies STAD contribute much to Achievement in English than TETBLT and AOMT.

Main and interaction effects of Instructional Strategies and Metacognitive Awareness on Achievement in English (Total and Skill wise Scores) for Boys.

Two-way ANOVA was employed to find out the main and interaction effects of Instructional Strategies and Metacognitive Awareness on Achievement in English (Total and Skill wise Scores)for the subsample Boys. Summary of Two-way ANOVA is given in Table 79.

Table 79

Summary of   Two-way ANOVA   for Achievement in English (Total and Skill wise Scores by instructional Strategies (STAD, TETBLT, and Control) by Metacognitive Awareness for Boys.

Sample	Dependent Variable		Source of Variation		
			Instructional Strategies	Metacognitive Awareness	Instructional Strategies * Metacognitive Awareness
Boys	Achievement in English	SS	1155.897	5.993	26.233
		MS	2	2	3
		df	577.948	2.996	8.744
		F	21.571*	0.112	0.326
	Skill wise Scores — Listening	SS	200.117	2.495	9.078
		MS	2	2	3
		df	100.058	1.248	3.026
		F	21.947*	0.274	0.664
	Speaking	SS	127.276	27.843	21.479
		MS	2	2	3
		df	63.638	13.922	7.16
		F	12.825*	2.806	1.443
	Reading	SS	482.244	24.348	60.925
		MS	2	2	3
		df	241.122	12.174	20.308
		F	25.761*	1.301	2.17
	Writing	SS	1741.314	23.61	19.517
		MS	2	2	3
		df	870.657	11.805	6.506
		F	65.401*	0.887	0.489

**indicates *p* < .01

Main Effect of Instructional Strategies

As per Table 79 the F-value obtained for the main effect of Instructional Strategies on Achievement in English (Total score) for Boys is significant, $F(2, 62) = 21.57$, $p < .01$). Hence, it can be inferred that Achievement in English (Total Score) for Boys changes with regard to the changes in the levels of Instructional Strategies - STAD, TETBLT, and Control.

Table 79 also shows that the *F*-values, for *df* 2,62, obtained for the main effect of Instructional Strategies on Achievement in English (Skill wise Scores) in Listening (21.947), Speaking (12.82), Reading (25.76), and Writing (65.40) are significant (2, 62; *p* < .01). The result indicates that changes in the levels of Instructional Strategies can make significant variation in the scores of Achievement in English (Skill wise Scores) of Boys.

Main Effect of Metacognitive Awareness.

The *F*-value, obtained for the main effect of Metacognitive Awareness on Achievement in English (Total score) for Boys is not significant, *F* (2,62) = 0.11, *p* = *n.s*). The result indicates that changes in the levels of Metacognitive Awareness cannot make any significant variation in the scores of Achievement in English (Total score) of Boys.

The *F*-values, for *df* 2,62 obtained for the main effect of Metacognitive Awareness on Achievement in English (Skill wise Scores) in Listening (0.27), Speaking (2.80), Reading (1.30), and writing (0.88) are not significant (*p* = n.s). The result indicates that changes in the levels of Metacognitive Awareness cannot make any significant variation in the scores of Achievement in English (Skill wise Scores) of Boys.

Interaction Effect of Instructional Strategies and Metacognitive Awareness.

The *F*-values obtained for the interaction effect of Instructional Strategies and Metacognitive Awareness on Achievement in English (Total score) for Boys is not significant *F*= (2,62) 0.32, *p* = ns). The obtained result thus suggests that Achievement in English (Total score) for Boys is not influenced by the combined effect of the Instructional Strategies and Metacognitive Awareness

From Table 79 *F*- values for *df* 2,62,obtained for the interaction effect of Instructional Strategies and Metacognitive Awareness on Achievement in English (Skill wise Scores) in Listening (0.66), Speaking (1.44), Reading, (2.17), and Writing (0.48) are not significant(*p*=n.s.). The obtained result thus suggests that Achievement in English (Skill wise Scores) for Total sample is not influenced by the combined effect of the Instructional Strategies and Metacognitive Awareness.)

Scheffe' Test of Post-hoc Comparison Based on Three Groups of Instructional Strategies- Boys.

Scheffe' Test of Post-hoc Comparison was done to determine the group difference between the three groups based on Instructional Strategies (STAD, TETBLT and AOMT). This was done on the basis of the significant *F*-values obtained for the main effect of Instructional Strategies on Achievement (Total and Skill wise Scores). The procedure of post-hoc comparison has already been described in the ANCOVA section**.**

In the comparison of the variable Achievement in English (Total and skill wise) for the Boys, the F ratio obtained for the comparison between three groups of Instructional strategies (STAD- Control, STAD-TETBLT and TETBLT) are found significant, except for some skills **(**See Table 33)

From the result it is revealed that there exists significant difference between the three levels of Instructional Strategies (STAD Strategy, TETBLT and AOMT) with reference to the mean Achievement in English (Total scores and relevant skills) for the Boys.

From the Scheffe' Test, STAD and TETBLT groups reported significantly higher Achievement in English (Total and for relevant Skill wise Scores) than the Control Group for Boys. In all comparisons, STAD Group reported significantly higher Achievement in English (Total and for relevant

Skill wise Scores) than the TETBLT group. Among the three Instructional Strategies STAD contribute much to Achievement in English than TETBLT and AOMT.

Main and interaction effects of Instructional Strategies and Metacognitive Awareness on Achievement in English (Total and Skill wise Scores) for Girls.

Two-way ANOVA was employed to find out the main and interaction effects of Instructional Strategies and Metacognitive Awareness on Achievement in English (Total and Skill wise Scores) of Girls students. Summary of Two-way ANOVA for Girls is given in Table 80.

Table 80

Summary of Two-way ANOVA for Achievement in English (Total and Skill wise Scores by instructional strategies (STAD, TETBLT, and Control) by Metacognitive Awareness for Girls

Sample		Dependent Variable		Source of Variation		
				Instructional Strategies	Metacognitive Awareness	Instructional Strategies **x** Metacognitive Awareness
Girls	Skill wise Scores	Achievement in English (Total Score)	SS	994.797	76.647	121.815
			df	2	2	4
			MS	497.399	38.323	30.454
			F	71.19**	2.485	2.359
		Listening	SS	161.834	2.612	27.72
			MS	2	2	4
			df	80.917	1.306	6.93
			F	23.918**	0.386	2.048
		Speaking	SS	120.513	1.931	3.743
			MS	2	2	4
			df	60.256	0.966	0.936
			F	14.807**	0.237	0.23
		Reading	SS	468.716	4.53	99.499
			MS	2	2	4
			df	234.358	2.265	24.875
			F	18.2**	0.176	1.932
		Writing	SS	460.222	49.696	68.194
			MS	2	2	4
			df	230.111	24.848	17.049
			F	8.34**	0.901	0.618

**indicates *p*< .01

Main Effect of Instructional Strategies.

As per Table 80 the *F*-value obtained for the main effect of Instructional Strategies on Achievement in English (Total Score) for girls is significant, *F* (2, 167) = 71.19, *p*<.01. Hence, it can be inferred that Achievement in English (Total Score) for girls changes with regard to the

changes in the levels of Instructional Strategies - STAD, TETBLT, and Control.

Table 80 also shows that the *F*-values, for *df* 2,167, obtained for the main effect of Instructional Strategies on Achievement in English (Skill wise Scores) in Listening (23.91), Speaking (14.80), Reading (18.2), and Writing (8.34) are significant ($p = .01$). The result indicates that changes in the levels of Instructional Strategies can make significant variation in the scores of Achievement in English (Skill wise Scores) of Girls.

Main Effect of Metacognitive Awareness

The *F*-value, obtained for the main effect of Metacognitive Awareness on Achievement in English (Total score) English for girls is not significant, $F(2, 67) = 2.48$, (p=n.s.). The result indicates that changes in the levels ofMetacognitive Awareness cannot make any significant variation in the scores of Achievement in English (Total score) of Girls**.**

The *F*-values, for *df* 2,67, obtained for the main effect of Metacognitive Awareness on Achievement in English (Skill wise Scores) in Listening (0.38), Speaking (0.23), Reading (0.17), and writing (0.90) are not significant(p=n.s). The result indicates that changes in the levels of Metacognitive Awareness cannot make any significant variation in the scores of Achievement in English (Skill wise Scores) of Girls.

Interaction Effect of Instructional Strategies and Metacognitive Awareness.

The *F*-value obtained for the interaction effect of Instructional Strategies and Metacognitive Awareness on Achievement in English (Total score) for girls is not significant $F= (2, 67)$ 2.35, p = n.s. The obtained result thus suggests that Achievement in English (Total score) for Girls is not

influenced by the combined effect of the Instructional Strategies and Metacognitive Awareness

From Table 80 *F*- values, for *df* 2,67,obtained for the interaction effect of Instructional Strategies and Metacognitive Awareness on Achievement in English (Skill wise Scores) in Listening (2.04), Speaking (0.23), Reading, (1.93), and Writing (0.61) arenot significant($p =$ n.s). The obtained result thus suggests that Achievement in English (Skill wise Scores) for Girlsisnot influenced by the combined effect of the Instructional Strategies and Metacognitive Awareness.

Scheffe' Test of Post-hoc Comparison Based on Three Groups of Instructional Strategies- Girls.

Scheffe' Test of Post-hoc Comparison was done to determine the group difference between the three groups based on Instructional Strategies (STAD, TETBLT and AOMT). This was done on the basis of the significant *F*-values obtained for the main effect of Instructional Strategies on Achievement (Total and Skillwise Scores). The procedure of post-hoc comparison has already been described in the ANCOVA section**.**

In the comparison of the variable Achievement in English (Total and for relevant skills) for the Girls, the F ratio obtained for the comparison beween three groups of Instructional strategies (STAD- Control, STAD-TETBLT and TETBLT) are found significant, except for some skills (See Table 35)

From the result it is revealed that there exists significant difference between the three levels of Instructional Strategies (STAD Strategy, TETBLT and AOMT) with reference to the mean Achievement in Englis (Total scores and relevant skills) for the Girls.

From the Scheffe' Test, STAD and TETBLT groups reported significantly higher Achievement in English (Total and for relevant Skillwise Scores) than the Control Group for Girls. In all comparisons, STAD Group reported significantly higher Achievement in English (Total and for relevant Skillwise Scores) than the TETBLT group. Among the three Instructional Strategies STAD contribute much to Achievement in English than TETBLT and AOMT.

Summary and Discussion of Two way Analysis of Variance for Achievement in English (Total and Skill wise scores).

The results of 15 ANOVA (five each in Total sample, Boys and Girls) undertaken to study the main and interaction effects of Instructional Strategies (STAD Strategy of Cooperative Learning, Technology Enriched Task Based Language Teaching and Activity Oriented Method of Teaching) and Metacognitive Awareness on Achievement in English (Total and Skill-wise scores) helped the investigator to check whether changes in the levels of Instructional Strategies create any change on the Dependent Variable or not. The *F*-values obtained for 15 ANOVA for Achievement are summarised, consolidated and presented in Table 81 and discussed in this part of the report.

Table 81

Summary of F-values of the Main and Interaction Effects of Instructional Strategies and Metacognitive Awareness on Achievement in English (Total and Skill-wise scores) in Total sample, Boys and Girls

Sl. No.	Sample	Variable	F-values		
			Instructional Strategies	Metacognitive Awareness	Instructional Strategies X Metacognitive Awareness
1	Total	Achievement in English (Total)	47.972**	1.124	1.031
2		Listening	24.659**	0.892	0.896
3		Speaking	27.755**	1.02	1.083
4		Reading	41.791**	0.13	1.554
5		Writing	39.947**	0.558	0.649
8 9	Boys	Achievement in English (Total Score)	21.571**	0.122	0.326
10		Listening	21.947**	0.274	0.664
		Speaking	12.825**	2.806	1.443
11		Reading	25.761**	1.301	2.17
12		Writing	65.401**	0.887	0.489
15	Girls	Achievement in English (Total Score)	71.19**	2.845	2.359
16		Listening	23.918**	0.386	2.048
17		Speaking	14.807**	0.237	0.23
18		Reading	18.23**	0.176	1.932
19		Writing	8.34**	0.901	0.618

** indicates $p<.01$

A scrutiny of the results of ANOVA shows that, 5 out of five ANOVA conducted to study the main and interaction effects of Instructional Strategies and Metacognitive Awareness on Achievement in English (Total and Skill-

wise scores), shows significant main effect of Instructional Strategies on Achievement in English (Total and Skill-wise scores) for the Total sample.

Five out of five ANOVA shows significant main effect of Instructional Strategies on Achievement ANOVA shows significant main effect of Instructional Strategies on Achievement in English for the Total and Skill-wise scores for Girls. So, from the result of 15 ANOVA undertaken to study the main and interaction effects of Instructional Strategies and Metacognitive Awareness on Achievement in English (Total and Objective wise scores) for Total Samole, Boys and Girls 15 ANOVA showed main effects of Instructional Strategies.

Scheffe' Test of Post-hoc Comparison done after ANOVA, for the significant values of F, revealed that STAD Strategy of Cooperative Learning influence the student Achievement (Total and Objective wise scores)than the Technology Enriched Task Based Language Teaching and Activity Oriented Method of Teaching, as higher mean Achievement scores associated with them.

Scrutiny of the *F*-values obtained for the main effect of Instructional Strategies on Achievement in English (Total and Skill wise score) denotes that no ANOVA shows significant main effect of Metacognitive Awareness on Achievement in English for Girls.

As per Table 81 out of 15 ANOVA undertaken, result shows significant interaction effect of Instructional Strategies and Metacognitive Awareness on Achievement in English. The result suggests that Achievement in English (Total and Skill-wise scores) for Total sample, Boys and Girls is free from the joint effect of Instructional Strategies and Metacognitive Awareness.

Analysis of Variance for Self Regulation

Two way ANOVA was undertaken to study the main and interaction effects of Instructional Strategies and Metacognitive Awareness on Self Regulation for the Total sample, Boys and Girls. The results of two-way ANOVA are presented and discussed in this subsection of analysis.

Main and Interaction Effects of Instructional Strategies and Metacognitive Awareness on Self Regulation for Total Sample.

Two-way ANOVA was employed for Total sample to find out the main and interaction effects of Instructional Strategies and Metacognitive Awareness on Self Regulation of Standard VIII students. Summary of Two-way ANOVA for the Total sample is given in Table 82.

Table 82

Summary of Two-way ANOVA for Self Regulation by Instructional strategies (STAD, TETBLT, and Control) by Metacognitive Awareness for the Total sample

Sample	Dependent Variable		Source of Variation		
			Instructional Strategies	Metacognitive Awareness	Instructional Strategies **x** Metacognitive Awareness
Total Sample	Self Regulation	SS	61896.72	70.074	484.831
		df	2	2	4
		MS	30948.36	35.037	121.208
		F	47.798**	0.054	0.187

**indicates *p*< .01

Main Effect of Instructional Strategies.

As per Table 82 significant *F*-values obtained for the main effect of Instructional Strategies on Self Regulation is significant $F (2,132) = 47.79$, *p*<.01. Hence, it can be inferred that Self Regulation for Total sample changes

with regard to the changes in the levels of Instructional Strategies (STAD, TETBLT, and Control).

Main Effect of Metacognitive Awareness

The *F*-value, obtained for the main effect of Metacognitive Awareness on Self Regulation for the Total sample is not significant, $F (2, 132) = 0.054$, $p> .05$. The result indicates that changes in the levels of Metacognitive Awareness cannot make any significant variation in the scores of Self Regulation of standard VIII students.

Interaction Effect of Instructional Strategies and Metacognitive Awareness.

The *F*-value obtained for the interaction effect of Instructional Strategies and Metacognitive Awareness on Self Regulation for Total sample is not significant, $F= (2,132) 0.187$, $p =$ n.s.The obtained result thus suggests that Self Regulation for the Total sample is not influenced by the combined effect of the Instructional Strategies and Metacognitive Awareness

Scheffe' Test of Post-hoc Comparison Based on Three Groups of Instructional Strategies for Total Sample

Scheffe' Test of Post-hoc Comparison was done to determine the group difference between the three groups based on Instructional Strategies (STAD, TETBLT and AOMT). This was done on the basis of the significant *F*-values obtained for the main effect of Instructional Strategies on Self Regulation. The procedure of post-hoc comparison has already been described in the ANCOVA section.

In the comparison of the variable Self Regulation for the Total Sample, the F ratio obtained for the comparison between three groups of Instructional

strategies (STAD- Control, STAD-TETBLT and TETBLT) are found significant **(**See Table 43)

From the result it is revealed that there exists significant difference between the three levels of Instructional Strategies (STAD Strategy, TETBLT and AOMT) with reference to the mean Self Regulation for the Total sample.

From the Scheffe' Test, STAD and TETBLT groups reported significantly higher Self Regulation than the Control Group for Total sample. In all comparisons, STAD Group reported significantly higher Self Regulation than the TETBLT group. Among the three Instructional Strategies STAD contribute much to Self Regulation than TETBLT and AOMT.

Main and Interaction Effects of Instructional Strategies and Metacognitive Awareness on Self Regulation for Boys.

Two-way ANOVA was employed for Boys to find out the main and interaction effects of Instructional Strategies and Metacognitive Awareness on Self Regulation of Standard VIII students. Summary of Two-way ANOVA for Boys is given in Table 83.

Table 83

Summary of Two-way ANOVA for Self Regulation by instructional strategies (STAD, TETBLT, and Control) by Metacognitive Awareness for Boys.

Sample	Dependent Variable		Source of Variation		
			Instructional Strategies	Metacognitive Awareness	Instructional Strategies **x** Metacognitive Awareness
Boys	Self Regulation	SS	50734.75	300.494	3132.609
		df	2	2	3
		MS	25367.37	150.247	1044.203
		F	35.737**	0.212	1.471

**indicates *p*< .01

Main Effect of Instructional Strategies.

As per Table 83 significant *F*-values obtained for the main effect of Instructional Strategies on Self Regulation is significant, $F(2,62) = 35.73$, $p < .01$. Hence, it can be inferred that Self Regulation for Boys changes with regard to the changes in the levels of Instructional Strategies (STAD, TETBLT, and Control).

Main Effect of Metacognitive Awareness

The *F*-value, obtained for the main effect of Metacognitive Awareness on Self Regulation for Boys is not significant, $F(2, 62) = 0.212$, $p = $ n.s. The result indicates that changes in the levels of Metacognitive Awareness cannot make any significant variation in the scores of Self Regulation of Boys.

Interaction Effect of Instructional Strategies and Metacognitive Awareness.

The *F*-value obtained for the interaction effect of Instructional Strategies and Metacognitive Awareness on Self Regulation for Boys is not significant, $F = (2,62)\ 1.47$, $p = $ n.s. The obtained result thus suggests that Self Regulation for Boys is not influenced by the combined effect of the Instructional Strategies and Metacognitive Awareness.

Scheffe' Test of Post-hoc Comparison Based on Three Groups of Instructional Strategies for Boys.

Scheffe' Test of Post-hoc Comparison was done to determine the group difference between the three groups based on Instructional Strategies (STAD, TETBLT and AOMT). This was done on the basis of the significant *F*-values obtained for the main effect of Instructional Strategies on Self Regulation.

The procedure of post-hoc comparison has already been described in the ANCOVA section**.**

In the comparison of the variable Self Regulation for Boys, the F ratio obtained for the comparison between three groups of Instructional strategies (STAD- Control, STAD-TETBLT and TETBLT) are found significant **(**See Table 46).

From the result it is revealed that there exists significant difference between the three levels of Instructional Strategies (STAD Strategy, TETBLT and AOMT) with reference to the mean Self Regulation for Boys.

From the Scheffe' Test, STAD and TETBLT groups reported significantly higher Self Regulation than the Control Group for Boys. In all comparisons, STAD Group reported significantly higher Self Regulation than the TETBLT group. Among the three Instructional Strategies STAD contribute much to Self Regulation than TETBLT and AOMT.

Main and Interaction Effects of Instructional Strategies and Metacognitive Awareness on Self Regulation for Girls.

Two-way ANOVA was employed for Girls to find out the main and interaction effects of Instructional Strategies and Metacognitive Awareness on Self Regulation of Standard VIII students. Summary of Two-way ANOVA for Girls is given in Table 84.

Table 84

Summary of Two-way ANOVA for Self Regulation by instructional strategies (STAD, TETBLT, and Control) by Metacognitive Awareness of Girls Students.

Sample	Dependent Variable		Source of Variation		
			Instructional Strategies	Metacognitive Awareness	Instructional Strategies **x** Metacognitive Awareness
Girls	Self Regulation	SS	35407.68	610.731	1175.898
		df	2	2	4
		MS	17703.84	305.365	293.974
		F	35.404**	0.611	0.588

**indicates *p*< .01

Main Effect of Instructional Strategies.

As per Table 84 the *F*-value obtained for the main effect of Instructional Strategies on Self Regulation of Girls is significant, $F(2, 67) = 35.40$, *p*< .01. Hence, it can be inferred that Self Regulation for Girls changes with regard to the changes in the levels of Instructional Strategies (STAD, TETBLT, and Control).

Main Effect of Metacognitive Awareness.

The *F*-value, obtained for the main effect of Metacognitive Awareness on Self Regulation Girls is not significant, $F(2, 67) = 0.61$, $p =$ ns. The result indicates that changes in the levels of Metacognitive Awareness cannot make any significant variation in the scores of Self Regulation of Girl students.

Interaction Effect of Instructional Strategies and Metacognitive Awareness.

The *F*-value obtained for the interaction effect of Instructional Strategies and Metacognitive Awareness on Self Regulation for Girls is not significant, $F = (2,67)\ 0.58$, $p =$ n.s. The obtained result thus suggests that Self

Regulation for Girls is not influenced by the combined effect of the Instructional Strategies and Metacognitive Awareness.

Scheffe' Test of Post-hoc Comparison Based on Three Groups of Instructional Strategies for Girls.

Scheffe' Test of Post-hoc Comparison was done to determine the group difference between the three groups based on Instructional Strategies (STAD, TETBLT and AOMT). This was done on the basis of the significant *F*-values obtained for the main effect of Instructional Strategies on Self Regulation. The procedure of post-hoc comparison has already been described in the ANCOVA section.

In the comparison of the variable Self Regulation for the Girls, the F ratio obtained for the comparison between three groups of Instructional strategies (STAD- Control, STAD-TETBLT and TETBLT) are found significant, **(**See Table 48)

From the result it is revealed that there exists significant difference between the three levels of Instructional Strategies (STAD Strategy, TETBLT and AOMT) with reference to the mean Self Regulation for the Girls.

From the Scheffe' Test, STAD and TETBLT groups reported significantly higher Self Regulation than the Control Group for Girls. In all comparisons, STAD Group reported significantly higher Self Regulation than the TETBLT group. Among the three Instructional Strategies STAD contribute much to Self Regulation than TETBLT and AOMT.

Summary and Discussion of Analysis of Variance for Self Regulation.

The results of 9 ANOVA (three ANOVA each for Total sample, Boys and Girls) conducted to examine the main and interaction effects of Instructional Strategies and Metacognitive Awareness on Self Regulation are summarised and discussed in this section of the chapter. The *F*-values obtained for 9 ANOVA for Self Regulation are consolidated and presented in Table 85.

Table 85

Summary of F-values for the Main and Interaction Effects of Instructional Strategies and Meta cognitive Awareness on Self Regulation in Total sample, Boys and Girls

Sample	Dependent Variable	Source of Variation		
		Instructional Strategies	Metacognitive Awareness	Instructional Strategies x Metacognitive Awareness
Total sample	Self Regulation	47.798**	0.054	0.187
Boys	Self Regulation	35.737**	0.212	1.471
Girls	Self Regulation	35.404**	0.611	0.588

*** indicates p<.01*

A scrutiny of the results of ANOVA shows that, out of 3 ANOVA conducted to study the main and interaction effects of Instructional Strategies and Metacognitive Awareness on Self Regulation, 3 ANOVA each shows significant main effect of Instructional Strategies on Self Regulation for Total sample, Boys and Girls. So, from the result of 9 ANOVA undertaken, it can be inferred that Self Regulation for Total sample, Boys and Girls are depended on changes in the Instructional Strategies. Scheffe' Test of Post-hoc Comparison done after ANOVA, for the significant values of F, revealed that STAD Strategy of Cooperative Learning influence the Self Regulation as higher mean Achievement scores associated with them.

Scrutiny of the *F*-values obtained for the main effect of Instructional Strategies on Self Regulation denotes that out of three ANOVA, no ANOVA showed significant main effect of Instructional Strategies on Self Regulation for Total sample, Boys, and Girls.

As per Table 85 out of 3 ANOVA undertaken to study the interaction effects of Instructional Strategies and Metacognitive Awareness on Self Regulation for Total sample, Boys and Girls, no ANOVA shows significant interaction effect on Self Regulation. The result suggests that Self Regulation for Total sample, Boys and Girls is free from the joint effect of Instructional Strategies and Metacognitive Awareness. So from the obtained result, it can be assumed that Self Regulation is independent of the main effect of Instructional

Strategies and the combined effect of Instructional Strategies and Metacognitive Awareness.

Conclusion

Analysis Chapter was presented in four sections. First section deals with the Percentage Analysis to analyse the data received in the Preliminary Syrvey to find the attitude of Secondary School towards different Instructional Strategies.

Second section of the analysis deals with the preliminary analysis on the collected data of students which were carried out to find the basic statistical constants and establishing the equivalence of groups.

Third phase was used to compare effect of STAD Strategy of Cooperative Learning, Technology Enriched Task Based Language Teaching and the Activity Oriented Method of Teaching in terms of Achievement in English and Self Regulation of Standard VIIII students. One Way Analysis of Variance for Achievement in English and One Way Analysis of Variance for Self Regulation were used for analysis. Since ANOVA results revealed a main effect of STAD Strategy of Cooperative Learning, Technology Enriched Task Based Language Teaching on the Activity Oriented Method of Teaching (prevailing strategy), and Effect size was calculated and it is also interpreted in this section.

Two Way Factorial Analysis of Covariance (ANCOVA) was used in this phase to find out the relative effectiveness of STAD Strategy of Cooperative Learning, and Technology Enriched Task Based Language Teaching over Activity Oriented Method of Teaching in terms of Achievement in English and Self Regulation of Standard VIII students by controlling the Covariates (Pre experimental Status in terms of Achievement in English and Self Regulation, Verbal Intelligence, Non Verbal Intelligence and Classroom Environment)

To find the main and interaction effects of two independent variables (Instructional Strategies and Metacognitive Awareness) on Achievement in English and Self Regulation, Two Way ANOVA with 3 x 3 Factorial Design was conducted. The results of the Two Way ANOVA are interpreted in the fourth section.

SUMMARY O F FINDINGS, CONCLUSIONS AND SUGGESTIONS

- Study in a Nutshell
- Major findings of the Study
- Tenability of Hypotheses
- Education implication Derived
- Suggestions for further Research

The chapter presents the summary of the study. It includes the Restatement of the Problem, Objectives and Hypotheses of the Study and the Methodology followed for the study. The chapter also presents the major findings and conclusions drawn from the study. Educational implications and Suggestion for Further Research are also given at the end of the chapter.

Study in a Nutshell

Present study was conducted to find the relative effectiveness of Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning and Technology Enriched Task Based Language Teaching (TETBLT) over Activity Oriented Method of Teaching in terms of Achievement in English and Self Regulation of standard VIII students. The study was also to find out the effect of Instructional Strategies (STAD, TETBLT and AOMT) Metacognitive Awareness on Achievement in English and Self Regulation of Standard VIII students. A preliminary study was also conducted on Attitude of Secondary School Teachers towards Instructional Strategies.

Restatement of the Problem

The present study was stated as **Effect of Student Teams Achievement Divisions Strategy and Technology Enriched Task Based Language Teaching on Achievement in English and Self Regulation of Standard VIII Students.**

Variables of the study

The independent, dependent and the control variables selected for this present study were as the following:

Independent Variables.

Independent Variables selected for the study were Instructional Strategies (Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning, Technology Enriched Task Based Language Teaching (TETBLT) and Activity Oriented Method of Teaching) and Metacognitive Awareness.

Dependent Variable.

Achievement in English (Total and Skill Wise Scores) and Self Regulation were treated as Dependent variables.

Control Variables.

Variables controlled for the present study were Pre Experimental Status in terms of Achievement in English (Total and Skill Wise Scores) and Self Regulation, Verbal Intelligence, Nonverbal Intelligence and Classroom Environment.

Objectives of the Study

The present study included following objectives:

1. To explore the attitude of Secondary School English teachers towards Instructional Strategies in general and Cooperative Learning strategies and Task Based Language teaching in particular.

2. To study whether there exists any significant difference in the mean Achievement in English (Total and Skill wise scores) of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) for the Total Sample, Boys and Girls.

3. To study whether there exists any significant difference in the mean Gain score of Achievement in English (Total and Skill wise Scores) of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) for the Total Sample, Boys and Girls.

4. To study whether there exists any significant difference in the mean Self-regulation scores of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) for the Total Sample, Boys and Girls.

5. To study whether there exists any significant difference in the mean Gain Score of Self-regulation of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) for the Total Sample, Boys and Girls.

6. To study the effectiveness of Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning over Activity Oriented Method of Teaching (AOMT), if any, in terms of Achievement in English (Total and Skill wise scores) of standard VIII Students.

7. To study the effectiveness of Technology Enriched Task Based Language Teaching (TETBLT) over Activity Oriented Method of Teaching (AOMT), if any, in terms of Achievement in English (Total and Skill wise scores) of standard VIII Students.

8. To study the effectiveness of Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning over Technology Enriched Task Based Language Teaching (TETBLT), if any, in terms of Achievement in English (Total and Skill wise scores) of standard VIII Students.

9. To study the effectiveness of Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning over Activity Oriented Method of Teaching (AOMT), if any, in terms of Self-regulation of standard VIII Students.

10. To study the effectiveness of Technology Enriched Task Based Language Teaching (TETBLT) over Activity Oriented Method of Teaching (AOMT), if any, in terms of Self-regulation of standard VIII Students.

11. To study the effectiveness of Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning over Technology Enriched Task Based Language Teaching (TETBLT), if any, in terms of Self-regulation of standard VIII Students.

12. To study the main effect of Independent Variables (Instructional Strategies and Metacognitive Awareness) on Achievement in English (Total and Skill wise Scores) of standard VIII Students for the Total Sample, Boys and Girls.

13. To study the interaction effect of Independent Variables (Instructional Strategies and Metacognitive Awareness) on Achievement in English (Total and Skill wise Scores) of standard VIII Students for the Total Sample, Boys and Girls.

14. To study the main effect of Independent Variables (Instructional Strategies and Metacognitive Awareness) on Self-regulation of standard VIII Students for the Total Sample, Boys and Girls.

15. To study the interaction effect of Independent Variables (Instructional Strategies and Metacognitive Awareness) on Self-regulation of standard VIII Students for the Total Sample, Boys and Girls.

Hypotheses of the Study

The present study was designed to test the following hypotheses:

On the basis of the review of literature, the experiment was designed to test the following hypotheses.

1. There will be no significant difference in the mean Achievement in English (Total and Skill wise Scores) of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) for the Total Sample, Boys and Girls.

2. There will be no significant difference in the mean Gain score of Achievement in English (Total and Skill wise Scores) of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) for the Total Sample, Boys and Girls.

3. There will be no significant difference in the mean Self-regulation scores of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) for the Total Sample, Boys and Girls.

4. There will be no significant difference in the mean gain score of Self-regulation of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) for the Total Sample, Boys and Girls.

5. Students taught through Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning will not differ significantly than students taught through Activity Oriented Method of Teaching (AOMT), if any, in terms of Achievement in English (Total and Skill wise scores) of standard VIII Students.

6. Students taught through Technology Enriched Task Based Language Teaching (TETBLT) will not differ significantly than students taught through Activity Oriented Method of Teaching (AOMT), if any, in terms of Achievement in English (Total and Skill wise scores) of standard VIII Students.

7. Students taught through Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning will not differ significantly than students taught through Technology Enriched Task Based Language Teaching (TETBLT), if any, in terms of Achievement in English (Total and Skill wise scores) of standard VIII Students.

8. Students taught through Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning will not differ significantly than students taught through Activity Oriented Method of Teaching (AOMT), if any, in terms of Self-regulation of standard VIII Students.

9. Students taught through Enriched Task Based Language Teaching (TETBLT) will not differ significantly than students taught through Activity Oriented Method of Teaching (AOMT), if any, in terms of Self-regulation of standard VIII Students

10. Students taught through Technology Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning will not differ significantly than students taught through Technology Enriched Task Based Language Teaching (TETBLT), if any, in terms of Self-regulation of standard VIII Students.

11. There will be no significant main effects of Independent Variables (Instructional Strategies and Metacognitive Awareness) on

Achievement in English (Total and Skill wise Scores) of standard VIII Students for the Total Sample, Boys and Girls.

12. There will be no significant interaction effect of Independent Variables (Instructional Strategies and Metacognitive Awareness) on Achievement in English (Total and Skill wise Scores) of standard VIII Students for the Total Sample, Boys and Girls.

13. There will be no significant main effects of Independent Variables (Instructional Strategies and Metacognitive Awareness) on Self-regulation of standard VIII Students for the Total Sample, Boys and Girls.

14. There will be no significant interaction effect of Independent Variables (Instructional Strategies and Metacognitive Awareness) on Self-regulation of standard VIII Students for the Total Sample, Boys and Girls.

Methodology

The methodology adopted for the study is outlined in this section. The study was conducted in three phases. First phase was a preliminary phase in which the researcher conducted a survey to study the attitude of Secondary School Teachers towards Instructional Strategies.

In the second phase, the study was found to find out the relative effectiveness of Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning, and Technology Enriched Task Based Language Teaching (TETBLT) over Activity Oriented Method of Teaching with regard to Achievement in English (Total and Skill wise Scores) and Self Regulation of standard VIII students.

In the third phase, researcher tried be find out the main and interaction effect, of Instructional Strategies (Student Teams Achievement Divisions (STAD) Strategy, Technology Enriched Task Based Language Teaching (TETBLT) and Activity Oriented Method of Teaching) and Metacognitive Awareness on Achievement in English (Total and Skill wise Scores) and Self Regulation of standard VIII students.

Design of the study.

The present study was conducted by employing Quasi Experimental Design. The Non Equivalent Groups Pretest Posttest Control and Comparison Groups Design used. In the present study, Experimental Group I was taught through the Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning; Experimental Group II was taught through the Technology Enriched Task Based Language Teaching (TETBLT)and the Control group, through the Activity Oriented Method of Teaching (AOMT).

Sample for the study.

Standard VIII Students studying in the Kerala syllabus schools where the population considered for the experimental study. The sample of consisted of three intact classrooms of 45 students each Total 135 students, in the Experimental Group I , II and the Control Group.

Selection of Topics for Treatment.

The topics for the treatment in the present study were selected from the syllabus prescribed for standard VIII students of Kerala for the academic year 2014-15. The topics selected were Unit III and Unit IV. The syllabus, curriculum, teacher's manual, textbook, and other learning materials have been studied in detail in advance. The researcher also consulted with the concerned teachers and experts for appropriate guidance and instructions.

Learning Materials and Tools Used for the Study.

The following learning materials and tools were used to measure the variables during the treatment in the Experimental and Control groups respectively.

Scale of Attitude Towards Instructional Strategies in Teaching English (Hameed & Sabna,2014)

Scale of Attitude towards Instructional Strategies in Teaching English composed of three sections,I, II and III. In the first section in items to assess the attitude of Secondary School Teacher towards Instructional Strategies used in teaching English. Section II comprises items to assess the attitude of teachers towards Cooperative Learning Strategies. Section III consists of items to assess the attitude of teachers towards Task Based Language Teaching. In total, the final tool consists of 80 items in which positive and negative items.

Lesson Transcripts for Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning (Hameed & Sabna, 2014).

The investigator prepared Lesson Transcripts for Student Teams Achievement Divisions Strategy of Cooperative Learning following the four phases (Details are given in Chapter 3) designed by Slavin (1995). These Lesson Transcripts were used for treatment in the Experimental Group I.

Lesson Transcripts for Technology Enriched Task Based Language Teaching –TETBLT (Hameed & Sabna, 2014).

The investigator prepared Lesson Transcripts for Technology Enriched Task Based Teaching (TETBLT) following the three phases (Details are given in Chapter 3) designed by Willis (1996). These Lesson Transcripts were used for treatment in the Experimental Group II.

Lesson Transcripts for Activity Oriented Method of Teaching (Hameed & Sabna, 2014). The Lesson Transcripts for Activity Oriented Method of Teaching which is the prevailing strategy practiced in secondary Schools in Kerala. These lesson transcripts were used for treatment in the Control group.

Scale of Metacognitive Awareness - SMA (Hameed, Sabna & Meharunnisa, 2014).

It is a three point scale with 52 items in final scale developed by six components namely, Knowledge of Self, Preparation and planning for learning, Conditional Knowledge, Selecting and using learning strategies, Monitoring and evaluating strategies and Evaluating of self.

Achievement Test in English- ATE (Hameed & Sabna, 2014).

The test is prepared on the basis of the two units 'As We Shall We Reap' and 'Within and Without' of English of standard VIII. This test was used as Pretest and Post-test on the selected units for treatment. The test consists of objective type items to evaluate the performance of students in English of the selected topics.

Test of Listening Skill in English- TLSE (Hameed & Sabna, 2014).

The test of listening English included stories, newspaper reports, announcement and picture based statements which were read out by the teacher. Based on this, objective type items were used to assess the listening skill of students.

Test of Speaking Skill in English- TSSE (Hameed & Sabna, 2014).

The Test of Speaking Skills in English is intended to assess the skill of students in speaking English. The Test includes items for speech construction

and picture description. The Test of Speaking Skills in English was evaluated using Speaking Test Rubrics which included evaluation criteria based on oraganisation, fluency, pronunciation, accuracy/grammar and vocabulary. Speaking Test Rubrics used for assessment.

Speaking Evaluation Rubrics –SER (Hameed & Sabna, 2014).

The Skill of Speaking was evaluated using Speaking Test Rubrics which included evaluation criteria based on oraganisation, fluency, pronunciation, accuracy/grammar and vocabulary.

Test of Reading Comprehension in English – TRCE (Hameed & Sabna, 2014).

Test of Reading Comprehension is used to evaluate the reading comprehension in English among students. The test includes objective type items for evaluating comprehension, grammar and vocabulary. The test also included descriptive type item for summarizing passage.

Test of Writing Skill in English- TWSE (Hameed & Sabna, 2014).

Test of Writing Skill in English evaluates the writing skill of students in English. The test includes descriptive items encompassing notice writing, poster preparation, formal and informal letter writing, proverb expansion, essay writing, preparing biography, diary writing and newspaper report writing.

The Self-Regulation Questionnaire (SRQ) (Miller & Brown, 1991).

In the present study, Self-Regulation Questionnaire -SRQ(Miller & Brown, 1991) is adapted to assess the Self-regulation among VIII standard students and was used as pretest and posttest of Self-regulation, before and after and the experimentation respectively. The researcher used seven step process in the original tool.

Verbal Group Test of Intelligence - VGTI (Kumar, Hameed & Prasanna, 1997).

For the present study, Verbal Intelligence - the Confounding variable was assessed using the Verbal Group Test of Intelligence (VGTI) developed by Kumar, Hameed, & Prasanna (1997). The test comprises of five subtests of twenty multiple choice items (Totally 100 items) by five components Verbal Analogy, Verbal classification, Numerical Reasoning, Verbal Reasoning and Comprehension.

Standard Progressive Matrices Test - SPMT (Raven, 1958).

Standard Progressive Matrices Test, developed by Raven (1958) was used to assess the Confounding Variable, Non-verbal Intelligence. The test comprises of five subtest of twelve items each and the maximum total score is 60.

Classroom Environment Inventory (CEI) (Aruna, Sureshan & Unnikrishnan, 1998).

This Inventory was used to assess the classroom environment of students. Twelve important areas of classroom situations were mentioned in the inventory to explain to students how to get a clear idea of the classroom environment.

General Data Sheet for Assessing Socio-Economic Status (SES).

To assess the Socio-Economic Status of the Students of Experimental and Control groups, this General Data Sheet was used. To collect the information regarding Income, Education and occupation of parents, nine columns each for father and mother, are included in the General Data Sheet.

Experimental Process.

Researcher contacted the heads of two schools and got the prior permission to conduct the experiments. Considering the feasibility and practicality, the researcher selected Experiment Group I and the Control from DGHSS Tanur, Malappuram, and Experiment Group II from GHSS, Niremerathur, Malappuram. The three groups were given same pre-test to measure the Pre-experimental Status in terms of Achievement in English and Self Regulation which were measured using standardized tools.

Treatment.

- Experiment Group I was taught using Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning. Twenty class periods each having a time duration of an average 40 minutes was prepared, according to the steps prepared by Slavin (1995).

- Experiment Group II was taught using and Technology Enriched Task Based Language Teaching –TETBLT.

- Control group was taught using the Activity Oriented Method of Teaching.

The topics selected and the time span was same for all the three groups selected.

During the course of the experiment, data on other variables such as Verbal Intelligence, Non-Verbal Intelligence, Metacognitive Awareness, Classroom Environment, and Socio-Economic status were collected from all the three groups using valid tools. Post Tests on Achievement in English and Self Regulation were conducted after the treatments in the respective groups.

After the data collection procedures, all the response sheets were scored in accordance with respective test manuals and scoring keys separately for each group. Scores of each tool were tabulated so as to do the analysis procedure.

Statistical Techniques Used for the Study.

The investigator followed both descriptive and inferential statistical techniques so as to reach the findings of the present study. The major statistical techniques used for the analysis were,

Percentage Analysis was used to find out the Attitude of Secondary School English Teachers towards the prevailing Instructional Strategies.

Basic Descriptive Statistics such as Mean, Median, Mode, Standard Deviation, Skewness and Kurtosis of each variable were calculated for Total Sample and separately for Boys and Girls. Nature of the distribution was identified using the measured descriptive statistics.

One Way Analysis of Variance (ANOVA) was employed to study whether there exists significant difference between the Experimental Group I (STAD), Experimental group II (TETBLT) and Control Group (AOMT) in case of Mean scores and Gain scores of Achievement in English (Total and Skill Wise) and Self Regulation without controlling the effects of Control variables. Graphical representations are also made suitably to compare the individual Post test scores and Gain scores of the three groups. It was also used to equate the Experimental Groups and the Control Group in terms of the Pre Experimental status of Achievement in English (Total and Skill Wise) and Self Regulation, Verbal Intelligence, Non-verbal Intelligence, Classroom Environment and, Socio-Economic Status.

Effect size was employed to find how much the effect of Instructional Strategies (STAD and TETBLT) on Achievement in English (Total and Skill Wise) and Self Regulation.

Two way Factorial Analysis of Covariance (ANCOVA) was used to find out the effectiveness of Student Teams Achievement Divisions (STAD) Strategy and Technology Enriched Task Based Language Teaching (TETBLT) over Activity Oriented Method of Teaching in terms of Achievement in English (Total and skill wise Scores) and Self Regulation after controlling the Covariates (Pre Experimental Status in terms of Achievement, Verbal Intelligence, Non Verbal Intelligence and Classroom Environment singly and in Combination).

Two-way Analysis of Variance (ANOVA) was employed to examine the main and interaction effects of Independent Variables (Instructional Strategies and Metacognitive Awareness) on Dependent Variables (Achievement in English Language- Total and Skill-wise scores and Self Regulation). In the study, 3 x 3 Factorial ANOVA consists of three levels of Instructional Strategies and three levels of Metacognitive Awareness.

Scheffe' Test of Post-hoc Comparison was used to compare the adjusted criterion means of the Experimental and Control groups to determine the advantageous groups in Covariance Analysis. In One Way ANOVA and Two Way ANOVA also, Scheffe' Test was used as a follow up analysis to study the group difference.

Major findings of the Study

Major findings of the present study are summarized in this section. Results are presented under two heads; Results of Preliminary Survey and Major Findings.

Results of Preliminary Survey

Preliminary analysis was done at the initial stage of the research so as to find the Attitude of Secondary School English Teachers towards Instructional Strategies used in Secondary School English Classrooms

In Section I, out of 50 teachers, 14%of teachers are having high and positive attitude, 70 % of teachers are having moderate attitude, and 16 % of teachers are having low and negative attitude towards Instructional Strategies in teaching English.

In Section II, out of 50 teachers, 30 % of teachers are having high and positive attitude, 50 % of teachers are moderate attitude,16 % of teachers have low and negative attitude towards the towards Cooperative Learning Strategies in English.

In section III, out of 50 teachers; 20% of teachers are having high and positive attitude, 68 % of teachers are having moderate attitude and 16 % teachers are having low and negative attitude towards implementing Task based language teaching in English language teaching

In all the sections, taken together, Secondary teachers have a moderate level of attitude towards Instructional Strategies used in Secondary School English Classrooms.

Major Findings

A concise discussion of the major findings of the study is presented in this section of the report. One Way ANOVA, was used to compare the three groups of Instructional strategies for relevant variables. Two Way Factorial ANCOVA was employed to investigate the effectiveness of Student Teams Achievement Divisions (STAD) Strategy and Technology Enriched Task

Based Language Teaching (TETBLT) over Activity Oriented Method of Teaching) in terms of Achievement in English (Total and skill wise) and Self Regulation. In ANCOVA, Pre Experimental Status of Achievement in English (Total and Skill Wise scores) and Self Regulation, Verbal Intelligence, Non-verbal Intelligence and Classroom Environment as Covariates singly and in combination is used as covariates. In addition to the Covariance Analysis, Two way ANOVA were undertaken to examine the main and interaction effects of Instructional Strategies ((STAD,TETBLT and Control) and Metacognitive Awareness and Achievement in English (Total and Skill Wise)and Self Regulation for Total Sample, Boys and Girls.

Results of One Way ANOVA.

One Way ANOVA was done be find whether there exist any significant difference between Experimental Group I (STAD), Experimental group II (TETBLT), and the Control Group (Total Sample, Boys and Girls) in case of Mean scores and Gain Scores of Achievement in English (Total and Skill wise scores) and Self Regulation, without controlling the covariates. Scheffe' Test of Post-hoc Comparison was used as a follow-up analysis, wherever the Independent Variable (Instructional Strategies) have significant effect on Achievement in English (Total and Skill wise scores) and Self Regulation, to determine the group, which caused the group difference in terms of the Dependent Variable.

One Way Analysis of Variance for Mean Achievement in English.

The One Way Analysis of Variance was executed to find the effect of Instructional Strategies (STAD, TETBLT and Control) on Achievement in English (Total and Skill wise scores) for the Total Sample, Boys and Girls, and is presented in the following order.

1) Effect of Instructional Strategies (STAD, TETBLT and Control - AOMT)) on Achievement in English (Total and Skill wise Scores) for the Total Sample.

The main effect of Instructional Strategies (STAD, TETBLT, Control) on Achievement in English (Total score and Skill wise Scores) is significant (*p<.01*) for the Total Sample. Mean Achievement in English (Total score and Skill wise Scores) differ significantly among STAD, TETBLT, Control groups.

i) STAD group shows significantly higher levels of Achievement in English (Total score and Skill wise Scores) than Control group ($p <.01$).

ii) TEBLT group shows significantly higher levels of Achievement in English (Total score and Skill wise Scores) than Control group ($p <.01$).

iii) STAD group shows significantly higher levels of Achievement in English (Total and Skill wise Scores) than TETBLT Group ($p<.01$) for the Total sample.

Effect size.

Effect Size was calculated using Cohen's *d* for Achievement in English (Total and Skill wise Scores) to measure the magnitude of effect as the mean difference were found significant for Total sample.

The Value Cohen's d for Achievement in English (Total score) is greater than 0.8 and come under the category 'Large'.

The value of Cohen's d for Achievement in English (Listening Skill) is greater than 0.8. and the effect size come under the Cohen's category' Large'

Cohen's d for Achievement in English (Speaking Skill) is greater than 0.5 and this come under the category 'Medium'.

value of Cohen's d for Achievement in English (Reading) is greater than 0.8 and the effect size come under the Cohen's category' Large'

Cohen's d for Achievement in English (Writing Skill) is greater than 0.8. So the effect size come under the Cohen's category 'Large'.

Hence it can be inferred that STAD Strategy has Large effect in enhancing Achievement in English (Total score and Skill wise scores) except Listening which has a medium effect in enhancing Achievement in English, of standard VIII students when compared to TETBLT.

2) *Effect of Instructional Strategies (STAD, TETBLT and Control - AOMT) on Achievement in English (Total and Skill wise Scores) for Boys.*

The main effect of Instructional Strategies (STAD, TETBLT, Control) on Achievement in English (Total score and Skill wise Scores) is significant ($p<.01$) for the Boys. Mean Achievement in English (Total score and Skill wise Scores) differ significantly among STAD, TETBLT, Control groups.

i)   STAD group shows significantly higher levels of Achievement in English (Total and Skill wise) than the Control group ($p <.01$).

ii)   TETBLT group shows significantly higher levels of Achievement in English (Total and Skill wise Scores) than Control group ($p <.01$), except Listening Skill ($p <.05$).

iii)   STAD groups shows significantly higher levels of Achievement in English (Total) than the TETBLT group ($p <.05$). STAD groups shows significantly higher levels of Achievement in English (Skill wise

scores in Listening ($p < .01$), Reading and Writing ($p < .05$), than TETBLT group, except for Speaking skill ($p = $n.s.).

3) Effect of Instructional Strategies (STAD, TETBLT and Control - AOMT)) on Achievement in English (Total and Skill wise Scores) for the Girls.

The effect of Instructional Strategies (STAD, TETBLT, Control) on Achievement in English (Total score and Skill wise Scores) is significant ($p < .01$) for Girls. Mean Achievement in English (Total score and Skill wise Scores) differ significantly among STAD, TETBLT, Control groups.

i)   STAD group shows significantly higher levels of Achievement in English (Total and Skill wise) than Control group ($p < .01$).

ii)   TETBLT group shows significantly higher levels of Achievement in English (Total and Skill wise Scores) than Control group ($p < .01$), except Listening Skill ($p < .05$).

iii)   STAD groups shows significantly higher levels of Achievement in English (Total and Skill wise scores) than the TETBLT group ($p < .01$).

One Way Analysis of Variance for Mean Scores Gain Scores of Achievement in English.

The One Way Analysis of Variance was executed to find the effect of Instructional Strategies (STAD, TETBLT and Control) on Mean Gain Scores of Achievement in English (Total and Skill wise scores) for the Total Sample, Boys and Girls, and is presented in the following order.

4) Effect of Instructional Strategies (STAD, TETBLT and Control - AOMT) on Mean Gain Scores of Achievement in English (Total and Skill wise Scores) for the Total Sample

The main effect of Instructional Strategies (STAD, TETBLT, Control) on Mean Gain Scores of Achievement in English (Total score and Skill wise Scores) is significant ($p<.01$) for the Total Sample. Mean Gain Scores of Achievement in English (Total score and Skill wise Scores) differ significantly among STAD, TETBLT, Control groups.

i)   STAD group shows significantly higher levels of Mean Gain Scores of Achievement in English (Total score and Skill wise Scores) than Control group ($p <.01$).

ii)   TEBLT group shows significantly higher levels of Mean Gain Scores of Achievement in English (Total score and Skill wise Scores) than Control group ($p <.01$).

iii)   STAD group shows significantly higher levels of Mean Gain Scores of Achievement in English (Total and Skill wise Scores) than TETBLT Group ($p<.01$).

5) Effect of Instructional Strategies (STAD, TETBLT and Control - AOMT) on Mean Gain Scores of Achievement in English (Total and Skill wise Scores) for the Boys.

The main effect of Instructional Strategies (STAD, TETBLT, Control) on Mean Gain Scores of Achievement in English (Total score and Skill wise Scores) is significant ($p<.01$) for the Boys. Mean Gain Scores of Achievement in English (Total score and Skill wise Scores) differ significantly among STAD, TETBLT, Control groups.

i)   STAD group shows significantly higher levels of Mean Gain Scores of Achievement in English (Total and Skill wise) than Control group ($p < .01$).

ii)   TETBLT group shows significantly higher levels of Mean Gain Scores of Achievement in English (Total and Skill wise Scores) than Control group ($p < .01$).

iii) STAD groups shows significantly higher levels of Mean Gain Scores of Achievement in English (Total) than the TETBLT group ($p < .05$). STAD groups shows significantly higher levels of Achievement in English (Skill wise scores ($p < .05$), except in Listening skills (($p < .01$)

6) Effect of Instructional Strategies (STAD, TETBLT and Control - AOMT) on Mean Gain Scores of Achievement in English (Total and Skill wise Scores) for Girls.

The main effect of Instructional Strategies (STAD, TETBLT, Control) on Mean Gain Scores of Achievement in English (Total score and Skill wise Scores) is significant ($p<.01$) for Girls. Mean Gain Scores of Achievement in English (Total score and Skill wise Scores) differ significantly among STAD, TETBLT, Control groups.

i)   STAD group shows significantly higher levels of Mean Gain Scores of Achievement in English (Total score and Skill wise Scores) than Control group ($p < .01$).

ii)   TEBLT group shows significantly higher levels of Mean Gain Scores of Achievement in English (Total score and Skill wise Scores) than Control group ($p < .01$).

iii)   STAD group shows significantly higher levels of Mean Gain Scores of Achievement in English (Total and Skill wise Scores) than TETBLT Group ($p<.01$).

One Way Analysis of Variance for Mean Self Regulation.

The One Way Analysis of Variance was executed to find the effect of Instructional Strategies (STAD, TETBLT and Control) on Self Regulation for the Total Sample, Boys and Girls, and is presented in the following order.

7)   Effect of Instructional Strategies (STAD, TETBLT and Control - AOMT) on Self Regulation of Standard VIII Students for Total Sample.

The main effect of Instructional Strategies (STAD, TETBLT, Control) on Self Regulation is significant (*$p<.01$*) for the Total Sample. Mean Self Regulation differ significantly among STAD, TETBLT, Control groups.

i)   STAD group shows significantly higher levels of Self Regulation than Control group ($p <.01$).

ii)   TEBLT group shows significantly higher levels of Self Regulation than Control group ($p <.01$).

iii)   STAD group shows significantly higher levels of Self Regulation than TETBLT Group ($p<.01$).

Effect Size

Effect Size was calculated using Cohen's d for Self Regulation to measure the magnitude of effect as the mean difference were found significant for Total sample.

The values of Cohen's d for Self Regulation are greater than 0.5. So the effect size come under the Cohen's category' medium' and hence it can be

inferred that Student Teams Achievement Division (STAD) strategy has medium effect in enhancing Self Regulation of standard VIII students when compared to Technology Enriched Task Based Language Teaching (TETBLT).

8) Effect of Instructional Strategies (STAD, TETBLT and Control - AOMT) on Self Regulation of Standard VIII Students for Boys.

The main effect of Instructional Strategies (STAD, TETBLT, Control) on Self Regulation is significant (*p<.01*) for the Boys. Mean Self Regulation differ significantly among STAD, TETBLT, Control groups.

i) STAD group shows significantly higher levels of Self Regulation than Control group (*p* <.01).

ii) TEBLT group shows significantly higher levels of Self Regulation than Control group (*p* <.01).

iii) STAD group shows significantly higher levels of Self Regulation than TETBLT Group (*p*<.05).

9) Effect of Instructional Strategies (STAD, TETBLT and Control - AOMT) on Self Regulation of Standard VIII Students for Girls.

The main effect of Instructional Strategies (STAD, TETBLT, Control) on Self Regulation is significant (*p<.01*) for Girls. Mean Self Regulation differ significantly among STAD, TETBLT, Control groups.

i) STAD group shows significantly higher levels of Self Regulation than Control group (*p* <.01).

ii) TEBLT groups shows significantly higher levels of Self Regulation than Control group (*p* <.01).

iii) STAD group shows significantly higher levels of Self Regulation than TETBLT Group ($p<.05$).

One Way Analysis of Variance for Mean Gain Score of Self Regulation.

The One Way Analysis of Variance was executed to find the effect of Instructional Strategies (STAD, TETBLT and Control) on Mean gain Scores Self Regulation for the Total Sample, Boys and Girls, and is presented in the following order

10) *Effect of Instructional Strategies (STAD, TETBLT and Control - AOMT)) on mean Gain scores Self Regulation for the Total Sample.*

The main effect of Instructional Strategies (STAD, TETBLT, Control) on Mean Gain scores of Self Regulation is significant ($p<.01$) for the Total Sample. Mean Self Regulation differ significantly among STAD, TETBLT, Control groups.

i) STAD group shows significantly higher levels of Self Regulation than Control group ($p <.01$).

ii) TEBLT group shows significantly higher levels of Self Regulation than Control group ($p <.01$).

iii) STAD group shows significantly higher levels of Self Regulation than TETBLT Group ($p<.01$).

11) *Effect of Instructional Strategies (STAD, TETBLT and Control - AOMT)) on mean Gain scores Self Regulation for Boys.*

The main effect of Instructional Strategies (STAD, TETBLT, Control) on Mean Gain scores of Self Regulation is significant ($p<.01$) for Boys. Mean Self Regulation differ significantly among STAD, TETBLT, Control groups.

i)   STAD group shows significantly higher levels of Self Regulation than Control group ($p <.01$).

ii)   TEBLT group shows significantly higher levels of Self Regulation than Control group ($p <.01$).

iii)   STAD group shows significantly higher levels of Self Regulation than TETBLT Group ($p<$ n.s.).

12) *Effect of Instructional Strategies (STAD, TETBLT and Control - AOMT)) on mean Gain scores Self Regulation for Girls.*

The main effect of Instructional Strategies (STAD, TETBLT, Control) on Mean Gain scores of Self Regulation is significant ($p<.01$) for Girls. Mean Self Regulation differ significantly among STAD, TETBLT, Control groups.

i)   STAD group shows significantly higher levels of Self Regulation than Control group ($p <.01$).

ii)   TEBLT group shows significantly higher levels of Self Regulation than Control group ($p <.01$).

iii)   STAD group shows significantly higher levels of Self Regulation than TETBLT Group ($p <.01$).

Results of the Covariance Analysis for Achievement in English

Results of ANCOVA done to find out the effectiveness of Student Teams Achievement Divisions (STAD) Strategy and Technology Enriched Task Based Language Teaching (TETBLT) over Activity Oriented Method of Teaching) in terms of Achievement in English (Total and skill wise) after controlling the Covariates (Pre Experimental Status in terms of Achievement, Verbal Intelligence, Non Verbal Intelligence and Classroom Environment in Combination) for Total Sample is presented in the following section.

13) *Effectiveness of Instructional Strategies on Achievement in English (Total Score and Skill Wise) – Pre Experimental Status in Achievement Controlled*

i. Eeffectiveness of STAD and TETBLT Groups over the Control Group in terms of Achievement in English (Total and Skill wise score) is significant ($p<.01$) for the Total Sample. Achievement in English (Total and Skill wise score) differ significantly among STAD, TETBLT, and AOMT groups even after controlling the Pre Experimental Status in Achievement in English (Total and Skill wise score).

ii. STAD group shows significantly higher levels of Achievement in English (Total and Skill wise score) than Control group ($p<.01$).

iii. TETBLT Group shows significantly higher levels of Achievement in English (Total and Skill wise score) than Control group ($p<.01$).

iv. STAD group shows significantly higher levels of Achievement in English (Total and Skill wise score) than TETBLT Group ($p<.01$) for Total Sample.

14) *Effectiveness of Instructional Strategies on Achievement in English (Total Score and Skill Wise) – Verbal Intelligence as Covariate.*

i. Eeffectiveness of STAD and TETBLT Groups over the Control Group in terms of Achievement in English (Total and Skill wise score) is significant (*p<.01*) for the Total Sample. Achievement in English (Total and Skill wise score) differ significantly among STAD, TETBLT, and AOMT groups even after controlling the Verbal Intelligence in Achievement in English (Total and Skill wise score)

ii. STAD group shows significantly higher levels of Achievement in English (Total and Skill wise) score than Control group (*p<*.01)

iii. TETBLT Group shows significantly higher levels of Achievement in English (Total and Skill wise) score than Control group (*p<*.01).

iv. STAD group shows significantly higher levels of Achievement in English (Total and Skill wise) score than TETBLT Group (*p<*.01) for Total Sample.

15) *Effectiveness of Instructional Strategies on Achievement in English (Total Score and Skill Wise) –Non- Verbal Intelligence as Covariate.*

i. Eeffectiveness of STAD and TETBLT Groups over the Control Group in terms of Achievement in English (Total and Skill wise score) is significant (*p<.01*) for the Total Sample. Achievement in English (Total and Skill wise score) differ significantly among STAD, TETBLT, and AOMT groups even after controlling the Non-Verbal Intelligence in Achievement in English (Total and Skill wise score)

ii.   STAD group shows significantly higher levels of Achievement in English (Total and Skill wise) score than Control group ($p<.01$)

iii.   TETBLT Group shows significantly higher levels of Achievement in English (Total and Skill wise) score than Control group ($p<.01$).

iv.   STAD group shows significantly higher levels of Achievement in English (Total and Skill wise) score than TETBLT Group ($p<.01$) for Total Sample.

16) *Effectiveness of Instructional Strategies on Achievement in English (Total Score and Skill Wise) –Classroom Environment as Covariate.*

i.   Eeffectiveness of STAD and TETBLT Groups over the Control Group in terms of Achievement in English (Total and Skill wise score) is significant (*p<.01*) for the Total Sample. Achievement in English (Total and Skill wise score) differ significantly among STAD, TETBLT, and AOMT groups even after controlling the Classroom Environment in Achievement in English (Total and Skill wise score).

ii.   STAD group shows significantly higher levels of Achievement in English (Total and Skill wise) score than Control group ($p<.01$).

iii.   TETBLT Group shows significantly higher levels of Achievement in English (Total and Skill wise) score than Control group ($p<.01$).

iv.   STAD group shows significantly higher levels of Achievement in English (Total and Skill wise) score than TETBLT Group ($p<.01$) for Total Sample.

17) *Effectiveness of Instructional Strategies on Achievement in English (Total and Skill wise – Four Covariates in Combination.*

i.   Eeffectiveness of STAD and TETBLT Groups over the Control Group in terms of Achievement in English (Total and Skill wise score) is significant (*p<.01*) for the Total Sample. Achievement in English (Total and Skill wise score) differ significantly among STAD, TETBLT, and AOMT groups even after controlling the Covariates in Combination on Achievement in English (Total and Skill wise score)

ii.   STAD group shows significantly higher levels of Achievement in English (Total and Skill wise) score than Control group (*p<*.01)

iii.   TETBLT Group shows significantly higher levels of Achievement in English (Total and Skill wise) score than Control group (*p<*.01).

iv.   STAD group shows significantly higher levels of Achievement in English (Total and Skill wise) score than TETBLT Group (*p<*.01) for Total Sample.

Results of the Covariance Analysis for Self Regulation

Results of ANCOVA done to find out the effectiveness of Student Teams Achievement Divisions (STAD) Strategy and Technology Enriched Task Based Language Teaching (TETBLT) over Activity Oriented Method of Teaching) in terms of Self Regulation after controlling the Covariates (Pre Experimental Status in terms of Achievement, Verbal Intelligence, Non Verbal Intelligence and Classroom Environment in Combination) for Total Sample is presented in the following section.

18) *Effectiveness of Instructional Strategies on Self Regulation – Pre Experimental Status in Achievement Controlled*

i) Eeffectiveness of STAD and TETBLT Groups over the Control Group in terms of Self Regulation of standard VIII students is significant (*p<.01*) for the Total Sample. Self Regulation score differ significantly among STAD, TETBLT, and AOMT groups even after controlling the Pre Experimental Status in Self Regulation.

ii) STAD group shows significantly higher levels of Self Regulation than Control group (*p<.01*)

iii) TETBLT Group shows significantly higher levels of Self Regulation than Control group (*p<.01*).

iv) STAD group shows significantly higher levels Self Regulation than TETBLT Group (*p<.01*) for Total Sample.

19) *Effectiveness of Instructional Strategies on Self Regulation(Total Score and Skill Wise) – Verbal Intelligence as Covariate.*

i) Eeffectiveness of STAD and TETBLT Groups over the Control Group in terms of Self Regulation of standard VIII students is significant (*p<.01*) for the Total Sample. Self Regulation score differ significantly among STAD, TETBLT, and AOMT groups even after controlling the Verbal Intelligence.

ii) STAD group shows significantly higher levels of Self Regulation than Control group (*p<.01*)

iii) TETBLT Group shows significantly higher levels of Self Regulation than Control group (*p<.01*).

iv)   STAD group shows significantly higher levels of Self Regulation than TETBLT Group ($p<.01$) for Total Sample.

20) Effectiveness of Instructional Strategies on Self Regulation(Total Score and Skill Wise) –Non- Verbal Intelligence as Covariate.

i)   Eeffectiveness of STAD and TETBLT Groups over the Control Group in terms of Self Regulation of standard VIII students is significant ($p<.01$) for the Total Sample. Self Regulation score differ significantly among STAD, TETBLT, and AOMT groups even after controlling the Non-Verbal Intelligence.

ii)   STAD group shows significantly higher levels of Self Regulation than Control group ($p<.01$)

iii)   TETBLT Group shows significantly higher levels of Self Regulation than Control group ($p<.01$).

iv)   STAD group shows significantly higher levels of Self Regulation than TETBLT Group ($p<.01$) for Total Sample.

21) Effectiveness of Instructional Strategies on Self Regulation – Classroom Environment as Covariate.

i)   Eeffectiveness of STAD and TETBLT Groups over the Control Group in terms of Self Regulation of standard VIII students is significant ($p<.01$) for the Total Sample. Self Regulation score differ significantly among STAD, TETBLT, and AOMT groups even after controlling the Classroom Environment.

ii)   STAD group shows significantly higher levels of Self Regulation than Control group ($p<.01$)

iii) TETBLT Group shows significantly higher levels of Self Regulation than Control group ($p<.01$).

iv) STAD group shows significantly higher levels of Self Regulation than TETBLT Group ($p<.01$) for Total Sample.

22) Effectiveness of Instructional Strategies on Self Regulation- Four Covariates in Combination

i). Eeffectiveness of STAD and TETBLT Groups over the Control Group in terms of Self Regulation of standard VIII students is significant ($p<.01$) for the Total Sample. Self Regulation differ significantly among STAD, TETBLT, and AOMT groups even after controlling the Covariates in Combination in case of Self Regulation.

ii) STAD group shows significantly higher levels of Self Regulation score than Control group ($p<.01$)

iii) TETBLT Group shows significantly higher levels of Self Regulation score than Control group ($p<.01$).

iv) STAD group shows significantly higher levels of Self Regulation score than TETBLT Group ($p<.01$) for Total Sample.

Results of the Two Way Analysis of Variance (ANOVA) for Achievement in English

In the present study, Two Way ANOVA was utilized to examine whether any change in the levels of the Independent Variables (Instructional Strategies and Metacognitive Awareness) create variation in Achievement in English (Total score and Skill Wise score) or not. Scheffe' Test of Post-hoc Comparison was used as a follow-up analysis, wherever the Independent Variables have significant main effect on Achievement in English (Total

score and Skill Wise score). Results of the Analysis of Variance for Achievement in English (Total score and Skill Wise score) for the Total Sample, Boys and Girls are presented briefly in this section of the findings.

Two way Analysis of Variance (ANOVA) for Achievement in English (Total and Skill wise Scores).

The results of Two Way ANOVA undertaken to investigate the main and interaction effects of Instructional Strategies (STAD, TETBLT, and Control) and Metacognitive Awareness on Achievement in English (Total and Skill wise Scores) are summarised in this section.

23. Main and of interaction effects of Instructional Strategies and Metacognitive Awareness on Achievement in English (Total and Skill wise Scores) for Total Sample.

The *F*-values, obtained for the main effect of Instructional Strategies on Achievement in English (Total and Skill wise Scores) are significant ($p < .01.$)

The *F*-values, obtained for the main effect of Metacognitive Awareness on Achievement in English (Total and Skill wise Scores) are not significant ($p = n.s.$)

The *F*-values, obtained for the interaction effect of Instructional Strategies and Metacognitive Awareness on Achievement in English (Total and Skill wise Scores) for Total sample are not significant ($p = n.s.$).

Scheffe' Test of Post-hoc Comparison Based on Three Groups of Instructional Strategies

The F ratio obtained for the comparison beween three groups of Instructional strategies (STAD- Control, STAD-TETBLT and TETBLT) for

the variable Achievement in English (Total and for relevant skills) for the Total Sample, are found significant ($p < .01.$). There exists significant difference between the three levels of Instructional Strategies (STAD Strategy, TETBLT and AOMT) for the Total sample.

STAD and TETBLT groups reported significantly higher Achievement in English (Total and for relevant Skillwise Scores) than the Control Group for Total sample.

In all comparisons, STAD Group reported significantly higher Achievement in English (Total and Skillwise Scores) than the TETBLT group.

Among the three Instructional Strategies STAD group contribute much to Achievement in English (Total and Skillwise Scores) than TETBLT and AOMT.

24) Main and interaction effects of Instructional Strategies and Metacognitive Awareness on Achievement in English (Total and Skill wise Scores) for Boys.

The *F*-values, obtained for the main effect of Instructional Strategies on Achievement in English (Total and Skill wise Scores) are significant ($p < .01.$)

The *F*-values, obtained for the main effect of Metacognitive Awareness on Achievement in English (Total and Skill wise Scores) are not significant ($p = n.s.$)

The *F*-values, obtained for the interaction effect of Instructional Strategies and Metacognitive Awareness on Achievement in English (Total and Skill wise Scores) for Boys are not significant ($p = n.s.$).

Scheffe' Test of Post-hoc Comparison Based on Three Groups of Instructional Strategies

The F ratio obtained for the comparison beween three groups of Instructional strategies (STAD- Control, STAD-TETBLT and TETBLT) for the variable Achievement in English (Total and skillwise scores) for the Boys, are found significant, except for some skills. There exists significant difference between the three levels of Instructional Strategies (STAD Strategy, TETBLT and AOMT) for Boys.

STAD and TETBLT groups reported significantly higher Achievement in English (Total and for Skillwise Scores) than the Control Group for Boys.

In all comparisons, STAD Group reported significantly higher Achievement in English (Total and for Skillwise Scores) than the TETBLT group.

Among the three Instructional Strategies STAD contribute much to Achievement in English than TETBLT and AOMT.

25) Main and interaction effects of Instructional Strategies and Metacognitive Awareness on Achievement in English (Total and Skill wise Scores) for Girls.

The *F*-values, obtained for the main effect of Instructional Strategies on Achievement in English (Total and Skill wise Scores) are significant ($p < .01.$)

The *F*-values, obtained for the main effect of Metacognitive Awareness on Achievement in English (Total and Skill wise Scores) are not significant ($p = n.s.$)

The *F*-values, obtained for the interaction effect of Instructional Strategies and Metacognitive Awareness on Achievement in English (Total and Skill wise Scores) for Girls are not significant (*p = n.s.*).

Scheffe' Test of Post-hoc Comparison Based on Three Groups of Instructional Strategies

The F ratio obtained for the comparison beween three groups of Instructional strategies (STAD- Control, STAD-TETBLT and TETBLT) for the variable Achievement in English (Total and for relevant skills) for the Girls, are found significant, except for some skills. There exists significant difference between the three levels of Instructional Strategies (STAD Strategy, TETBLT and AOMT) for Boys.

STAD and TETBLT groups reported significantly higher Achievement in English (Total and Skillwise Scores) than the Control Group for Girls.

 In all comparisons, STAD Group reported significantly higher Achievement in English (Total and Skillwise Scores) than the TETBLT group.

Among the three Instructional Strategies STAD contribute much to Achievement in English than TETBLT and AOMT.

Analysis of Variance for Self Regulation

Two way ANOVA was undertaken to study the main and interaction effects of Instructional Strategies and Metacognitive Awareness on Self Regulation for the Total sample, Boys and Girls. The results of two-way ANOVA are presented and discussed in this subsection of analysis.

26) Main and Interaction Effects of Instructional Strategies and Metacognitive Awareness on Self Regulation for Total Sample.

F-values obtained for the main effect of Instructional Strategies on Self Regulation is significant ($p<.01$).

The *F*-value, obtained for the main effect of Metacognitive Awareness on Self Regulation for the Total sample is not significant, ($p=$ .n.s.).

The *F*-value obtained for the interaction effect of Instructional Strategies and Metacognitive Awareness on Self Regulation for Total sample is not significant, ($p=$n.s.).

Scheffe' Test of Post-hoc Comparison Based on Three Groups of Instructional Strategies for Total Sample

F ratio obtained for the comparison between three groups of Instructional strategies (STAD- Control, STAD-TETBLT and TETBLT) are found significant ($p<.01$).

From the result it is revealed that there exists significant difference between the three levels of Instructional Strategies (STAD Strategy, TETBLT and AOMT) with reference to the mean Self Regulation for the Total sample.

STAD and TETBLT groups reported significantly higher Self Regulation than the Control Group for Total sample.

In all comparisons, STAD Group reported significantly higher Self Regulation than the TETBLT group.

Among the three Instructional Strategies STAD contribute much to Self Regulation than TETBLT and AOMT.

27) *Main and Interaction Effects of Instructional Strategies and Metacognitive Awareness on Self Regulation for Boys.*

F-values obtained for the main effect of Instructional Strategies on Self Regulation is significant (*p*< .01).

The *F*-value, obtained for the main effect of Metacognitive Awareness on Self Regulation for Boys is not significant, (*p*= .n.s.).

The *F*-value obtained for the interaction effect of Instructional Strategies and Metacognitive Awareness on Self Regulation is not significant, (*p*=n.s.).

Scheffe' Test of Post-hoc Comparison Based on Three Groups of Instructional Strategies for Boys.

F ratio obtained for the comparison between three groups of Instructional strategies (STAD- Control, STAD-TETBLT and TETBLT) are found significant (*p*<.01).

From the result it is revealed that there exists significant difference between the three levels of Instructional Strategies (STAD Strategy, TETBLT and AOMT) with reference to the mean Self Regulation for Boys.

STAD and TETBLT groups reported significantly higher Self Regulation than the Control Group for Boys.

In all comparisons, STAD Group reported significantly higher Self Regulation than the TETBLT group.

Among the three Instructional Strategies STAD contribute much to Self Regulation than TETBLT and AOMT.

28) ***Main and Interaction Effects of Instructional Strategies and Metacognitive Awareness on Self Regulation for Girls.***

F-values obtained for the main effect of Instructional Strategies on Self Regulation is significant ($p < .01$).

The *F*-value, obtained for the main effect of Metacognitive Awareness on Self Regulation for Girls is not significant, ($p = $ .n.s.).

The *F*-value obtained for the interaction effect of Instructional Strategies and Metacognitive Awareness on Self Regulation is not significant, ($p =$ n.s.).

Scheffe' Test of Post-hoc Comparison Based on Three Groups of Instructional Strategies for Girls.

F ratio obtained for the comparison between three groups of Instructional strategies (STAD- Control, STAD-TETBLT and TETBLT) are found significant ($p < .01$).

From the result it is revealed that there exists significant difference between the three levels of Instructional Strategies (STAD Strategy, TETBLT and AOMT) with reference to the mean Self Regulation for Girls.

STAD and TETBLT groups reported significantly higher Self Regulation than the Control Group for Girls.

 In all comparisons, STAD Group reported significantly higher Self Regulation than the TETBLT group.

Among the three Instructional Strategies STAD contribute much to Self Regulation than TETBLT and AOMT.

Tenability of Hypotheses

The tenability of the hypotheses stated for the present experimental study are examined on considering the major findings of the study.

1. Hypothesis one states that "There will be no significant difference in the mean Achievement in English (Total and Skill wise Scores) of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) for the Total Sample, Boys and Girls.

For the Total Score, Analysis of the data revealed that the effect of Instructional Strategies on Mean Achievement in English (Total and Skill wise scores is significant ($p<.01$) in 15 out of 15 ANOVA. Mean scores of the Achievement differ significantly among STAD, TETBLT, and AOMT for the Total Sample, Boys and Girls. Thus the first hypothesis is rejected.

2. Hypothesis two states that "There will be no significant difference in the mean Gain score of Achievement in English (Total and Skill wise Scores) of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) for the Total Sample, Boys and Girls".

For the Total Score, Analysis of the data revealed that the effect of Instructional Strategies on Mean Gain of Achievement in English (Total and Skill Wise scores is significant ($p<.01$) for 15 out of 15 ANOVA. Mean gain scores of the Achievement differ significantly among STAD, TETBLT, and AOMT for the Total Sample, Boys and Girls. Thus the second hypothesis is rejected.

3. Hypotheses three states that "There will be no significant difference in the mean Self-regulation scores of the Experimental Group I (STAD),

Experimental Group II (TETBLT) and the Control Group (AOMT) for the Total Sample, Boys and Girls.".

Analysis of the data revealed that the effect of Instructional Strategies on Mean Self Regulation scores is significant (p<.01) for Total Sample Boys and Girls in 3 out of 3 ANOVA. Mean Self Regulation differ significantly among STAD, TETBLT, and AOMT for the Total Sample, Boys and Girls. Hence the third hypothesis is rejected.

4. Hypothesis four states that "There will be no significant difference in the mean gain score of Self-regulation of the Experimental Group I (STAD), Experimental Group II (TETBLT) and the Control Group (AOMT) for the Total Sample, Boys and Girls."

Analysis of the data revealed that the effect of Instructional Strategies on Mean Gain scores of Self Regulation scores is significant (p<.01) for Total Sample, Boys and Girls in 3 out of 3 ANOVA. Mean Gain scores of Self Regulation differ significantly among STAD, TETBLT, and AOMT for the Total Sample, Boys and Girls. Hence the fourth hypothesis is rejected.

5. Hypothesis five states that "Students taught through Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning will not differ significantly than students taught through Activity Oriented Method of Teaching (AOMT), if any, in terms of Achievement in English (Total and Skill wise scores) of standard VIII Students".

In the ANCOVA for Achievement in English (Total and Skill wise Scores), significant F-values (p<.01) were obtained for Instructional Strategies in 25 out of 25 ANCOVA when Pre-Experimental status in terms of Achievement in English (Total and Skill wise Scores), Verbal Intelligence, Non-verbal Intelligence and Classroom Environment are controlled singly and

in combination. Results of the Post-hoc comparison also yielded significant difference ($p<.01$) in favour of the STAD Strategy over Activity Oriented Method of Teaching. Therefore, the result of ANCOVA with the Dependent Variable, Achievement in English (Total and Skill wise Scores) revealed the effectiveness of STAD Strategy over Activity Oriented Method of Teaching.. Hence the fifth hypothesis is rejected.

6. Hypothesis six states that "Students taught through Technology Enriched Task Based Language Teaching (TETBLT) will not differ significantly than students taught through Activity Oriented Method of Teaching (AOMT), if any, in terms of Achievement in English (Total and Skill wise scores) of standard VIII Students.".

In the ANCOVA for Achievement in English (Total and Skill wise Scores), significant F-values ($p<.01$) were obtained for Instructional Strategies in 25 out of 25 ANCOVA when Pre-Experimental status in terms of Achievement in English (Total and Skill wise Scores)*,* Verbal Intelligence, Non-verbal Intelligence and Classroom Environment are controlled singly and in combination. Results of the Post-hoc comparison also yielded significant difference ($p<.01$) in favour of the TETBLT Strategy over Activity Oriented Method of Teaching. Therefore, the result of ANCOVA with the Dependent Variable, Achievement in English (Total and Skill wise Scores) revealed the effectiveness of TETBLT Strategy over Activity Oriented Method of Teaching. Hence the sixth hypothesis is rejected.

7. Hypothesis seven states that "Students taught through Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning will not differ significantly than students taught through Technology Enriched Task Based Language Teaching (TETBLT), if any, in terms of Achievement in English (Total and Skill wise scores) of standard VIII Students".

In the ANCOVA for Achievement in English (Total and Skill wise Scores), significant F-values (p<.01) were obtained for Instructional Strategies in 25 out of 25 ANCOVA when the four covariates are controlled singly and in combination. Results of the Post-hoc comparison also yielded significant difference (p<.01) in favour of the STAD Strategy over TETBLT. Therefore, the result of ANCOVA with the Dependent Variable, Achievement in English (Total and Skill wise Scores) revealed the effectiveness of STAD Strategy over TETBLT. Hence the seventh hypothesis is rejected.

8. Hypothesis eight states that "Students taught through Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning will not differ significantly than students taught through Activity Oriented Method of Teaching (AOMT), if any, in terms of Self-regulation of standard VIII Students".

In the ANCOVA Self Regulation, significant F-values (p<.01) were obtained for Instructional Strategies in 9 out of 9 ANCOVA the four covariates are controlled singly and in combination. Results of the Post-hoc comparison also yielded significant difference (p<.01) in favour of the STAD Strategy over Activity Oriented Method of Teaching. Therefore, the result of ANCOVA with the Dependent Variable, Self Regulation revealed the effectiveness of STAD Strategy over Activity Oriented Method of Teaching. Hence the eighth hypothesis is rejected.

9. Hypothesis nine states that "Students taught through technology Enriched Task Based Language Teaching (TETBLT) will not differ significantly than students taught through Activity Oriented Method of Teaching (AOMT), if any, in terms of Self-regulation of standard VIII Students".

In the ANCOVA Self Regulation, significant F-values (p<.01) were obtained for Instructional Strategies in 9 out of 9 ANCOVA when the four covariates are controlled singly and in combination. Results of the Post-hoc comparison also yielded significant difference ($p<.01$) in favour of the TETBLT over Activity Oriented Method of Teaching. Therefore, the result of ANCOVA with the Dependent Variable, Self Regulation revealed the effectiveness of TETBLT over Activity Oriented Method of Teaching. Hence the ninth hypothesis is rejected.

10. Hypothesis ten states that "Students taught through Technology Student Teams Achievement Divisions (STAD) Strategy of Cooperative Learning will not differ significantly than students taught through Technology Enriched Task Based Language Teaching (TETBLT), if any, in terms of Self-regulation of standard VIII Students.".

In the ANCOVA for Self Regulation, significant F-values (p<.01) were obtained for Instructional Strategies in 9 out of 9 ANCOVA when the four covariates are controlled singly and in combination. Results of the Post-hoc comparison also yielded significant difference ($p<.01$) in favour of the STAD Strategy over TETBLT. Therefore, the result of ANCOVA with the Dependent Variable, Self Regulation revealed the effectiveness of STAD Strategy over TETBLT. Hence the tenth hypothesis is rejected.

11. Hypothesis eleven states that "There will be no significant main effects of Independent Variables (Instructional Strategies and Metacognitive Awareness) on Achievement in English (Total and Skill wise Scores) of standard VIII Students for the Total Sample, Boys and Girls".

Significant main effect of Instructional Strategies on Achievement in English (Total and Skill wise Scores) was found in 15 out of 15 ANOVA

undertaken for the Total sample, Boys and Girls. For the main effect of Meta cognitive Awareness on Achievement in English (Total and Skill wise Scores), none out of 15 ANOVA yielded significant main effect for Total sample, Boys and Girls. Hence the eleventh hypothesis is partially rejected.

12. Hypothesis twelve states that "There will be no significant interaction effect of Independent Variables (Instructional Strategies and Metacognitive Awareness) on Achievement in English (Total and Skill wise Scores) of standard VIII Students for the Total Sample, Boys and Girls.

No significant interaction effect of the Independent Variables (Instructional Strategies and Metacognitive Awareness) on Achievement in English (Total score and Skill Wise sore) of standard VIII students for the Total Sample, Boys and Girls were found in 15 ANOVA undertaken for the purpose. Hence the twelfth hypothesis is not rejected.

13. Hypothesis thirteen states that "There will be no significant main effects of Independent Variables (Instructional Strategies and Metacognitive Awareness) on Self-regulation of standard VIII Students for the Total Sample, Boys and Girls.

Significant main effect of Instructional Strategies was found in 9 out of 9 ANOVA undertaken for the Total sample, Boys and Girls. Whereas, no significant main effect of the Metacognitive Awareness on Self Regulation of standard VIII students for the Total Sample, Boys and Girls is found in 9 ANOVA. Hence the thirteenth hypothesis is rejected partially..

14. Hypothesis fourteen states that "There will be no significant interaction effect of Independent Variables (Instructional Strategies and

Metacognitive Awareness) on Self-regulation of standard VIII Students for the Total Sample, Boys and Girls.

No significant interaction effect of the Independent Variables (Instructional Strategies and Metacognitive Awareness) on Self Regulation of standard VIII students for the Total Sample, Boys and Girls were found in 9 ANOVA undertaken for the purpose. Hence the fourteenth hypothesis is not rejected.

Educational Implications Derived

In the present study, STAD (Student Teams Achievement Divisions) Strategy of Cooperative Learning was found more effective than the Technology Enriched Task Based Language Teaching (TETBLT) and Activity Oriented Method of Teaching (AOMT) on Achievement in English and Self Regulation. The transition from the traditional competitive classroom to a cooperative one does not slow down the performance of the students; rather it was found that it improves the performances of learners with regard to English Language Achievement.

Cooperative Learning strategies provide teachers with effective ways to respond to individual differences prevailing among students by promoting four language skills such as TETBLT found and Writing along with Self Regulation. STAD proved to be more practical and more acceptable for students compared to other strategies. It was observed that sometimes the students found to be hesitant to ask for clarifications whenever they had doubts that arise during the learning process. In groups, however, they seemed to be more interactive in simply explaining and clarifying the same topic that lead to greater success. Important skills such as TETBLT found and Writing are easily achieved through cooperative group activities.

The use of STAD in classroom demonstrates students how to work as a team and shows them that learning is much more fun when everyone is part of it. A conducive environment without threat of competition allows the child to flourish and reach its full potential in a relaxed atmosphere. Creating classrooms in which diversity among the students is embraced and in which all students achieve academically is challenging, but not impossible.

Cooperative Learning provides the strategy for improving academic achievement, enhancing mutual concerns, making learning enjoyable and nurturing safe, caring environments. If used in the context of collaboration, it definitely enhances English language learning leading to higher achievement for every child. The results of the present study suggest that teachers in English Language, should give a serious consideration and to have a favorable attitude towards this method. STAD could be initiated by student's involvement in explaining and receiving explanation in which the skills can be easily understood.

The use of STAD Strategy of Cooperative Learning in English is a suitable teaching/ learning strategy for minimising gender differences in students' achievement in English. Teacher training colleges and universities should emphasize STAD as an effective strategy of teaching English. Education stakeholders should encourage teachers to use this strategy in teaching English so that students share their intellect, co-exist harmoniously, and learn in teams/groups without anxiety and enjoy English lessons thereby promoting Self Regulated learning among students.

The results of the study revealed that teaching English using STAD has positive effect on the student's achievement. It seems reasonable to consider using this technique in today's classroom. Teachers' objections to cooperative techniques may come from the perceived increase in time and effort required,

the loss of feeling in control in the traditional lecture style classroom, or the fear that all the required material will not be covered. Efforts should be made by the teachers to create suitable STAD learning environment especially in English classes for enhanced achievement and self regulation.

Co-operative Learning assigns a new role to the teacher. It is the teacher who converts the passive listeners in the classroom into active learners and achievers by implementing Co-operative Learning strategies in perfect way. The teacher thus becomes a facilitator in learning process to actively encourage the student to help each other and learn from each other, participate in discussions, and engage in problems solving in a free democratic way. A merit of Cooperative Learning environment is that it does not require a great deal of expertise on the part of the instructor or much time to prepare and implement. Coupled with direct instruction, Cooperative Learning holds great promise as a supplement to textbook instruction by providing students opportunities to apply English skills and concepts, reason and problem solving with peers, use language to discuss concepts, and make connections to other skills and disciplines.

Carefully constructed lessons, using the "lesson preparation," "lesson instruction," and "lesson evaluation" components can offer students rich learning opportunities in English teaching. The students who are instructed using STAD which gives more emphasize on cooperation among group members. Students can ensure that all group members have attained the same comprehension about the lesson and obtained nearly the same learning achievement. This is because, in the learning process that uses Cooperative Learning strategy, it is expected that all students will attain abilities alike. Students routinely work in groups to help each other in discourses. During the group work, the task of group members is to master the lessons that are presented by teachers, and help their group members to master the lesson, and

to collaboratively achieve a common goal. This will in turn help students to develop skills that relate to their fellow human beings which will be very useful for their life outside the school.

Students will strive to carry out the assigned Discourse well, which in turn can acquire learning achievement. Furthermore, for a group of students who have a positive belief about science has faith that everything that is done well will surely yield maximum results or attain success. Thus, the positive faith about English language would rightly enable the students to learn it effectively and efficiently for enhanced English language Learning and achievement among the students.

STAD ensures full involvement of students ensuring increased individual responsibility in group work. There is a need to modify teaching and learning of English teaching especially in focusing basic skills proficiency at the secondary schools. In order to ensure students' improved performance in English language, teachers, policy makers as well as the Ministry of Education all have important role to play in this exercise.

Teachers who want to use a new intuitional method in class should be firm in their stance. From the study, it was realized that it took some weeks before the students got adjusted to the new teaching approach. Hence, if a teacher is not firm, he or she might rescind his or her decision and resort to the traditional lecture approach with the fear that the use of the new Instructional Strategies would not yield the desired results. Schools and district authorities should organize workshops for teachers on theory and practice about the use of STAD as a Cooperative Learning approach in the classroom. The facilitators of such workshops should be experts in the fields of Cooperative Learning strategy so as to clear all doubts teachers may have about the approach and other group activities.

This is because, this study has proved that students at any schools and all levels. The study revealed that, small as well as smaller groups' studies were all effective in using the Cooperative Learning approach. Thus, teachers should use group sizes based on the sample size of their class. Students can also be put into mixed ability groups to practice peer tuition. This is so because students explain concept to each other, they do so at their own cognitive maturity level. Their understanding of grammar and language skills may be improved as student solved problems together.

The school can also organize periodic in-service trainings by infusing STAD Strategy of Cooperative Learning for non- professional teachers as and when they join the staff or take teaching appointment. Teachers who are enthusiastic and pleasurable users of language, can be models of best practices in language learning. STAD Strategy of Cooperative Learning is an important input for teaching in English. Student Teams Achievement Division (STAD) activities may require more teacher preparation of group material and monitoring of group activities, the rewards and benefits for both the teacher and students go a long way. They appear likely to positively influence a school's academic and social climates as well.

Based on the findings of the study Technology Enriched Task Based Language Teaching is very effective on Achievement in English and Self Regulation of standard VIII students. Technology can be utilized for adopting modern styles which satisfies both visual and auditory senses of the students. In this regard, the role of teacher is that of a "scaffolder" and scrupulously providing safety nets, allows student to build up knowledge, and become part of the teaching process through enriched teaching and learning experiences. Moreover, it allows teachers to guide more and teach less. It also allows students to have more control of their own learning. Task -based instruction provided learners with opportunities to use the English language contextually,

and to explore it through situational activities. Task Based Language Teaching with technology enrichment helps students to practice English in an anxiety free classroom setting through learning by doing.

The content of the English textbook of secondary schools should be reconsidered and task based learning activities should be included in teaching English as a foreign language. Technology Enriched Task Based Language Teaching (TEBLT) based learning is student centered in the sense that students are encouraged to use language relatively through the tasks they are asked to perform. Language learners can understand texts without conscious focus on the language forms.

There must be provision for adequate Instructional Strategies and vivid approaches for enriched English language skills. English language skills should be included in the students' evaluation program to prepare the students for the summative written achievement tests as these tests alone cannot measure the all language skills very effectively and comprehensively. Technology incorporated facilities can be effectively utilised especially in crowded classrooms for enhanced English Language Learning and achievement among the students. Any academic reform that aims to bring about a systematic improvement in English can take advantage of the current research efforts of the STAD strategy and TETBLT strategy. The practicing English teachers can utilise STAD strategy and TETBLT exclusively for curricular transaction for effective language teaching.

Suggestions for Further Research

Findings of the present study made the investigator to suggest the following areas where further researches are needed.

1.   The study can be extended to investigate the effectiveness of Cooperative Learning Strategy on creativity and language proficiency of secondary and higher secondary students.

2.   The study can be extended to investigate the effect of STAD and TETBLT with other student specific variables like Motivation, creativity on productive skills.

3.   The study can also be extended to investigate the effect of STAD, TETBLT Strategies with achievement in receptive skills.

4.   The study can be extended to other disciplines such as science and other languages.

5.   Replication of the study to higher levels of education such as Higher Secondary, college level classes to examine the effectiveness of technology enriched classroom on creativity and productive skills.

6.   The research can be expanded to compare the impact of the cooperative strategy and task based language teaching for primary and secondary education

7.   Other Cooperative Learning Strategies like Teams-Games Tournaments (TGT), Group Investigation (GI), Team Assisted Individualisation (TAI), etc. can be experimented.

8.   Independent effect of the STAD and TETBLT can be replicated in the same sample.

9. Teacher training materials for Cooperative Learning strategies and technology enriched task based language teaching can be developed.

10. A longitudinal study on the effect on STAD, TETBLT on language learning can be undertaken.

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APPENDICES

Appendix A

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION
Section- I

SCALE OF ATTITUDE TOWARDS INSTRUCTIONAL STRATEGIES IN TEACHNING ENGLISH
(Draft)

Dr.A. Hameed   Sabna.E.P
(Assistant Professor)   Research Scholar

Instructions

The following statements are on the different aspects of instructional strategies used in English Class room. Each statement is provided with three choices. Kindly check your response and indicate what you believe is true in the appropriate column provided against the statements using a '✓' mark. Please fill your personal details in the space provided below.

Gender : Male /Female   Type of school :Govt/Aided/Unaided

SI. No.	Statements	Agree	Undecided	Disagree
1	Innovative instructional strategies augment academic achievement of language learning			
2	Use of different instructional strategies promotes the progress of communication skills (e.g., writing and presentation skills).			
3	Innovative instruction strategies Makes language teachers feel more competent as educators.			
4	It is not possible to implement variety of instructional strategies in language classroom without specialized materials.			
5	Promotes the development of students' interpersonal skills (e.g., ability to relate or work with others).			
6	Diversity of Classroom Teaching Improves my			

	professional development			
7	Diversity of instruction in language classroom eases the strain on me as a teacher.			
8	Innovative strategies Improves student learning of critical concepts and ideas			
9	Successful implementation of instructional strategies in classroom is possible only if teachers have responsive the content and features of each instruction			
10	Teachers can implement any method in their language classroom successfully.			
11	Teachers have to teach variety of instruction in my language class			
12	Some instructional strategies require skills training that is too time consuming.			
13	I have to use technology integration in my language classroom for effective learning.			
14	Successful implementation of instructional strategies makes a admirable classroom management			
15	Innovative instructional strategies Gives teachers the opportunity to be learning facilitators instead of information providers			
16	Instructional strategies help students obtain a deeper understanding of the language skills development			
17	There is too little time available to prepare students to work effectively in groups.			
18	Instructional varities enhances the learning of low-ability students in language classroom.			
19	Using different instructional strategies fosters positive student attitudes towards in language learning.			
20	It is better to use familiar teaching methods over trying new approaches.			
21	Teachers have to use grouping techniques in their class room			
22	Teachers may use technologies for effective instruction			
23	Lecture method is good for teachings English in secondary school.			
24	Innovative teaching process gives too much responsibility to the students.			
25	All teachers have seek knowledge about innovative instructional strategies.			

Section- II

Attitude of English Teacher Towards Cooperative Learning Strategy

Instructions

The following statements are on the different aspects of cooperative learning strategy .Each statement is provided with three choices. Kindly check your response and indicate what you believe is true in the appropriate column provided against the statements using a '✓' mark .Please fill your personal details in the space provided below.

Sl. No.	Statements	Agree	Un decided	Disagree
1	Cooperative learning motivates learners with different ability levels to master academic activities.			
2	Cooperative learning is a valuable instructional approach for English language teaching			
3	Too much preparation time is required to implement cooperative learning in English language classroom.			
4	Cooperative learning boosts learner's productivity in English language skills.			
5	Teachers should have knowledge of how to create effective cooperative learning groups.			
6	Cooperative learning gives too much importance on developing student's social skills.			
7	Cooperative learning helps students get a deeper understanding of learning materials in English classroom			
8	Cooperative learning gives equal chances to all learners.			
9	The physical ambience of my classroom is an obstacle in using cooperative learning.			
10	Cooperative learning gives support to group members to have different roles for the good effects of the			

26	Instructional strategies is consistent with my teaching philosophy			
27	When Implementing innovative teaching methods I have to face too many disciplinary problems among my students.			
28	For me to succeed in using instructional strategies requires support from the school administration.			
29	Peer interaction helps students obtain a deeper understanding of the language learning to become more enthusiastic and lively.			
30	Innovative instruction strategies gives a chance to students academic progress.			
31	Teachers have do not believe in the diversity of strategies for language teaching			
32	Teachers have very proficient in using a wide variety of technologies with innovative instructional strategies in classroom.			
33	Teachers have to integrate students in teaching activities.			
34	Teachers have to often use our smart class to teach English language			
35	Feel comfortable in using digital portfolios with my class.			
36	An innovative technology in classroom is really a boon to teachers and students.			
37	A teacher requires continuous support to use the Innovative strategies in class room.			
38	Teachers have do not feel comfortable using variety of language teaching methods in my classroom			
39	Implementing variety of strategies requires extra time to plan learning activities.			
40	Innovative instructional strategies Improves student learning of critical concepts and ideas through innovative strategies.			

	group learning.			
11	Cooperative learning gets respect of others opinions among learners.			
12	I have Cooperative Learning makes learners responsible for their English language learning.			
13	Engaging in cooperative learning improves learner's social skills.			
14	Using cooperative learning can create too many disciplinary problems among my students.			
15	To succeed in using cooperative learning requires support from the school administration is needed			
16	Cooperative learning improves the English language learning of low grade students.			
17	Cooperative learning well to give a good outcome in English language learning.			
18	Cooperative learning encourages learners to use higher order thinking strategies.			
19	I have in mind that group members in cooperative learning should be heterogeneous in power.			
20	It is not easy to implement cooperative learning successfully in my English language teaching.			
21	Engaging in cooperative learning connects with students' English language skills development			
22	Cooperative learning helps learners to achieve academic goals positively.			
23	There is limited time available to prepare students to work effectively in groups			
24	Implementing cooperative learning takes too much class time.			
25	It is not possible to use cooperative learning without specialized materials in my teaching English.			
26	I am not much experienced to implement cooperative learning successfully in my English teaching.			
27	Implementation cooperative learning has so many barriers.			

28	Cooperative learning is important both for learners and teachers.			
29	Positive connections in Cooperative Learning among group members ensures effective learning.			
30	Cooperative Learning is not different from structuring of groupings in Class rooms.			

Section- III

Attitude of English Teacher Towards Task Based Language Teaching Strategy

Instructions

The following statements are on the different aspects of Task Based Language Teaching. Each statement is provided with three choices. Kindly check your response and indicate what you believe is true in the appropriate column provided against the statements using a '✓' mark. Please fill your personal details in the space provided below.

Gender :male /female   Type of school :Govt/Aided/Unaided

Sl. No.	Statements	Agree	Undecided	Disagree
1	TBLT is in accordance with the principles of communicative language teaching			
2	TBLT pursues the development of integrated skills in the classroom.			
3	I feel pressured by the administration to TBLT in my classroom			
4	TBLT Stimulate motivation among learners.			
5	TBLT Promotes student collaboration in language classroom.			
6	TBLT promotes learners' academic progress			
7	TBLT is an efficient classroom strategy in teaching English			
8	TBLT takes into account the needs and			

	interests of learners			
9	An overcrowded classroom is an obstacle to the implementation of the TBLT			
10	TBLT materials in textbooks are useful and target the real context			
11	I don't have sufficient knowledge of task based language teaching			
12	TBLT requires much preparation time compared to other instructional strategies.			
13	Using of TBLT fosters positive student attitudes towards English learning			
14	TBLT Promotes student collaboration in language classroom.			
15	TBLT is not appropriate for all the grade level			
16	TBLT strengthen language Skills.			
17	Materials in textbooks are not accurate for the use of TBLT			
18	TBLT provides a relaxed atmosphere to use the language in English classroom			
19	TBLT with technology is very interactive and effective in teaching English			
20	TBLT is suitable for controlling classrooms.			
21	Small group work is not very effective in TBLT classroom			
22	Evaluating the task-based performance of the learner is very difficult in TBLT			
23	Proficiency of language skills is necessary in task based language classroom			
24	Proficiency of language skills is necessary in task based language classroom			
25	Implementing TBLT requires a great deal of effort			

Appendix A1

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION
Section- I

SCALE OF ATTITUDE TOWARDS INSTRUCTIONAL STRATEGIES IN TEACHNING ENGLISH
(Final)

Dr.A. Hameed	Sabna.E.P
(Assistant Professor)	Research Scholar

Instructions

The following statements are on the different aspects of instructional strategies used in English Class room. Each statement is provided with three choices. Kindly check your response and indicate what you believe is true in the appropriate column provided against the statements using a '✓' mark. Please fill your personal details in the space provided below.

Gender : Male /Female   Type of school :Govt/Aided/Unaided

SI. No.	Statements	Agree	Undecided	Disagree
1	Innovative instructional strategies augment academic achievement of language learning			
2	Innovative instruction strategies Makes language teachers feel more competent as educators.			
3	Promotes the development of students' interpersonal skills (e.g., ability to relate or work with others).			
4	Diversity of Classroom Teaching Improves my professional development			
5	Innovative strategies Improves student learning of critical concepts and ideas			
6	Teachers can implement any method in their language classroom successfully.			

7	Teachers have to teach variety of instruction in my language class			
8	Some instructional strategies require skills training that is too time consuming.			
9	I have to use technology integration in my language classroom for effective learning.			
10	Successful implementation of instructional strategies makes a admirable classroom management			
11	Innovative instructional strategies Gives teachers the opportunity to be learning facilitators instead of information providers			
12	Instructional strategies help students obtain a deeper understanding of the language skills development			
13	There is too little time available to prepare students to work effectively in groups.			
14	Instructional varities enhances the learning of low-ability students in language classroom.			
15	Using different instructional strategies fosters positive student attitudes towards in language learning.			
16	It is better to use familiar teaching methods over trying new approaches.			
17	Teachers have to use grouping techniques in their class room			
18	Teachers may use technologies for effective instruction			
19	Innovative teaching process gives too much responsibility to the students.			
20	All teachers have seek knowledge about innovative instructional strategies.			
21	Instructional strategies is consistent with my teaching philosophy			
22	When Implementing innovative teaching methods I have to face too many disciplinary problems among my students.			
23	For me to succeed in using instructional strategies requires support from the school administration.			
24	Peer interaction helps students obtain a deeper understanding of the language learning to become more enthusiastic and lively.			
25	Innovative instruction strategies gives a chance to students academic progress.			

Section- II

Attitude of English Teacher Towards Cooperative Learning Strategy

Instructions

The following statements are on the different aspects of cooperative learning strategy .Each statement is provided with three choices. Kindly check your response and indicate what you believe is true in the appropriate column provided against the statements using a '✓' mark .Please fill your personal details in the space provided below.

Sl. No.	Statements	Agree	Un decided	Disagree
1	Cooperative learning is a valuable instructional approach for English language teaching			
2	Too much preparation time is required to implement cooperative learning in English language classroom.			
3	Cooperative learning boosts learner's productivity in English language skills.			
4	Cooperative learning gives too much importance on developing student's social skills.			
5	Cooperative learning helps students get a deeper understanding of learning materials in English classroom			
6	Cooperative learning gives equal chances to all learners.			
7	Cooperative learning gives support to group members to have different roles for the good effects of the group learning.			
8	Cooperative learning gets respect of others opinions among learners.			
9	I have Cooperative Learning makes learners responsible for their English language learning.			
10	Engaging in cooperative learning improves learner's			

26	Teachers have do not believe in the diversity of strategies for language teaching			
27	Teachers have very proficient in using a wide variety of technologies with innovative instructional strategies in classroom.			
28	Teachers have to integrate students in teaching activities.			
29	Teachers have to often use our smart class to teach English language			
30	Feel comfortable in using digital portfolios with my class.			
31	An innovative technology in classroom is really a boon to teachers and students.			
32	A teacher requires continuous support to use the Innovative strategies in class room.			
33	Teachers have do not feel comfortable using variety of language teaching methods in my classroom			
34	Implementing variety of strategies requires extra time to plan learning activities.			
35	Innovative instructional strategies Improves student learning of critical concepts and ideas through innovative strategies.			

Section- III

Attitude of English Teacher Towards Task Based Language Teaching Strategy

Instructions

The following statements are on the different aspects of Task Based Language Teaching. Each statement is provided with three choices. Kindly check your response and indicate what you believe is true in the appropriate column provided against the statements using a '✓' mark. Please fill your personal details in the space provided below.

Gender :male /female   Type of school :Govt/Aided/Unaided

Sl. No.	Statements	Agree	Undecided	Disagree
1	TBLT is in accordance with the principles of communicative language teaching			
2	TBLT pursues the development of integrated skills in the classroom.			
3	I feel pressured by the administration to TBLT in my classroom			
4	TBLT Stimulate motivation among learners.			
5	TBLT promotes learners' academic progress			
6	TBLT is an efficient classroom strategy in teaching English			
7	TBLT takes into account the needs and interests of learners			
8	TBLT materials in textbooks are useful and target the real context			
9	I don't have sufficient knowledge of task based language teaching			
10	TBLT requires much preparation time compared to other instructional strategies.			
11	TBLT is not appropriate for all the grade level			
12	TBLT strengthen language Skills.			
13	Materials in textbooks are not accurate for the use of TBLT			

	social skills.			
11	Cooperative learning improves the English language learning of low grade students.			
12	Cooperative learning well to give a good outcome in English language learning.			
13	Cooperative learning encourages learners to use higher order thinking strategies.			
14	I have in mind that group members in cooperative learning should be heterogeneous in power.			
15	It is not easy to implement cooperative learning successfully in my English language teaching.			
16	Engaging in cooperative learning connects with students' English language skills development			
17	Cooperative learning helps learners to achieve academic goals positively.			
18	There is limited time available to prepare students to work effectively in groups			
19	Implementing cooperative learning takes too much class time.			
20	It is not possible to use cooperative learning without specialized materials in my teaching English.			
21	I am not much experienced to implement cooperative learning successfully in my English teaching.			
22	Implementation cooperative learning has so many barriers.			
23	Cooperative learning is important both for learners and teachers.			
24	Positive connections in Cooperative Learning among group members ensures effective learning.			
25	Cooperative Learning is not different from structuring of groupings in Class rooms.			

14	TBLT provides a relaxed atmosphere to use the language in English classroom			
15	TBLT with technology is very interactive and effective in teaching English			
16	TBLT is suitable for controlling classrooms.			
17	Small group work is not very effective in TBLT classroom			
18	Evaluating the task-based performance of the learner is very difficult in TBLT			
19	Proficiency of language skills is necessary in task based language classroom			
20	Implementing TBLT requires a great deal of effort			

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LESSON TRANSCRIPT FOR STUDENT TEAM ACHIEVEMENT DIVISION (STAD) STRATEGY OF COOPERATIVE LEARNING

Dr.A. Hameed   Sabna.E.P
(Assistant Professor)   Research Scholar

Name of Teacher	:	SABNA.E.P
Class	:	VIII
Duration	:	45
Unit	:	As we shall we reap
Topic	:	Gulliver's Travels

Objectives

The students will

- ➤ recognize how to read and understand a variety of materials.

- ➤ understand how to apply thinking skills to their reading, writing,

- ➤ speaking, listening, and viewing

- ➤ identify and list facts about the author Jonathan Swift.

- ➤ answer comprehension questions about Gulliver's Travels.

- ➤ crossword puzzle with vocabulary

- ➤ identify different statements as either fact or opinion.

- ➤ write a paragraph about the book's main character.

- ➤ identify the main characters, setting, and plot in part one of Gulliver's Travels.

- ➤ recognize and match cause and effect relationships in the story Gulliver's Travels.

- ➤ complete a word search with vocabulary words from Gulliver's Travels.

> place the events from the story in the correct order.

> identify correct answers to multiple choice and matching questions.

> write correct responses to short answer questions.

Learning Aids: Chart, Marker, Pencil, Visuals/Images, Worksheet Paper

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Phase I -Class Presentation

(Teacher creates rapport with the students).

Teacher	:	Good Morning
Student	:	Good Morning
Teacher	:	How Are You?
Student	:	Fine Teacher
Teacher	:	In which method your teacher teaches you?
Students	:	Activity Oriented Method of Teaching, Game method etc.
Teacher	:	Do you like to learn English, using different and interesting method?
Student	:	Yes.
Teacher	:	We are going to deal this topic with STAD method. The features of this method are the following. The main features of this method are

- Learning become easy

- Considering the opinion of everyone

- Learning with mutual cooperation etc.

(Students listen carefully)

Teacher : In this method we will go through the following phases

Phase I – Class Presentation

Phase II: Teams.

Phase III. Quizzes.

Teacher	:	Do You like Adventures, Are you doing adventures?
Students	:	Yes
Teacher	:	Can you tell me about adventure from and your experience?
Students	:	Yes (one of them narrates)

Teacher: Ok, Today we are going to enjoy an adventure story of Gulliver. Have you heard of him? Are you interested?

Students: Yes

Teacher: I will explain a brief summary of the lesson.

Lemuel Gulliver ,a surgeon in ship named Antelope, started his journey on 4th May 1699.In his journey to the south sea he faces problems and hardships. Many of his crew died. On 5th November, a fierce storm split the ships and it began to sink. It killed several of the ship sailors and rendered the rest of the them ill valid. His people had to suffer a lot on the voyage. when the ship was caught in a storm it was completely wrecked. Gulliver swam to a island. He was tired. He slept on a grass plot for nine hours. When he awoke, he found a strange sight. People who were six inches tall became to stand on him. He was completely tied to the ground.

Gulliver made a loud roar. The people of the place(Lilliput) began to run away frightened. Some of them took pity on him. They cut the ropes on his face. His captivity was reported to the king. By the king's orders, Gulliver was given meat and wine. They loosened the strings and the arrows were removed.

Then the Lilliputians made a large cart and took Gulliver on it to the city. There he was lodged in a temple. The emperor came there and spoke to him. Gulliver's kindness towards those who attached him impressed the emperor. The emperor tried to entertain the guest. One of the items in the entertainment was walking on threads. Gulliver also showed some tricks there.

Gulliver was given freedom conditionally. He should not leave the country or enter the city without prior permission. He should fight in defense of country.

Phase IV. Individual Improvement Scores.

Phase V .Team Recognition.

(Teacher Introduced the a new teaching strategy which used the cooperation., Student Teams Achievement Divisions strategy of cooperative learning. Student teams achievement divisions strategy (STAD). Teacher introduces the lesson 'Gulliver's travels 'used in the new strategy)

Teacher : Are you ready?, Let us start.

Students : Yes

(Teacher gives an introduction to the author Jonathan swift.(Teacher exhibit
A chart about the writer including hint photo and other details).

Jonathan Swift
1667-1745
online-literature.com

Born	:	30 November 1667, Dublin, Republic of Ireland
Died	:	19 October 1745, Dublin, Republic of Ireland
Education	:	Hertford College, Oxford (1694), University of Oxford, Trinity College, Dublin
Influenced by	:	Daniel Defoe, Horace, Juvenal
Works	:	Swift is remembered for works such as *A Tale of a Tub* (1704), *An Argument Against Abolishing Christianity*(1712), *Gulliver's Travels* (1726), and *A Modest Proposal* (1729

Teacher :   Did you enjoy? Can you see the image of Gulliver travel

Students   :   Yes

Teacher   :   How is it?

Students   :   Exiting

Phase I - *Teams.*

(The students are divided into a team of nine groups with five students. For this, the teacher distributes a paper strips to all students. The paper strips bear name of poets(Words Worth, Shelly, Keats, Coleridge, Eliot, Sarojini Naidu, Rabintranath Tagore, Shakespeare, John Donne).Students Are asked into sit in groups)

Teacher   :   Did you all get the strips?

Students   :   Yes

Teacher   :   Now our seating need be rearranged in accordance with the new

method. Who will do it?

Students : We will

(Teacher helps the students to arrange the seats as given below).

Teacher : Now you can sit in groups in this way.

Entrance

Top

Students are seated in groups based on the poet name in the strips

Teacher : Now let us do some discourses

Group Name: _____ *Date:*_____

Discourse: Story Writing

Create an imaginary story like Gulliver travels

Teacher invites one of the team member in each group to present the work.

Criteria Of Judgment : Teacher gave a score 1,2,3 to each presentation. The criteria for scoring is Score3- Creativity, way of presentation, use of vocabulary and grammar, characterization, sequence ,imagination

Score2. Missing vocabulary and grammar, characterization, sequence ,imagination, one or two sentence are clear

Score1-Only one or two events are in order, little clarity ,neatness and legibility.

(Teacher present a model of the cartoon)

Group Name: _____ *Date:*_____

Discourse: preparing Announcement

Imagine emperor announces a magic competition .prepare an announcement for it.

Criteria Of Judgment : Teacher gave a score 1,2,3 to each presentation based on

Score3- legible and clear content, convey message, presentation

Score 2-Clear content

Score 1-Missing content

The teacher asks the student to present the Announcement

Kings announcement
A magic competition will be held on 26 august at the place .skilled magicians are invited

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(Other activities carried out in different days).

Group Name: _____ *Date:* _____

Discourse: Cartoon preparation

All of you heard the interesting story of Gulliver. Then you map a Cartoon depicting   first events in series

(Hints- starting ship,   thunderstorm and lightening, sinking ship, Gulliver jumped to the sea,
          see small people)

(Teacher provides enough time for the completion of the work).

Teacher   :   Did you finish the cartoon

Students   :   yes

 (Teacher invites one of the team member in each group to present the work).

Criteria Of Judgment : Teacher gave a score 1,2,3 to each presentation based on the following
          cartoon

Score3-Events are in order, precise, clarity of presentation ,neatness and legibility

Score2- Some events are in order ,more clarity and legibility

Score1-Only one or two events are in order, little clarity ,neatness and legible.

(The Shakespeare ,Words Worth groups are winner with three points, Group Shelly has won
two points, and the Keats group is in third place)

 (Teacher present a model of the cartoon.) It may be prescribed form

Phase III - *Quizzes*

(In Phase III students take individual quizzes. Students are not permitted to talk each one another during quizzes. Thus every student is individually responsible for knowing the material,The teacher distributes worksheet for each student)

Teacher   :   Now we are going to conduct quiz based on the lesson .Are you ready?

Students   :   yes

(Teacher reminds the rules of quiz once again).

Teacher   :   At the time of quiz nobody will help others to answer, All of you are ready to participate in quizzes

Students   :   yes

Teacher   :   Let us start ,Take your worksheet .

WORK SHEET -I

Name ....Anjali .c.............................Group name..Words worth.............................
Base score.................................

Q. How does the Antelope wreck?
Q. What happens to Gulliver's companions during and after the shipwreck?
Q. How tall is the first Lilliputian Gulliver sees? What is he carrying?
Q. To what does Gulliver compare the Lilliputian arrows?
Q. What makes Gulliver fall asleep after the Lilliputians put soothing ointment on his blistered face and hands?
Q. Why do the Lilliputians have to move Gulliver? How do they do it??
Q. What makes Gulliver sneeze?
Q. Where does Gulliver "lodge," or stay, while he's in Lilliput?
Q. How do the Lilliputians keep him captive in his new home?
Q. What does Gulliver do with his penknife?
Q.How do the Lilliputians make a bed for Gulliver?
Q. Who authored 'Gulliver's travels'?

(Students participate in the quiz wholeheartedly and quizzing moves interestingly. After completing the questions, teacher exposed the answer key. The teacher presents the answer to the questions. Students exchange their answer sheet and value it. The individual score is taken into account for the team score. Each team scores its point.)

After one or two quizzes, discover the individual improvement scores

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Phase IV- *Individual Improvement Scores*

Teacher verifies the result.

Teacher   :   Each of you has your marks.

Students   :   yes.

Teacher   :   write your score in your work sheet

Students   :   Yes teacher.

Teacher   :   Are you remembering your base scores?

(Based on the teacher made test before start lesson)

Students   :   Obviously

Teacher   :   You write those base scores in your worksheet

Students   :   yes

(Teacher finds the individual improvement scores of each student based on their base scores and the score obtained from quizzing. Teacher classifies the team on account of the performance in to three categories.

Phase V - *Team Recognition*

Teacher: We are going to classify you on the basis of your individual improvement scores. Are you interested?

Students   :   Interested

Teacher   :   the criteria for team awards is as follows.

15 - 19	Good team
19 - 24	Great team
25 - 30	super team

(on the basis of this at the end of the week teacher distributes certificates to the winning team and declares the class ended) you can calculate the sure of the group by adding the scores of individual members.

Students   :   Thank you.

Teacher   :   Welcome.

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DEPARTMENT OF EDUCATION

LESSON TRANSCRIPT FOR TECHNOLOGY ENRICHED TASK BASED LANGUAGE TEACHING

Dr.A. Hameed	Sabna.E.P
(Assistant Professor)	Research Scholar

Class   :   VIII

Duration   :   45

Unit   :   As we shall we reap

Topic   :   Gulliver's Travels

Objectives

The students will

> ➤ recognize how to read and understand a variety of materials.
> ➤ understand how to apply thinking skills to their reading, writing,
> ➤ speaking, listening, and viewing
> ➤ identify and list facts about the author Jonathan Swift.
> ➤ answer comprehension questions about Gulliver's Travels.
> ➤ crossword puzzle with vocabulary
> ➤ identify different statements as either fact or opinion.
> ➤ write a paragraph about the book's main character.
> ➤ identify the main characters, setting, and plot in part one of Gulliver's Travels.
> ➤ recognize and match cause and effect relationships in the story Gulliver's Travels.
> ➤ complete a word search with vocabulary words from Gulliver's Travels.
> ➤ place the events from the story in the correct order.
> ➤ identify correct answers to multiple choice and matching questions.
> ➤ write correct responses to short answer questions.

Learning Aids: YouTube Video Clippings, Images

PHASE I-PRE TASK

In informal conversation, the teacher creates rapport with students. The teacher asks some questions to present the subject.

    Teacher : Do you remember adventure trips .You have attempted?.
                    That trip   helps   adventure. Displays a video based on
                    trucking.
    Student : Yes, Exciting.

https://syoutu.be/22wvyDP3O64

Brainstorming

(Teacher shows a video .Based on the video clipping you all should share your thoughts. Teacher will ask some questions based on the video. Students are eagerly response with very enthusiastic)

    Teacher : What are the things can you see in the video?
    Students : Trucking hills
    Teacher : Any of you can experience in trucking?

(Teacher asks students does any one of you have about an experience they had during their journeys. Both pleasing and worse experiences)

    Student : One of the students shared his experience at
                 Meeshapulimala In Munnar, Kerala

Task I:

*(*All are listening very attentively .Teacher gives a task to list out the adventurous nearby places. Teacher asks students to present the list in the whole class).

    Teacher : Here we have a adventurous novel Gulliver's travels
                 written by Jonathan swift.
    (The teacher divides the students into groups.)

Teacher : You have to form groups and select a leader for the group.

Student : Yes

(Student forms groups and participate in a group discussion).

Teacher : You may read the first three paragraphs of Gulliver's travels.

Student Yes

(The teacher helps the student identify the meaning of a difficult word. Teacher also provide a dictionary after reading the teacher shows a movie based on Gulliver's travels).

PHASE II TASK CYCLE

(Students do the task in pairs or small groups while the teacher monitors).

Group Scaffolding: Teacher divides the students into groups and select a group leader, Students one engaged in group discussion. After writing the group leaders present it the whole class.

Teacher : Now let us do some tasks, Are you ready.

Student : yes,sure

Task II- Analysis Chart

Objective: Apply Critical Thinking to the Ideas . Gulliver analyzes the laws and customs of the land of Lilliput.

Some of them he sees as brilliant improvements on the way people do things in England. Others find it difficult to understand or accept. Many customs are simply traditional, and so are dispensed by some residents. Some laws, however, have received a lot of thought and are designed to improve the lives of Lilliputians. Examine the laws and customs of Lilliput. For each Lilliputian law or custom shown in the following table, determine whether it is reasonable and, therefore, valid, and record your vote for or against. Provide a brief explanation of your opinion.

Task II- Resume Writing

Objective: Gathering details from the text. Teacher shows a video clip of demo on resume writing

Despite his education and experience, Lemuel Gulliver cannot make a living practicing medicine on earth. He therefore decides to accept a ship surgeon position, as he has done in the past. Imagine that Gulliver has to compete with many other candidates for the profitable position on the Antelope. Review what you have read about his education and work experience. Make a list of all relevant information that you can extract from the text. Then create a resume for Gulliver who will make sure he is hired. The curriculum vitae must include Gulliver's education, previous work experience, skills, personal interests and references. A blank CV template has been provided.

(Other Tasks carried out in different days)

Task III- Letter to the Editor

Objectives: Exploring a Novel Theme Writing an Effective Letter to the Editor .Gulliver is powerless to prevent it.

Teacher : What situations do you see happening around you where someone is exploited? Do you see it in the news at the national level? Do you see it locally, maybe in your school?

Student : Respond well

Teacher: Are students bullied? Are local business employees exploited, forced to work longer hours for less pay? What about the exploitation of animals used to make movies and entertain people in the parks? Write a letter to the editor of your local newspaper in which you describe a case of exploitation and then speak against it.

Teacher:This is your chance to express your indignation about a problem that is really important to you. Use the Internet or other reliable sources to gather your facts. Then think of solutions to the problem to be able to • reveal a truth, • express your emotion, • and conclude on a note of hope.

Student : actively participate in groups

Planning

Student prepare to present report to the whole class (oral/written) on how they did the task, and what they decided or discovered.

The Report

Some groups present their reports to the class,or exchange written reports and compare results.

(Teacher is that of chairperson, to introduce the presentations, to set a purpose for listening, to nominate who speaks next and to sum up at the end).

Some guidelines follow the basic principles of which apply to handling all types of presentations. Written reports and compare results

Some groups present their reports to the class, or exchange written reports an compare results.

PHASE III-LANGUAGE FOCUS

Analysis

Students examine and discuss specific features.

Practice

Teacher conducts practice of new words phrases, and patterns that occur in the data.

Summing up and giving feedback best.

Teacher encourages students and motivate with appropriate feedback.

Repeat task.

Teacher present their audio speech .students listened very enthusiastically.

Self- evaluation of attainment.

Students compare their task with others. Identify the mistake and learn new vocabulary, sentence creation, grammatical elements and language use

Follow-up

Collect details about Jonathan Swift. Prepare a script based on 'Gulliver's Travels'.

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION
LESSON TRANSCRIPT BASED ON ACTIVITY ORIENTED METHOD OF TEACHING

Name of Teacher	: Sabna E.P	Class	: VIII
Name of School	: D.G.S.S.H Tanur	Duration	: 45mts
Subject	: English	Strength	: 45
Unit	: As we shall we reap		
Topic	: Gulliver's Travels		

Learning Objectives

The Learner,

- To read and enjoys pieces of literature like satire ,stories
- Pre requisites   Students familiar with, the skill to read and comprehend language.
- Familiarise a satire
- develop the four fold skills of language (Listening, Speaking, Reading and Writing
- Equips the learners to participate in group activities
- enable students to respond to questions

Pre –requisites:

- Students might have familiar with stories and novels.
- They might have seen the Malayalam Movie ''ALBUDA DWEEB''
- They have adequate grammar and vocabulary

Material used: Course Book , Black Board

PROCESS	EVALUTION
Entry activity Teacher enters the classroom and establishes rapport with students by introducing self and having casual talks with them. Teacher assesses the student' interest with foreign language and asks them whether they like stories or not? Teacher asks them what kind if stories they like most? And why? Through this conversation teacher gauge their interest in stories. **Individual Reading** Teacher asks students to read the story from beginning to the 5th paragraph silently and to mark the unfamiliar words, familiar words and words they found interesting. **Collaborative Reading** Teacher asks the students to sit in groups, share their ideas and clarify doubts. Teacher megaphones doubts to the entire class and initiates discussion on the topic. **Scaffolding Questions** What trade does Gulliver learn as an apprentice? Surgeon What continent is Gulliver near when he is shipwrecked? Australia How does the Antelope wreck? It crashed into a rock during a storm. What happens to Gulliver's companions during and after the shipwreck? They are all either lost or dead. How tall the first Lilliputian Gulliver is sees? What is he carrying? Six inches. A bow and arrow. To what does Gulliver compare the Lilliputian arrows? Needles What makes Gulliver fall asleep after the Lilliputians put soothing ointment on his blistered face and hands? They put a sleepy potion in his wine. **Discourse Making** *Activity I* Teacher asks the students to write a conversation between Gulliver and King of Lilliput.	

Activity II
 	
 Imagine that you are Gulliver. write a letter to his friend about the strange thing in Lilliput .Draft a letter
 	
 Presentation
 	
     Teacher asks each group to present their group work
 	
 Editing
 	
     Teacher edits the discourse thematically, syntactically and morphologically
 	
 Teacher's Version	

Teacher shows his own version of conversation **Follow up** Teacher gives a home assignment that to write a home assignment, to write a short note on satire. Students are given home assignment to write about Jonathan Swift.	

Appendix E

UNIVERSITY OF CALICUT
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SCALE OF METACOGNITIVE AWARENESS (DRAFT)

Dr. A. Hameed   **Sabna E.P.**   **Meharunnisa Karadan**
Assistant Professo   Research Scholar   Research Scholar

Name of the Student:..

Name of the School:...Class:............

Male/Female:.. Govt./Aided/Unaided

Instructions:

The statements given below are to test how far you are aware of your intellectual capacities. For each statement three responses - "Always", "Sometimes" and "Never" are given. After reading each statement carefully mark (✓) which suits the best in your case. Take special care to keep serial number while answering. Your data will be kept confidential and used only for research purposes. Please ensure you have responded to all the statements.

Sl. No.	Statements	Always	Sometimes	Never
1.	I know what my strengths are			
2.	I realize how much I can learn in the end			
3.	I am not interested in the method of learning different areas of a particular subject.			
4.	I used to evaluate how much I learned after learning a subject.			
5.	I do not think of suitable and necessary learning materials.			
6.	I am aware of my weaknesses in studies.			
7.	I am aware of the various elements that arouse interest in learning.			
8.	I do not use previous knowledge in learning situations appropriately.			

Sl. No.	Statements	Always	Sometimes	Never
9.	I find my own ways to overcome barriers to learning.			
10.	I have found the most suitable methods to learn different topics.			
11.	I follow my own easy ways to achieve curricular goals.			
12.	I have not identified any learning strategies appropriate to my learning style.			
13.	When solving learning problems, I have no insight into its results.			
14.	I am proud of my achievements in learning.			
15.	To simplify the learning task, I keep punctuality.			
16.	To simplify my learning difficulties, I use my strengths to the maximum			
17.	I always use similar resources for learning.			
18.	During learning I am unable to look at it from different angles.			
19.	I do not try to achieve my goals by controlling various elements that influence learning.			
20.	I do not test if my learning style is suitable for learning performance.			
21.	I change my learning style depending on the situation.			
22.	I do not think about new strategies to enrich learning activities.			
23.	I know when and when to apply a particular learning strategy based on its effectiveness.			
24.	I do not recognize which learning style leads to success.			
25.	I classify different topics according to their importance.			
26.	I do not categorize lessons in advance based on the time allocated.			
27.	I do not study without proper planning.			
28.	I do not solve problems before reading instructions and regulations.			
29.	I do not think about the importance of what is learned.			
30.	I structurally analyze the learning goals.			
31.	I use all available options to evaluate my mistakes in learning.			
32.	I wonder how to improve the planning of learning.			
33.	I do not see if my abilities and thoughts have changed			

Sl. No.	Statements	Always	Sometimes	Never
	through learning.			
34.	I prefer self-analysis to tests and questions.			
35.	I'm not looking for shortcut methods that lead to success.			
36.	I am aware of the factors that influence my thoughts.			
37.	I have identified the factors that influence my attention in learning.			
38.	After each lesson I evaluated myself with simple tests.			
39.	I cannot relate learning strategies to learning outcomes.			
40.	In the problem-solving phase, I specifically remember what is needed.			
41.	I try to keep my feelings and emotions away from learning.			
42.	I am aware of what concepts I need to achieve in order to achieve the goals of learning.			
43.	I know how important it is to learn new concepts.			
44.	I am aware about the importance of learning new information.			
45.	I'm not sure what the key concepts are that need to be achieved during the learning process.			
46.	I discuss with my friends the concepts that are not clear in the class.			
47.	I try to figure out ways and methods myself to improve my learning through television and the internet.			
48.	It does not bother me if I could complete the learning process successfully.			
49.	I have identified my positions in the class based on teacher assessment.			
50.	I like to learn with the help of different learning aids.			
51.	I think of the use and availability of learning strategies.			
52.	I usually ask myself to analyze how far I am, clearly about the areas that are taught in class.			
53.	While learning I do not try to integrate big concepts.			
54.	I do not prepare the possible questions from the class.			
55.	I try to develop new concepts based on the lessons.			
56.	When new theories and definitions are introduced in the classroom, I do not think they came into being.			
57.	When I'm having trouble writing down lecture scripts, I			

Sl. No.	Statements	Always	Sometimes	Never
	prepare my own notes.			
58.	Before I try to study a classroom, I usually do not think about how to prepare it.			
59.	When I find any new lesson confusing, I try to associate it with the lessons I learned earlier to get conceptual clarity.			
60.	I could not check every level of learning in the right way before moving on to the next level.			
61.	When I read or hear conclusions from class, I thought of other possibilities.			
62.	I do not set the learning goals in advance.			
63.	I used materials that were more suitable than teachers.			
64.	I used to go on several strategies to analyze problems in the textbooks.			
65.	I do not analyze if learning styles go hand in hand with learning goals.			
66.	I am aware of my personal responsibility to achieve general learning goals.			

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

SCALE OF METACOGNITIVE AWARENESS
(Final)

Dr. A. Hameed	**Sabna E.P.**	**Meharunnisa Karadan**
Assistant Professor	Research Scholar	Research Scholar

Name of the Student:..

Name of the School:...Class:...........

Male/Female:... Govt./Aided/Unaided

Instructions:

The statements given below are to test on how far you are aware of your intellectual capacities. For each statement three responses - "Always", "Sometimes" and "Never" are given. After reading each statement carefully mark (✓) which suits the best in your case. Take special care to keep serial number while answering. Your data will be kept confidential and used only for research purposes. Please ensure you have responded to all the statements.

Sl. No.	Statements	Always	Sometimes	Never
1.	I know what my strengths are			
2.	I am not interested in the method of learning different areas of a particular subject.			
3.	I used to evaluate how much I learned after learning a subject.			
4.	I do not think of suitable and necessary learning materials.			
5.	I am aware of my weaknesses in studies.			
6.	I am aware of the various elements that arouse interest in learning.			
7.	I find my own ways to overcome barriers to learning.			

8.	I have found the most suitable methods to learn different topics.			
9.	I follow my own easy ways to achieve curricular goals.			
10.	I have not identified any learning strategies appropriate to my learning style.			
11.	When solving learning problems, I have no insight into its results.			
12.	I am proud of my achievements in learning.			
13.	To simplify the learning task, I keep punctuality.			
14.	To simplify my learning difficulties, I use my strengths to the maximum			
15.	During learning I am unable to look at it from different angles.			
16.	I do not try to achieve my goals by controlling various elements that influence learning.			
17.	I change my learning style depending on the situation.			
18.	I do not think about new strategies to enrich learning activities.			
19.	I know when and where to apply a particular learning strategy based on its effectiveness.			
20.	I do not recognize which learning style leads to success.			
21.	I classify different topics according to their importance.			
22.	I do not categorize lessons in advance based on the time allocated.			
23.	I do not solve problems before reading instructions and regulations.			
24.	I do not think about the importance of what is learned.			
25.	I structurally analyze the learning goals.			
26.	I use all available options to evaluate my mistakes in learning.			
27.	I wonder how to improve the planning of learning.			
28.	I do not see if my abilities and thoughts have changed through learning.			
29.	I prefer self-analysis to tests and questions.			
30.	I am aware of the factors that influence my thoughts.			

31.	I have identified the factors that influence my attention in learning.			
32.	After each lesson I evaluated myself with simple tests.			
33.	I try to keep my feelings and emotions away from learning.			
34.	I am aware of what concepts I need to achieve in order to achieve the goals of learning.			
35.	I am aware about the importance of learning new information.			
36.	I'm not sure what the key concepts are that need to be achieved during the learning process.			
37.	I discuss with my friends the concepts that are not clear in the class.			
38.	I try to figure out ways and methods myself to improve my learning through television and the internet.			
39.	I have identified my positions in the class based on teacher assessment.			
40.	I like to learn with the help of different learning aids.			
41.	I think of the use and availability of learning strategies.			
42.	While learning I do not try to integrate big concepts.			
43.	I do not prepare the possible questions from the class.			
44.	I try to develop new concepts based on the lessons.			
45.	When new theories and definitions are introduced in the classroom, I do not think they came into being.			
46.	When I'm having trouble writing down lecture scripts, I prepare my own notes.			
47.	Before I try to study a classroom, I usually do not think about how to prepare it.			
48.	When I find any new lesson confusing, I try to associate it with the lessons I learned earlier to get conceptual clarity.			
49.	When I read or hear conclusions from class, I thought of other possibilities.			
50.	I used materials that were more suitable than teachers.			
51.	I used to go on several strategies to analyze problems			

	in the textbooks.			
52.	I do not analyze if learning styles go hand in hand with learning goals.			
53.	I am aware of my personal responsibility to achieve general learning goals.			

Appendix F
UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

ACHIEVEMENT TEST IN ENGLISH
(Draft)

Dr.A. Hameed   Sabna.E.P
(Assistant Professor)   Research Scholar

Instructions:

- It is a test in English Language. Don't write anything in the question paper. Separate response sheet is provided to mark the answers.

- For each question, four answers are given as **a, b, c** and **d.** Only one among them is right. After finding out the right answer for each question, mark (**X**) it on the respective alphabet in the response sheet.

- If wrongly answered, for changing the answer, draw a rectangle (□) around the first answer and put (**X**) mark in the right place.

- Answer all the questions.

Example: The poem 'The River of Caroline Ann Bowles' refers to?
            A. Child   B . A tree
            C.A bird   D. Wind

A	B	C	D

Choose the Correct Answer

1.   The poem 'The River of Caroline Ann Bowles' refers to?

    A. Child   B. A tree   C. A bird   D. Wind

2.   'She skims like a bird' Can you identify similar expression from the given poem?

    A   Down you dash into the sea

    B.   Tending onward to the ocean

    C.   Sea that line hath never sounded

    D.   Just like mortal prime

3.   How does the sea remind you of eternity?

    A.   The sea cannot be measured

    B   The sea can be measured

C.   Musical quality of the sea

D.   Colour of the sea

4.   What is the word picture used in the poem?

A.   Tending onward to the ocean

B.   Over the yellow pebble dancing

C.   Just like mortal prime

D.   Sea that line hath never sounded

5.   Where does the river leap?

A. Sea   B. Rock   C. Flowers   D. Bushes

6.   Find out the rhyming words?

A.   Way- Play   B. Little- Bright

C.   Yellow-Pebbles   D. Flowers-Foliage

7.   'Seeming still' What does the word" still" mean?

A. Motionless   B. Unfixed

C. Moving   D. Flowing

8.   Choose the opposite word of 'Bright'?

A. Dim   B. Shining

C. Glittering   D. Dazzling

9.   Pick out the word from the passage that means   "Forced to be silent".

A. Creative   B. Mutilated

C. Muzzled   D. Interruption

10.   'She never got time free from interruption'.   What were the interruptions?

A. The noisy inquiries of her many children .

B. The sound of birds.

C. Noise from atmosphere.

D. Noise from near farm.

11.   She spent the winter evenings making quilts enough to cover all our beds" in summer season which type of bed cover do you prefer?

A. Cotton   B. Woolen

C. Synthetic   D. Quilt

12.   You can infer from Walker's comment that her mother labored "beside—not behind—[her] father in the fields" that Walker's ....

A.   Parents did not like field work.

B.   Parents spent all their time in the fields.

C.   Parents treated each other as equals.

D.   Father resented his wife's desire to grow flowers.

13.   Alice Walker's mother ....

A.   won awards for her flowers.

B.   is an artist in the garden.

C.   died when walker was young.

D.   is a professional gardener in the garden .

14.   Walker's description of her mother's daily routine reveals that her mother
....

A.   had relatively easy life

B.   was not very efficient

C.   had a difficult life

D.   never wanted a career outside her home

15.   Walker believes that from her mother and previous generations of African
American women she inherited ....

A.   the knowledge of many different kinds of plants

B.   respect for strength and love of beauty

C.   dislike for household chores

D.   appreciation for the importance of relaxation

16.   The author and her mother share a talent for ....

A.   Quilt making

B.   Gardening

C.   Writing poems

D.   Storytelling

17.   The main idea of Walker's essay can best be described as ....

A.   people should make certain their children receive a good education.

B.   efficient housekeeping is the most important skill in life.

C.   all women owe thanks to their creative female relatives and friends.

D.   all women artists have frustrated mothers.

18.   A personal essay is also called a(n) ....

A.   drama   B. work of fiction

C.   short story   D. informal essay

19.   A personal essay does *not* normally include

A   prose .

B.   the author's perspective.

C.   imaginary characters and invented plot.

B   autobiographical elements.

20.   This excerpt from *In Search of Our Mothers' Gardens* is considered a personal essay because ....

    A.   it is a short work of nonfiction with a personal slant

    B.   it is a work of fiction with a subjective focus

    C.   the author rambles on as in a conversation

    D.   the author reveals intimate details about a person

21.   Choose the opposite word of "disturb" ?

    A. Undisturbed   B. Irritate   C. Interrupt   D. Annoy

Look at the following statements. Identify whether the statements are True or False.

22.   Alice walker and her family were rich

    A. True   B. False

23.   The garden and its creator were appreciated

    A. True   B. False

24.   Alice is mother enjoyed working in the garden

    A. True   B. False

25.   The theme of the poem "river" is...........

    A.   destruction of the river.   B.   beauty of the river.

    C.   the qualities of the river   D.   poet's mind

26.   What is the message of the poem "river" is..........

    A.   Human thought

    B.   The river is always young as spring time

    C.   Destruction of the river

    D.   Pollution of the river

27.   The poem "River of Barbara Mahone" is in the form of dialogue. who are engaged in the dialogue?

    A.   A mother and river   B. River and child

    C.   A mother and a child   D. River and wind

28.   What is the theme of the poem "Rive"r of Barbara Mahone"?

    A.   Qualities of the river   B.   The moving river

    C.   Pollution of the river   D.   Sadness of the river

29.   How tall are the Lilliputians?

    A.   Human size   C.   5 to 6 inches

    B.   Giant   D.   About a foot tall

30. What washes up on the shore of Lilliput?

    A.   Gulliver's hat   B.   Gulliver's gunpowder pouch

    C.   Gulliver's boat   D.   Gulliver's glasses

31. How did Gulliver scare the people of Lilliput?

    A.   He clapped his hands loudly   B.   He sneezed

    C.   He fired his pistol   D.   He stomped his foot

32.. How does Gulliver learn to speak the Lilliputian language?

    A.   A young girl teaches him

    B.   Six scholars are employed to teach him

    C.   He reads their newspapers

    D.   He reads their books

33. Who are the enemies of the Lilliputians?

    A.   The Brobdingnags

    B.   The Laputians

    C.   The Blefuscudians

    D.   Human beings

34. How does Gulliver get home from Blefuscu?

    A.   He finds a boat floating off shore and repairs it

    B.   He is picked up by a large bird

    C.   He swims

    D.   He doesn't

35. Who wrote Gulliver's Travels?

    A.   Alexander Pope   B.   Jonathan Swift

    C.   Henry Fielding   C.   Lemuel Gulliver

36. Why does Gulliver flee to Blefuscu?

    A.   The Lilliputians won't grant him his freedom.

    B.   The Lilliputians are going to execute him.

    C.   The Lilliputians are going to starve him to death.

    D.   The Lilliputians are going to put hiseyes out.

37. How does Gulliver gain his liberty in Lilliput?

    A.   He breaks free

    B.   He tricks the Lilliputians

    C.   With his gentleness and good behavior

    D.   He never gains his liberty

38. Which of the Lilliputians is the nicest to Gulliver?

    A. Flimnap   B. The Emperor

    C. The Empress   D. Redresal

39. How do the Lilliputians hurt Gulliver when they first find him?

    A. let their animals bite him   B.They hit him with stones

    C. They pull his hair   D.They shoot tiny arrows at him

40. What is the punishment for the Lilliputians who bother Gulliver?

    A. They are forced to walk the tight-rope   B. They are put in prison

    C. They are given into Gulliver's hands   D. Death

41. Who raises the Lilliputian children?

    A. Gulliver raises them while he's there   B. Their parents

    C. Animals   D. The government

42. When is the story "Harrison Bergeron" set?

    A. In the future   B. In the past

    C. Right now   D. The story doesn't say

43. One of the sentences in the story is "They leaped like deer on the moon." This is an example of which kind of literary device?

    A. Understatement   B. Simile

    C. Dialogue   D. Metaphor

44. In the story, two characters get shot. Who are they?

    A. A radio announcer and Harrison   B. George and Hazel

    C. Harrison and a Ballerina   D. A musician and a Ballerina

45. What do the handicaps in "Harrison Bergeron" symbolize?

    A. Equality   B. Handicaps

    C. Restraints   D. Totalitarianism

46. In this society, Diana Moon Glampers is the Handicapper general, the one who is in charge of what handicaps the citizens receive. What does she symbolize?

    A. The rights of the citizens.

    B. The way to create equality.

    C. The control of the ruling class.

    D. The government's respect for its citizens.

47. Which of the following is a weakness Vonnegut points out about the government's control?

    A. The government is totalitarian in nature.

    B. The government can only maintain control through force.

C.   The government is not a democracy like it is supposed to be.

D.   The government cannot keep complete control of its citizens.

48.   Which would be the best theme statement for "Harrison Bergeron"?

A.   Being equal is ideal but a difficult state to attain.

B.   It is not in human nature to be like everyone else.

C.   Nobody should try to become equal to anyone else.

D.   People should not try to be equal because it makes life difficult.

49.   What kind of short story is "Harrison Bergeron"?

A.   Romance   B.   Mystery

C.   Science-fiction   D.   Non-fiction

50.   Choose the word which best expresses the meaning of the word "Vague"

A.   Small   B. Common

C.   Indefinite   D. Definite

51.   Which word best describes the mood of the Bergeron household?

A.   Subdued   B   Overwhelming

C.   Inspiring   D.   Restless

52.   In this story, people with above-average intelligence have to

A.   Watch a lot of television every night

B.   Marry someone with less intelligence

C.   Report weekly to the Handicapper General

D.   Wear mental-handicap transmitters

53.   Throughout most of the story, you can conclude that George treats Martha.............

A.   Unfairly   B.   Gently

C.   Rudely   D.   Poorly

54.   Harrison is in conflict with

A.   His parents   B. The government

C.   His teachers   D. A ballerina

55.   They don't work hard,................?

A. are they   B. don't they   C. do they   D. aren't they

56.   whose voice is in the sugar fields?

A.   Mother's voice

B.   Poet's voice

C.   Nature voice

D.   Bird voice

57. What phrase does the poet use to describe sugar cane?

    A. the syrup of earth

    B. the syrup of music

    C. the syrup of sugarcane

    D the syrup of fruits.

58. What is the meaning of the word whisper?

    A. Murmur B. Noisy C. Piercing D. Strident

59 What image do the words 'tree talk' and 'wind song' create in your mind?

    A. The word 'tree talk' is when tree dances it starts making sounds , 'wind song' is when wind cries we think that the wind is singing.

    B. The word 'tree talk is the trees shaking its branches in the wind and making certain sounds as if talking and the word 'wind song' is the sound made when wind blows against the trees which has branches with leaves.

    C. when the tree fall towards a lake then it makes noises as if talking and wind start shaking tree leaves as if singing.

    D. None of the above

60. What phrase does the poet use to describe sugarcane?

    A. The poet describes the sugarcane as the favorite food of elephants.

    B. The poet describes sugarcane as the syrup of the earth.

    C. The poet describes the sugarcane as the salty fruit of earth.

    D. none of the above

61. It......since 11 o'clock this morning.

    A. is raining

    B. was raining

    C. had been raining

    D. has been raining

62. What effect does the poem "The Bat" has on your feelings about bat......

    A. Bat is looking ugly.   B. Bat has its own beauty.

    C. Bat is cruel in his nature.   D. Fear of bat.

63. The bat flies in the air...................

    A. Fast   B. Rhythmic

    C. Slow   D. Medium

64. His fingers make a hat about his head' is one of ....poet. used by the poem"The Bat"

    A.   Hyperbole   B. Simile

    C.   Visual image   D. Metaphor

65. What happened to the spaceship bound for venus?

    A.   Power failure and it floated in space.

    B.   Empty of fuel.

    C.   Machine is not working.

    D.   Environment of the Venus.

66. Who do you think is Venu?.

    A.   Creature from the planet Venus

    B.   Name of Astraunut

    C.   Small girl

    D.   Spaceship

67. How did the journey change the astronauts?

    A.   More cautious about using up the energy sources

    B.   No precaution in their journey

    C.   Nothing will be change

    D.   Develops the fear about journey

68. Why didn't Venu allow the astronauts to land on Venus?

    A.   Astronauts would crush thousands of the little creatures and they would use all the resources from Venus.

    B.   the environment of the Venus.

    C.   Tempest of the Venus.

    D.   Astronauts care resources from the Venus.

69. What did astronauts learn from their meeting with Venu?

    A.   Valuable lessons about the e beauty of Venus

    B.   Valuable lessons on the need for protecting their safety.

    C.   Need for protecting the flora and fauna of one's planet and need. for saving energy sources of one's country.

    D.   Need for protecting the astronauts security .

70. Choose the word which best expresses the meaning of the word "Tremendous"

    A.   Very small   B.   Tiny

    C.   Very big   D.   weak

71. I couldn't get to sleep .... of the noise.

    A. although   B. and

    C. in spite of   D. because

72. I have .... to Scotland twice and I want to go there again.

    A. went   B. gone

    C. been   D. come

73. Has mother cooked the chicken ....?

    A. already   B. yet

    C. just   D. never

74. Have you ....-...... visited Delhi?

    A. never   B. Ever

    C. so far   D. yet

75. I am .... my sister

    A. taller   B. more taller than

    C. taller than   D. tall than

76. I ....TV when I .... a loud noise.

    A. watched / heard   B. was watching / was hearing

    C. was watching / heard   D. watched / was hearing

77. I .... her while I .... home.

    A. met / was went   B. met / was going

    C. meet / am going   D. was meeting / went

78. She .... the light and then he .... to sleep.

    A. was turning off/went   B. turned off/was going

    C. was turned off/was going   D. turned off/went

79. My parents will help me if they ....too busy.

    A. aren't   B. aren't be
    C. don't   D. won't be

80. I am going to ....French next summer.

    A. learning   B. will learn

    C. learnt   D. learn

81. I am not sure but It .... tomorrow.

    A. will rains   B. will going to rain
    C. is going to rain   D. will rain

82. Choose the incorrect sentence.

    A. They can help each other.

    B. My father can speak English.
    C. Are they can swim very well?

    D. Some students can't find the class.

83. The train is going ………….. the tunnel.

    A. below   B. around

    C. through   D. at

84. He usually travels to Calicut …………….. train.

    A. with   B. by

    C. at   D. in

85. I was afraid to walk there by _____.

    A. herself   B. himself   C. itself   D. myself

    In questions given below, a part of the sentence is *italicised and underlined..*
    Choose the correct alternative.

86. George *had told* me that he hasn't done it yet.

    A. told   B. was telling   C. tells   D .tell

87. Hardly had reached the bus stop …………. the bus arrived.

    A. than   B. when   C. where   D. until

88. Nehru was not only a politician ………….a great writer.

    A. but   B. and   C. or   D. but also

89. You should…………..go to his office nor speak to him .

    A. either   B. quite   C. not   D. neither

90. He will ………….. buy a land or deposit the money in a bank .

    A. either   B. and   C. than   D. neither

91. If you help her, she …………….. you.

    A. would help   B. would have helped

    C. will help   D. could have helped

92. Unless you work hard you ……………..high score

    A. won't get   B. can get   C. may get   D. will get

93. My mother asked me whether I…………….solve the problem

    A. can   B. could   C. was   D. have

94. Britain is ………… European country

    A. a   B. an   C. the   D. no article

95. I am standing here ………………………… my friends.

A. in behalf of   B. on behalf of   C. on behalf   D. in behalf

96. She walked .... he were rich

    A. if   B. as if   C. incase   D. whether

97. I have been waiting here ......three hours.

    A. since   B. of   C. for   D. at

98. The book was .... interesting that I forgot my lunch while reading it.

    A. so   B. of   C. why   D. to

99. I could scarcely ....his writing

    A. make up   B. make out   C. make of   D. make up for

100. Which word is spelt correctly?

    A. collision   B. Colision   C. Collition   D. Coleesion

Appendix F1

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION
ACHIEVEMENT TEST IN ENGLISH

(Draft)

Response Sheet

Name: .... Class .... No. ....

School: .... Division .... Boy/Girl ....

Sl. No.	A	B	C	D
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Appendix F2
UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION
ACHIEVEMENT TEST IN ENGLISH

(Draft)

SCORING KEY

SI.No	Answers	SI.No	Answers	SI.No	Answers	SI.No	Answers	SI.No	Answers	SI.No	Answers
1	A	18	D	35	B	52	D	69	C	86	A
2	D	19	C	36	D	53	B	70	C	87	B
3	A	20	A	37	C	54	B	71	D	88	D
4	B	21	A	38	D	55	C	72	C	89	D
5	B	22	B	39	D	56	A	73	B	90	A
6	A	23	A	40	A	57	A	74	B	91	C
7	A	24	A	41	A	58	A	75	C	92	A
8	A	25	C	42	A	59	B	76	C	93	A
9	C	26	B	43	B	60	B	77	B	94	A
10	A	27	C	44	C	61	D	78	D	95	B
11	A	28	D	45	D	62	B	79	A	96	B
12	C	29	C	46	C	63	C	80	D	97	C
13	B	30	C	47	A	64	C	81	D	98	A
14	A	31	C	48	C	65	A	82	C	99	B
15	B	32	B	49	C	66	A	83	C	100	A
16	D	33	C	50	C	67	A	84	B		
17		34	A	51	B	68	A	85	D		

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION
ACHIEVEMENT TEST IN ENGLISH
Final

Dr.A. Hameed   Sabna.E.P
(Assistant Professor)   Research Scholar

Instructions:

• It is a test in English Language. Don't write anything in the question paper. Separate response sheet is provided to mark the answers.

• For each question, four answers are given as **a, b, c** and **d.** Only one among them is right. After finding out the right answer for each question, mark (**X**) it on the respective alphabet in the response sheet.

• If wrongly answered, for changing the answer, draw a rectangle (□) around the first answer and put (**X**) mark in the right place.

• Answer all the questions.

Example: The poem 'The River of Caroline Ann Bowles' refers to?
             A. Child   B . A tree
             C.A bird   D. Wind

A	B	C	D

Choose the Correct Answer

1. 'She skims like a bird' Can you identify similar expression from the given poem?

    A   Down you dash into the sea

    B. Tending onward to the ocean

    C. Sea that line hath never sounded

    D. Just like mortal prime

2. How does the sea remind you of eternity?

    A.   The sea cannot be measured

    B   The sea can be measured

    C.   Musical quality of the sea

    D.   Colour of the sea

3. What is the word picture used in the poem?

    A. Tending onward to the ocean

    B. Over the yellow pebble dancing

    C. Just like mortal prime

    D. Sea that line hath never sounded

4. Where does the river leap?

    A. Sea   B. Rock   C. Flowers   D. Bushes

5. 'Seeming still' What does the word" still" mean?

    A. Motionless   B. Unfixed

    C. Moving   D. Flowing

6. Pick out the word from the passage that means "Forced to be silent".

    A. Creative   B. Mutilated

    C. Muzzled   D. Interruption

7. 'She never got time free from interruption'. What were the interruptions?

    A. The noisy inquiries of her many children .

    B. The sound of birds.

    C. Noise from atmosphere.

    D. Noise from near farm.

8. She spent the winter evenings making quilts enough to cover all our beds" in summer season which type of bed cover do you prefer?

    A. Cotton   B. Woolen

    C. Synthetic   D. Quilt

9. Alice Walker's mother ....

    A. won awards for her flowers.

    B. is an artist in the garden.

    C. died when walker was young.

    D. is a professional gardener in the garden .

10. Walker's description of her mother's daily routine reveals that her mother ....

    A. had relatively easy life

    B. was not very efficient

    C. had a difficult life

    D. never wanted a career outside her home

11. Walker believes that from her mother and previous generations of African American women she inherited ....

    A. the knowledge of many different kinds of plants

    B. respect for strength and love of beauty

    C. dislike for household chores

    D. appreciation for the importance of relaxation

12. The author and her mother share a talent for ....

    A. Quilt making

    B. Gardening

    C. Writing poems

    D. Storytelling

13. A personal essay is also called a(n) ....

    A. drama   B. work of fiction

    C. short story   D. informal essay

14. A personal essay does *not* normally include

    A   prose .

    B. the author's perspective.

    C. imaginary characters and invented plot.

    B   autobiographical elements.

15. This excerpt from *In Search of Our Mothers' Gardens* is considered a personal essay because ....

    A. it is a short work of nonfiction with a personal slant

    B. it is a work of fiction with a subjective focus

    C. the author rambles on as in a conversation

    D. the author reveals intimate details about a person

Look at the following statements. Identify whether the statements are True or False.

16. Alice walker and her family were rich

    A. True   B. False

17. The garden and its creator were appreciated

    A. True   B. False

18. Alice is mother enjoyed working in the garden

    A. True   B. False

19. The theme of the poem "river" is...........

    A.   destruction of the river.   B.   beauty of the river.

    C.   the qualities of the river   D.   poet's mind

20. What is the message of the poem "river" is..........

    A.   Human thought

    B.   The river is always young as spring time

    C.   Destruction of the river

    D.   Pollution of the river

21. What is the theme of the poem "Rive"r of Barbara Mahone"?

    A.   Qualities of the river   B.   The moving river

    C.   Pollution of the river   D.   Sadness of the river

22. How tall are the Lilliputians?

    A.   Human size   C.   5 to 6 inches

    B.   Giant   D.   About a foot tall

23. What washes up on the shore of Lilliput?

    A.   Gulliver's hat   B.   Gulliver's gunpowder pouch

    C.   Gulliver's boat   D.   Gulliver's glasses

24. How did Gulliver scare the people of Lilliput?

    A.   He clapped his hands loudly   B.   He sneezed

    C.   He fired his pistol   D.   He stomped his foot

25.. How does Gulliver learn to speak the Lilliputian language?

    A.   A young girl teaches him

    B.   Six scholars are employed to teach him

    C.   He reads their newspapers

    D.   He reads their books

26. How does Gulliver get home from Blefuscu?

    A.   He finds a boat floating off shore and repairs it

    B.   He is picked up by a large bird

    C.   He swims

    D.   He doesn't

27. Why does Gulliver flee to Blefuscu?

    A.   The Lilliputians won't grant him his freedom.

    B.   The Lilliputians are going to execute him.

    C.   The Lilliputians are going to starve him to death.

    D.   The Lilliputians are going to put his eyes out.

28.   How does Gulliver gain his liberty in Lilliput?

A.   He breaks free

B.   He tricks the Lilliputians

C.   With his gentleness and good behavior

D.   He never gains his liberty

29.   Which of the Lilliputians is the nicest to Gulliver?

A.   Flimnap   B. The Emperor

C.   The Empress   D. Redresal

30.   How do the Lilliputians hurt Gulliver when they first find him?

A.   let their animals bite him   B.They hit him with stones

C.   They pull his hair   D.They shoot tiny arrows at him

31.   When is the story "Harrison Bergeron" set?

A.   In the future   B.   In the past

C.   Right now   D.   The story doesn't say

32.   In the story, two characters get shot. Who are they?

A. A radio announcer and Harrison   B. George and Hazel

C. Harrison and a Ballerina   D. A musician and a Ballerina

33.   What do the handicaps in "Harrison Bergeron" symbolize?

A. Equality   B.   Handicaps

34.   What kind of short story is "Harrison Bergeron"?

A.   Romance   B.   Mystery

C.   Science-fiction   D.   Non-fiction

35.   Which word best describes the mood of the Bergeron household?

A.   Subdued   B   Overwhelming

C.   Inspiring   D.   Restless

36.   Harrison is in conflict with

A.   His parents   B. The government

C.   His teachers   D. A ballerina

37.   whose voice is in the sugar fields?

A.   Mother's voice

B.   Poet's voice

C.   Nature voice

D.   Bird voice

38.   What is the meaning of the word whisper?

A. Murmur B. Noisy C. Piercing D. Strident

39   What image do the words 'tree talk' and 'wind song' create in your mind?

   A.   The word 'tree talk' is when tree dances it starts making sounds , 'wind song' is when wind cries we think that the wind is singing.

   B.   The word 'tree talk is the trees shaking its branches in the wind and making certain sounds as if talking and the word 'wind song' is the sound made when wind blows against the trees which has branches with leaves.

   C.   when the tree fall towards a lake then it makes noises as if talking and wind start shaking tree leaves as if singing.

   D.   None of the above

40.   It..,...since 11 o'clock this morning.

   A.   is raining

   B.   was raining

   C.   had been raining

   D.   has been raining

41.   What effect does the poem "The Bat" has on your feelings about bat......

   A.   Bat is looking ugly.   B. Bat has its own beauty.

   C.   Bat is cruel in his nature.   D. Fear of bat.

42.   The bat flies in the air...................

   A.   Fast   B.   Rhythmic

   C.   Slow   D.   Medium

43.   What happened to the spaceship bound for venus?

   A.   Power failure and it floated in space.

   B.   Empty of fuel.

   C.   Machine is not working.

   D.   Environment of the Venus.

44.   Who do you think is Venu?.

   A.   Creature from the planet Venus

   B.   Name of Astraunut

   C.   Small girl

   D.   Spaceship

45.   How did the journey change the astronauts?

   A.   More cautious about using up the energy sources

   B.   No precaution in their journey

   C.   Nothing will be change

   D.   Develops the fear about journey

46. What did astronauts learn from their meeting with Venu?

    A. Valuable lessons about the e beauty of Venus

    B. Valuable lessons on the need for protecting their safety.

    C. Need for protecting the flora and fauna of one's planet and need. for saving energy sources of one's country.

    D. Need for protecting the astronauts security .

47. Choose the word which best expresses the meaning of the word "Tremendous"

    A. Very small   B. Tiny

    C. Very big   D. weak

48. I couldn't get to sleep ………… of the noise.

    A. although   B. and

    C. in spite of   D. because

49. Have you …………… visited Delhi?

    A. never   B. Ever

    C. so far   D. yet

50. I am ………………… my sister

    A. taller   B. more taller than

    C. taller than   D. tall than

51. I ……………TV when I ……………… a loud noise.

    A. watched / heard   B. was watching / was hearing

    C. was watching / heard   D. watched / was hearing

52. I …………… her while I ………… home.

    A.met / was went   B. met / was going

    C. meet / am going   D. was meeting / went

53. She ………… the light and then he ………… to sleep.

    A. was turning off/went   B. turned off/was going

    C. was turned off/was going   D. turned off/went

54. My parents will help me if they …………too busy.

    A. aren't   B. aren't be

    C. don't   D. won't be

55. I am going to …………French next summer.

    A. learning   B. will learn

    C. learnt   D. learn

56. I am not sure but It ………… tomorrow.

    A. will rains   B. will going to rain

    C. is going to rain   D. will rain

57. Choose the incorrect sentence.
   A. They can help each other.
   B. My father can speak English.
   C. Are they can swim very well?
   D. Some students can't find the class.

58. The train is going .... the tunnel.
   A. below   B. around
   C. through   D. at

59. George *had told* me that he hasn't done it yet.
   A. told   B. was telling   C. tells   D .tell

60. Hardly had reached the bus stop .... the bus arrived.
   A. than   B. when   C. where   D. until

61. Nehru was not only a politician ....a great writer.
   A. but   B. and   C. or   D. but also

62. He will .... buy a land or deposit the money in a bank .
   A. either   B. and   C. than   D. neither

63. If you help her, she .... you.
   A. would help   B. would have helped
   C. will help   D. could have helped

64. Unless you work hard you ....high score
   A. won't get   B. can get   C. may get   D. will get

65. My mother asked me whether I..............solve the problem
   A. can   B. could   C. was   D. have

66. Britain is .... European country
   A. a   B. an   C. the   D. no article

67. She walked .... he were rich
   A. if   B. as if   C. incase   D. whether

68. I have been waiting here ......three hours.
   A. since   B. of   C. for   D. at

69. I could scarcely ....his writing
   A. make up   B. make out   C. make of   D. make up for

70. Which word is spelt correctly?
   A. collision   B. Colision   C. Collition   D. Coleesion

Appendix F4

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION
ACHIEVEMENT TEST IN ENGLISH

(Draft)

Response Sheet

Name: .... Class .... No. ....

School: .... Division .... Boy/Girl ....

Sl. No.	A	B	C	D
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Sl. No.	A	B	C	D
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UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION
ACHIEVEMENT TEST IN ENGLISH

(Draft)

SCORING KEY

SI.No	Answers	SI.No	Answers	SI.No	Answers	SI.No	Answers	SI.No	Answers
1	D	18	A	35	B	52	B	69	B
2	A	19	C	36	B	53	D	70	A
3	B	20	B	37	A	54	A	71	
4	B	21	D	38	A	55	D	72	
5	A	22	C	39	B	56	D	73	
6	C	23	C	40	D	57	C	74	
7	A	24	C	41	B	58	C	75	
8	A	25	B	42	C	59	A	76	
9	B	26	A	43	A	60	B	77	
10	A	27	D	44	A	61	D	78	
11	B	28	C	45	A	62	A	79	
12	D	29	D	46	C	63	C	80	
13	D	30	D	47	C	64	A	81	
14	C	31	A	48	D	65	A	82	
15	A	32	C	49	B	66	A	83	
16	B	33	D	50	C	67	B	84	
17	A	34	C	51	C	68	C	85	

Appendix G
UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

TEST OF LISTENING SKILL
(Draft)
(Teacher's Script)

Dr. A. Hameed	Sabna.E.P
(supervising teacher)	Research Scholar

Instructions:

We are going to conduct a listening test to check your skill of listening.

I

You will hear a poem daffodils by William Words Worth .after the poem recitation, you have to answer the questions given in your worksheet. put a tick () in the appropriate box given against the choices.

Daffodils

I wandered lonely as a cloud
That floats on high o'er vales and hills,
When all at once I saw a crowd,
A host, of golden daffodils;
Beside the lake, beneath the trees,
Fluttering and dancing in the breeze.

Continuous as the stars that shine
And twinkle on the milky way,
They stretched in never-ending line
Along the margin of a bay:
Ten thousand saw I at a glance,
Tossing their heads in sprightly dance.   (William Words worth)

II

You are going to listen to a passage related with 'Yoga'. Listen carefully and write the answers for the questions.

Yoga is a most important and precious gift given by the nature from ancient time to get connected throughout the life with nature. It is the practice of uniting the mind and body in order to achieve the perfect harmony between both. It helps in

maintaining the health, knowledge and inner peace. Regular practice of the yoga in the morning provides outer and inner relief by keeping away from the countless ailments at the physical and mental level. Practicing postures or Asanas strengthens the body and mind as well as creates the feeling of well being. Yoga is like a practical philosophy which develops self-discipline and self awareness within us through regular practice. The very good time for practicing the yoga like pranayam is the early morning as it provides better environment to get control over body and mind. Practicing yoga in daily life regularly prevents from various diseases . The inhaling and exhaling of the oxygen during yoga is the main thing. June 21st is celebrating international yoga day.

III

ANNOUNCEMENT

Good morning students

The school is planning to organise two weeks summer camp for the children of age group 10-14 year for developing their creative skills in Art, Craft, Music, Clay Modeling, etc. In the school campus from 8to 26th April .Those interested may deposit rupees 800 in the accounts office by 28 th March, 2013.For more details contact the arts teacher

IV

You will hear a short story. After the story, you have to answer the questions given in your worksheet. put a tick mark () in the appropriate box given against the choices.

(Read the story clearly. After finishing pause for few seconds. Then read again)

HONESTY IS THE BEST POLICY

A milkman became very wealthy through dishonest means. He had to cross a river daily to reach the city where his customers lived. He mixed the water of the river generously with the milk that he sold for a good profit. One day he went around collecting the dues in order to celebrate the wedding of his son. With the large amount thus collected he purchased plenty of rich clothes and glittering gold ornaments. But while crossing the river the boat capsized and all his costly purchases were swallowed by the river. The milk vendor was speechless with grief. At that time he heard a voice that came from the river, "Do not weep. What you have lost is only the illicit gains you earned through cheating your customers.

V

You will hear twice a report on an accident. After hearing you have to answer the questions given below. Put a tick() mark against the correct answer.

Horrible accident

In a cruel accident, seven students and the driver were killed and many injured when a Munnar tourist bus fell down a hill about 150 feet, while at 12:45 pm he crossed a bend in Vimalapuram between Thekkinkanam and Mullakkanam in the hilly Idukki district on Monday.

The students of the Sarabhai Institute of Science and Technology in Vellanad in Thiruvananthapuram were on a tour. They were students of department and

electronics and instrumentation last year. The victims were identified as Jithin, 21, Nanthencode, Thiruvananthapuram; Vignes, 21, Jawahar Nagar Colony, Thiruvananthapuram; Shyju K.C., 22, Thykkattukara, Ernakulam; Sreejesh, 22, Karunagapally, Kollam; Sarathchandran, Ambalamedu, Ernakulam; Manju, Kannur; Hemanth, Palode, Thiruvananthapuram; and driver Rajkumar. The bodies were kept at the Adimaly Taluk hospital, the police said.

Severe injury

Early reports said many had severe injuries. Up to 12 seriously injured students were brought to a private medical school in Kolencherry. One is referred to a hospital in Thodupuzha and another to the Adimaly Taluk Hospital.The bodies of four students who fell under the bus were recovered by the police and the fire and rescue service.

VI

For each of the questions, you will hear twice a short sentence containing one of the two words, or phrases given below. Put a tick mark against the word that you hear.

22. Sometimes it is hard to find a Vein to draw blood.

23. Who has won the trophy?

24. I am going to start taking Martial arts classes.

25. We peel the orange with a knife.

26.. Did you remember to close the door, or did you leave it open?

27. The table is made from wood

28. Push me higher on the swing

29. I ate a huge breakfast today

30. Push me higher on the swing

21. Ram has excellent eye sight

32. You need to be careful and not waste too much glue

33. The toad hopped across the lily pad and into the pond

34. Sit here and hear the soft music played on the piano

You will Listen to a series of statements, some statements are true and some statements are false about the picture given in your worksheet. You have to write True/False against the number of the statement

35. The table is empty

36. There are three cups on the shelf

37. We can see the rainbow through the window

38. There is a cat sitting on the chair

39. The room is untidy

40. The chairs are lying on the floor

UNIVERSITY OF CALICUT

DEPARTMENT OF EDUCATION

Test listening in English (students script)

(Draft)

Dr.A. Hameed	Sabna.E.P
(Assistant Professor)	Research Scholar

Name:.. Class:...........................

Roll no:...Male/Female....................

Directions

We are going to conduct a listening test to check your skill of listening. You will be provided with worksheets for each. Please follow the instructions given in each worksheet.

I

You will hear a poem. After hearing the poem ,you have to answer the questions given below. Put a tick mark () in the appropriate box given against the choices.

1.   I wandered lonely as a ....

     a)   cloud   ☐

     b)   crowd   ☐

     c)   could   ☐

     d)   cold   ☐

2.   Ten thousand saw I at a ....

     Tossing their heads in sprightly ....

     a)   glance ,dance   ☐

     b)   glands ,dance   ☐

     e)   glass, dense   ☐

     b)   grants, dance   ☐

3.   Where did the poet see the daffodils?

     a)   Beside the lake, beneath the trees.   ☐

     b)   On a roof.   ☐

     c)   Beside the courtyard.   ☐

     d)   In the market.   ☐

4. How many daffodils did the poet see?

   a) five thousand ☐

   d) eight thousand ☐

   e) ten thousand ☐

   c) nine thousand ☐

5. What are the daffodils compared to?

   a) stars ☐

   b) stones ☐

   c) stairs ☐

   d) storm ☐

II

You will hear a passage about "Yoga". Listen carefully and put a tick in the appropriate box that corresponds to the choices.

6. Practicing yoga in daily life regularly prevents from...............

   a) strength ☐

   b) deceases ☐

   e) health ☐

   f) fitness ☐

7. The inhaling and exhaling of the .... during yoga is the main thing.

   a) oxygen ☐

   b) carbon dioxide ☐

   c) hydrogen ☐

   d) nitrogen ☐

8. The very good time for practicing the yoga is ....

   a) night ☐

   b) evening ☐

   c) afternoon ☐

   d) early morning ☐

9. Postures in yoga also called.............

   a) Asana ☐   b) self-discipline ☐   c) self will ☐   d) traits ☐

III

You will hear an Announcement. Listen carefully and tick the appropriate box corresponding to the choices

10. What does the school is planning to organise?
    a) Two weeks summer camp ☐
    b) one week winter camp ☐
    c) Two weeks winter camp ☐
    d) Four week winter camp ☐

11. Which age is consider to participate in the camp?
    a) 10-11 year ☐
    b) 12-14 year ☐
    c) 10-14 year ☐
    d) 08-09 ☐

12. What is the purpose of camp?
    a) Participate sports programme ☐
    b) Developing their creative skills in Art, ☐
       Craft, Music, Clay Modelling
    d) Participate nature club progrmme ☐
    e) Participate dance programme ☐

13. When the camp scheduled?
    a) 8to 26th April ☐
    b) 1 to 26th April ☐
    c) 26 to 28 th April ☐
    d) 11 to 14 April ☐

14. How much fee for depositing camp ?
    a) 800 ☐
    b) 400 ☐
    c) 700 ☐
    d) 660 ☐

IV

You will hear a short story. After the story, you have to answer the questions given in your worksheet. put a tick mark () in the appropriate box given against the choices.

15. Who turned out to be extremely wealthy?

    a) workman. ☐

    b) Milkman ☐

    c) salesman ☐

    d) businessman ☐

16. He needed to cross a stream day by day for his

    a) wife ☐

    b) friends ☐

    c) family ☐

    d) clients ☐

17. With the expansive sum he acquired a lot of rich

    a) garments and sparkling gold decorations ☐

    b) money ☐

    c) diamond ☐

    d) All of the above ☐

18. Why did The drain seller felt puzzled with anguish.

    a) because he lost all his earnings ☐

    b) he wasn't able to cross the bridge ☐

    c) he got all his earnings ☐

    d) None of the above ☐

VI

You will hear twice a report on an accident. After hearing you have to answer the questions given below. Put a tick mark against the correct answer.

19. Where did the accident took place?

    a) Idukki ☐
    b) trivandrum ☐
    c) kollam ☐
    d) nagercoil ☐

20. How many causalities were reported

    a) seven students and driver ☐

    b) five students ☐

    c) seven students ☐

d)   no one ☐

21.   The students involved in the accident were From

    a)   Sarabhai Institute of Science and Technology ☐

    b)   Sarabhai Institute of Arts ☐

    c)   Sarabhai Institute of Commerce ☐

    d)   Sarabhai Institute of Law ☐

For each of the questions, you will hear twice a short sentence containing one of the four words, or phrases given below. Put a tick mark against the word that you hear.

22.

    a)   vein ☐

    b)   vane ☐

    c)   vane ☐

    d)   veil ☐

23.

    a)   one ☐

    b)   won ☐

    c)   own ☐

    d)   on ☐

24.

    a)   martial ☐

    b)   marshal ☐

    c)   mass ☐

    d)   mess ☐

25.

    a)   peel ☐

    b)   peal ☐

    c)   pool ☐

    d)   poll ☐

26.

    a)   close ☐

    b)   clothes ☐

    c)   closed ☐

    d)   closing ☐

27.
- a) wood ☐
- b) would ☐
- c) wound ☐
- d) wool ☐

28.
- a) Hire ☐
- b) higher ☐
- c) hour ☐
- d) our ☐

29.
- a) eight ☐
- b) ate ☐
- c) it ☐
- d) wait ☐

30.
- a) Sight ☐
- b) site ☐
- c) cite ☐
- d) sought ☐

31.
- a) Waste ☐
- b) waist ☐
- c) worst ☐
- d) wait ☐

32.
- a) Towed ☐
- b) toad ☐
- c) told ☐
- d) tapped ☐

33.
- (a) here, ☐
- b) hear ☐
- c) hour ☐
- d) our ☐

you will hear a series of statements. Some statements are true and some statements are false about the picture given above. write true false against the number of statement.

34.....................................

35.....................................

36.....................................

37.....................................

38.....................................

39.....................................

40.....................................

Appendix G2
UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

TEST OF LISTENING SKILL
(Final)
(Teacher's Script)

Dr. A. Hameed	Sabna.E.P
(supervising teacher)	Research Scholar

Instructions:

We are going to conduct a listening test to check your skill of listening.

Part-I

You will hear the poem Daffodils by William Words Worth .After the poem recitation, you have to answer the questions given in your worksheet. put a tick (✓) in the appropriate box given against the choices.

Daffodils

I wandered lonely as a cloud
That floats on high o'er vales and hills,
When all at once I saw a crowd,
A host, of golden daffodils;
Beside the lake, beneath the trees,
Fluttering and dancing in the breeze.

Continuous as the stars that shine
And twinkle on the milky way,
They stretched in never-ending line
Along the margin of a bay:
Ten thousand saw I at a glance,
Tossing their heads in sprightly dance.　　　　(William Words Worth)

Part- II

You are going to listen to a passage related with 'Yoga'. Listen the passage carefully and write the answers for the questions.

Yoga is a most important and precious gift given by the nature from ancient time to get connected throughout the life with nature. It is the practice of uniting the mind and body in order to achieve the perfect harmony between both. It helps in maintaining the health, knowledge and inner peace. Regular practice of the yoga in the morning provides outer and inner relief by keeping away from the countless ailments at the physical and mental

level. Practicing postures or Asanas strengthens the body and mind as well as creates the feeling of well being. Yoga is like a practical philosophy which develops self-discipline and self awareness within us through regular practice. The very good time for practicing the yoga like Pranayam is the early morning as it provides better environment to get control over body and mind. Practicing yoga in daily life regularly prevents from various diseases. The inhaling and exhaling of the oxygen during yoga is the main thing. June 21st is celebrating international yoga day.

Part-III

You will hear an Announcement. After the story, you have to answer the questions given in your worksheet. put a tick mark (✓) in the appropriate box given against the choices.

ANNOUNCEMENT

Good morning students

The school is planning to organise two weeks summer camp for the children of age group 10-14 year for developing their creative skills in Art, Craft, Music, Clay Modeling, etc. In the school campus from 8to 26th April .Those interested may deposit rupees 800 in the accounts office by 28 th March, 2013.For more details contact the arts teacher

Part -IV

You will hear a short story. After the story, you have to answer the questions given in your worksheet. put a tick mark (✓) in the appropriate box given against the choices.

(Read the story clearly. After finishing pause for few seconds. Then read again)

HONESTY IS THE BEST POLICY

A milkman became very wealthy through dishonest means. He had to cross a river daily to reach the city where his customers lived. He mixed the water of the river generously with the milk that he sold for a good profit. One day he went around collecting the dues in order to celebrate the wedding of his son. With the large amount thus collected he purchased plenty of rich clothes and glittering gold ornaments. But while crossing the river the boat capsized and all his costly purchases were swallowed by the river. The milk vendor was speechless with grief. At that time he heard a voice that came from the river, "Do not weep. What you have lost is only the illicit gains you earned through cheating your customers.

V

You will hear twice a report on an accident. After hearing you have to answer the questions given below. Put a tick(✓) mark against the correct answer.

Horrible accident

In a cruel accident, seven students and the driver were killed and many injured when a Munnar tourist bus fell down a hill about 150 feet, while at 12:45 pm he crossed a bend in Vimalapuram between Thekkinkanam and Mullakkanam in the hilly Idukki district on Monday.

The students of the Sarabhai Institute of Science and Technology in Vellanad in Thiruvananthapuram were on a tour. They were students of department and electronics and instrumentation last year. The victims were identified as Jithin, 21, Nanthencode, Thiruvananthapuram; Vignes, 21, Jawahar Nagar Colony, Thiruvananthapuram; Shyju K.C., 22, Thykkattukara, Ernakulam; Sreejesh, 22, Karunagapally, Kollam; Sarathchandran, Ambalamedu, Ernakulam; Manju, Kannur; Hemanth, Palode, Thiruvananthapuram; and driver Rajkumar. The bodies were kept at the Adimaly Taluk hospital, the police said.

Severe injury

Early reports said many had severe injuries. Up to 12 seriously injured students were brought to a private medical school in Kolencherry. One is referred to a hospital in Thodupuzha and another to the Adimaly Taluk Hospital.The bodies of four students who fell under the bus were recovered by the police and the fire and rescue service.

VI

For each of the questions, you will hear twice a short sentence containing one of the two words, or phrases given below. Put a tick(✓) mark against the word that you hear.

22.   Who has <u>won</u> the trophy?

23.   We <u>peel</u> the orange with a knife.

24.   The table is made from <u>wood</u>

25.   Push me <u>higher</u> on the swing

26.   Ram has excellent eye <u>sight</u>

27.   You need to be careful and not <u>waste</u> too much glue

28.   The <u>toad</u> hopped across the lily pad and into the pond

29.   Sit <u>here</u> and <u>hear</u> the soft music played on the piano

VII

You will Listen to a series of statements, some statements are true and some statements are false about the picture given in your worksheet. You have to write True/False against the number of the statement

30. The table is empty

31. There are three cups on the shelf
32. There is a cat sitting on the chair

33. We can see the rainbow through the window ·

34. The room is untidy

35. The chairs are lying on the floor

Appendix G3

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION
TEST LISTENING TEST (Students Script)

(Final)

Name:.. Class:............................

Roll no:...Male/Female.....................

Directions

We are going to conduct a listening test to check your skill of listening. You will be provided with worksheets for each. Please follow the instructions given in each worksheet.

Part-I

You will hear a poem. After hearing the poem ,you have to answer the questions given below. Put a tick mark () in the appropriate box given against the choices.

1.   I wandered lonely as a ....

    a)   cloud   ☐

    b)   crowd   ☐

    c)   could   ☐

    d)   cold   ☐

2.   Ten thousand saw I at a ....

    Tossing their heads in sprightly ....

    a)   glance ,dance   ☐

    b)   glands ,dance   ☐

    e)   glass, dense   ☐

    b)   grants, dance   ☐

3.   Where did the poet see the daffodils?

   a)   Beside the lake, beneath the trees.   ☐

   b)   On a roof   ☐

   c)   Beside the courtyard.   ☐

   d)   In the market.   ☐

4.   How many daffodils did the poet see?

   a)   five thousand   ☐

   d)   eight thousand   ☐

   e)   ten thousand   ☐

   c)   nine thousand   ☐

5.   What are the daffodils compared to?

   a)   stars   ☐

   b)   stones   ☐

   c)   stairs   ☐

   d)   storm   ☐

Part - II

You will hear a passage about to "Yoga". Listen carefully and put a tick in the appropriate box that corresponds to the choices.

6.   Practicing yoga in daily life regularly prevents from................

   a)   strength   ☐

   b)   deceases   ☐

   e)   health   ☐

   f)   fitness   ☐

7.   The inhaling and exhaling of the .... during yoga is the main thing.

   a)   oxygen   ☐

   b)   carbon dioxide   ☐

   c)   hydrogen   ☐

d)   nitrogen   ☐

8.   The very good time for practicing the yoga is ....

   a)   night   ☐

   b)   evening   ☐

   c)   afternoon   ☐

   d)   early morning   ☐

9.   Postures in yoga also called.............

   a)   Asana ☐   b) self-discipline ☐   c) self will ☐   d) traits ☐

Part-III

You will hear an Announcement. Listen carefully and tick the appropriate box corresponding to the choices

10.   What does the school is planning to organise?

   a)   Two weeks summer camp   ☐

   b)   one week winter camp   ☐

   c)   Two weeks winter camp   ☐

   d)   Four week winter camp   ☐

11.   Which age is consider to participate in the camp?

   a)   10-11 year   ☐

   b)   12-14 year   ☐

   c)   10-14 year   ☐

   d)   08-09   ☐

12.   What is the purpose of camp?

   a)   Participate sports programme   ☐

   b)   Developing their creative skills in Art, Craft, Music,   ☐
          Clay Modelling

   d)   Participate nature club progrmme   ☐

   e)   Participate dance programme   ☐

13. When the camp scheduled?

    a)   8to 26th April   ☐

    b)   1 to 26th April   ☐

    c)   26 to 28 th April   ☐

    d)   11 to 14 April   ☐

14. How much fee for depositing camp ?

    a)   800   ☐

    b)   400   ☐

    c)   700   ☐

    d)   660   ☐

Part -IV

You will hear a short story. After the story, you have to answer the questions given in your worksheet. put a tick mark () in the appropriate box given against the choices.

15. Who turned out to be extremely wealthy?

    a)   workman.   ☐

    b)   Milkman   ☐

    c)   salesman   ☐

    d)   businessman   ☐

16. He needed to cross a stream day by day for his

    a)   wife   ☐

    b)   friends   ☐

    c)   family   ☐

    d)   clients   ☐

17. With the expansive sum he acquired a lot of rich

    a)   garments and sparkling gold decorations   ☐

    b)   money   ☐

    c)   diamond   ☐

    d)   All of the above   ☐

18. Why did The drain seller felt puzzled with anguish.

a) because he lost all his earnings ☐

b) he wasn't able to cross the bridge ☐

c) he got all his earnings ☐

d) None of the above ☐

Part -V

You will hear twice a report on an accident. After hearing you have to answer the questions given below. Put a tick mark against the correct answer.

19. Where did the accident took place?

a) Idukki ☐

b) Trivandrum ☐

c) Kollam ☐

d) Nagercoil ☐

20. How many causalities were reported

a) seven students and driver ☐

b) five students ☐

c) seven students ☐

d) no one ☐

21. The students involved in the accident were From

a) Sarabhai Institute of Science and Technology ☐

b) Sarabhai Institute of Arts ☐

c) Sarabhai Institute of Commerce ☐

d) Sarabhai Institute of Law ☐

Part -VI

For each of the questions, you will hear twice a short sentence containing one of the four words, or phrases given below. Put a tick mark against the word that you hear.

22. a) one ☐

    b) won ☐

    c) own ☐

    d) on ☐

23. a) peel ☐

    b) peal ☐

    c) pool ☐

    d) poll ☐

24. a) wood ☐

    b) would ☐

    c) wound ☐

    d) wool ☐

25. a) Hire ☐

    b) higher ☐

    c) hour ☐

    d) our ☐

26. a) Sight ☐

    b) site ☐

    c) cite ☐

    d) sought ☐

27. a) Waste ☐

    b) waist ☐

    c) worst ☐

    d) wait ☐

28. a) Towed ☐

     b) toad ☐

     c) told ☐

     d) tapped ☐

29. (a) here, ☐

     b) hear ☐

     c) hour ☐

     d) our ☐

VII

you will hear a series of statements. Some statements are true and some statements are false about the picture given above. write true false against the number of statement.

30.......................................

31.......................................

32.......................................

33.......................................

34.......................................

35.......................................

Appendix H

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION
TEST OF SPEAKING SKILL IN ENGLISH

(Draft)

Dr.A. Hameed	Sabna.E.P
(Assistant Professor)	Research Scholar

Instructions: We are going to conduct a speaking test to check your skill of speaking in English . Teacher divides the students into five groups with nine members. Then Teacher gives a list of topics and each student from each group chooses any one of the question. Read the selected item carefully and try to answer that question without the help of others.

1. **Express your own views on the following topic. Select any one of them .Deliver a small talk.**

   My dream in my life

   Need of self discipline

   Strength and weakness of you

   Hobby

   Ambition

2. **The following pictures are Gandhiji and Lionel Messi .Choose one among them and speak at least five sentences.**

3. The following pictures are related to different festivals. Share your thoughts with your friends

4. **Deliver a speech about women empowerment.**

5. **Study the picture given below .Prepare a Small Speech About It**

Dr.A. Hameed   Sabna.E.P
(Assistant Professor)   Research Scholar

Name:...Class:...............................

Div: ....Male/Female................................

Si.No	Sub Skill	Excellent	Very Good	Good	Average	Poor

1.	**Organization**
	  a. Accurate Organizing
	  b. Systematic Presentation
	  c. Apt Content
	  d. Elaboration
	  e. Logical Presentation					

2.	**Fluency**
	  a. Appropriate speed
	  b. Voice Modulation
	  c. Proper Flow
	  d. Gestures
	  e. Expression					

3.	**Pronunciations**
	  a. Intonation,
	  b. Stress,
	  c. Clarity,
	  d. Manner of speaking
	  e. loudness.					

4.	**Accuracy and grammar**
	  a. Sentence structure,
	  b. Apt and accurate use of sentence,
	  c. Simple sentence
	  d. Accuracy of words
	  e. Use of connectors					

5.	**Vocabulary**
	  a. Wide variety of words
	  b. Adequate vocabulary
	  c. Use of idioms and phrasal verb.
	  d. Use of active vocabulary
	  e. Attention grabbing words and usages					

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION
TEST OF SPEAKING SKILL IN ENGLISH

(Final)

Dr.A. Hameed	Sabna.E.P
(Assistant Professor)	Research Scholar

Instructions: We are going to conduct a speaking test to check your skill of speaking in English . Teacher divides the students into five groups with nine members. Then Teacher gives a list of topics and each student from each group chooses any one of the question. Read the selected item carefully and try to answer that question without the help of others.

1. **Express your own views on the following topic. Select any one of them .Deliver a small talk.**

    My dream in my life

    Need of self discipline

    Strength and weakness of you

2. **The following pictures are APJ Abdulkalam and Sachin Tendulkar .Choose one among them and speak at least five sentences.**

APJ Abdulkalam   **Sachin Tendulkar**

3. The following pictures are related to different festivals. Share your thoughts with your friends

4. **Deliver a speech about women empowerment.**

5. **Study the picture given below .Prepare a Small Speech About It**

Appendix I
UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION
TEST OF READING COMPREHENSION
(Draft)

Dr.A. Hameed	Sabna.E.P
(Assistant Professor)	Research Scholar

Instructions

We are going to conduct a reading comprehension test to check your skill of Reading comprehension .You will be provided with worksheet for each question. please follow the instruction. Read the questions carefully and write the answers.

Part-I

Questions 1 - 5: Read the following Passage *'Home And The World'* and answer the questions that follow:

HOME AND THE WORLD

A prolific Bengali writer ,Tagore structured this novel in which three main characters represent the turbulence of the partition looming on India's horizon in 1947.nikhil is married to Bimala, existing in the traditional domestic manner, for herself, Bimala has no expectation for her life ever deviating from her wifely path. the concept of Swadeshi Movement a renewed appreciation of everything Indian and denial of everything British, particularly British imported goods and grains, rages throughout the country, as are pressed citizenry wakes after a long slumber of indignities and patronization.

The egocentric Sandip ,a guest in Nikhil's house ,is a fierce proponent of Swadeshi. Sandip is passionately attracted to Bimala, idealizing her as the epitome of 'Mother India'. He purses Bimala without reservation, driven by his mission. Flattered by Sandip's attention, Bimala questions the nature of her marriage and her role as a woman. The three embark upon an emotional journey that will forever alter their lives, just as India lurches into a lengthy period of upheaval and unrest.

1) What is the underlying theme of this great novel written by Tagore?

(1)

    (a)   Devoted wife

    (c).   Turbulence of partition

    (b)   Cheating wife

    (d)   Love triangle

    2)   Who is Bimala?

(2)

    (a)   Nikhil's mother

    (b)   Nikhil's sister

    (c)   Nikhil's wife

    (d)   teacher

3) What was the theme of Swadeshi movement?

(1)

    (a)   acceptance of everything British

    (c)   denial of everything British

    (b)   denialof everything Indian

    (d)   acceptance of everything cheap

4) Bimala has been epitomized by Sandip as

(1)

    (a)   Mother in India

    (c)   Mother Nature

    (b)   Goddess

    (d)   Goddess kali

5) Who in the novel has been shown egocentric?

1)

(a) Nikhil (c) Tagore (b) Bimala (d) Sandip

6) Which word the above passage mean 'get on'?

(1)

a) Turbulence
b) Traditional
c) Embark
d) Slumber what is the meaning of the word

Choose the following Three words from the given passage and find their synonyms and antonyms

word	Synonym	Antonym

7) Embark

    a) go on board b)robes   a)disembark, b)un embark

8) Traditional a) conventional b) contemporary a)old b) Modern

9) Attract   a) hideous b)magnetize a) gruesome b) gorgeous

Part -II

Read the following poem '*The Road Not Taken*' and answer the questions that follow

Two roads diverged in a yellow wood,
And sorry I could not travel both
And be one traveler, long I stood
And looked down one as far as I could
To where it bent in the undergrowth;

Then took the other, as just as fair,
And having perhaps the better claim,
Because it was grassy and wanted wear;
Though as for that the passing there
Had worn them really about the same,

And both that morning equally lay
In leaves no step had trodden black.
Oh, I kept the first for another day!
Yet knowing how way leads on to way,
I doubted if I should ever come back.

I shall be telling this with a sigh
Somewhere ages and ages hence:
Two roads diverged in a wood, and
I took the one less traveled by,
And that has made all the difference.

(Robert Frost)

III

Solve the following crossword on the basis of the reading of the above poem

(5)

	Y¹⁰		⁶	³			²
				⁷ ⁴			R
		⁸					
				O			
¹							
		D			⁵ A		

Clues :

Across

10)	a hard surface	(1/2)
11)	opposite of 'short'	(1/2)
12)	spread	(1/2)
13)	to be used	(1/2)
14)	opposite of 'up'	(1/2)

Down

15)	covered with grass	(1/2)
16)	forest	(1/2)
17)	to put your foot down	(1/2)
18)	guides	(1/2)
19)	a colour	(1/2)

20) Two roads diverged in a yellow wood, And sorry I could not travel both And be one traveler, long I stood To where it bent in the undergrowth . The poet is standing :

(1)

(a)   at a crossing   (b)   at a crossing in autumn season

(c)   where two roads cross   (d)   in a forest

21) The poet doubts his comeback because

(1)

(a) he continues to follow the road he chooses   (b) he is very lazy

(c) he is a man on the move   (d) he never repeats himself

22.   The poet chose to travel on another road because :   (1)

(a) it was easier   (b) it was shorter and easier   (c) it was grassy and wanted wear   (d) he was sure of his success on that way

23   The second road had better claim as :   (1)

(a) It had been lying waste   (b) It was attractive with green grassy carpet

(c) It needed to be explored   (d) It was full of surprises

24.   'Road' is a metaphor for :   (1)

(a) travelling wisely   (b) good health

(c) choices we make in life   (d) morning walks

25).   The poet's decision to take the other road indicates that he is :

(a) Adventurous   (b) Calculative   (c) Opportunist   (d) Careful

26   Yet knowing how way leads on to way, I doubted if I should come back. In this extract, the poet is describing.   (1)

(a) a road   (b) his love for trekking

(c) two roads, the one he chose and the reason for his choice

(d) his tastes

27)   Then took the other, as just as fair, And having perhaps the better claim, Because it was grassy and wanted wear; The poet didn't take the first road as :   (1)

(a) It had worn out by continuous use   (b) It had been tried and tested

(c) It was expected of him   (d) It looked shabby

28.   I shall be telling this with a sigh Somewhere ages and ages hence : Two roads diverged in a wood, and I – I took the one less travelled by, And that has made all the difference. 'Sigh' means :

(a) regret (b to hate (c) not to feel sorry (d) to be indifferent

Complete the following table (4)

Subject	Person	Adjective
Magic	....	magical
Bioblogy	biologist	....
Music	....	musical
. ...	Mathematician	mathematical

29,.............................

30..............................

31..............................

32..............................

Check the phrasal verbs you can find in the pictures. (4)

call in, write down, look after, look for, call off, Put up, get in

33

34

35

36

Give the correct homophone to complete each sentence. (3)

37. How (pale, pail) she looks!

38. Will you help me (find, fined) my book.

39. If you are in (pain, pane) please call the doctor.

Write the correct form of the Pronoun as shown in the brackets.

40. Let you and .... try what we can do (I, me). (1)

41.) **Read the following passage carefully .On the basis of your reading of the following passage make notes on it, using headings & Sub headings. Supply an appropriate title to it.**

(5)

The work of the heart can never be interrupted The heart's job is to keep oxygen rich blood flowing through the body. All the body's cells need a constant supply of Oxygen, especially those in the brain. The brain cells like only four to five minutes after their oxygen is cut off, and death comes to the entire body. The heart is a specialized muscle that serves as a pump. This pump is divided into four chambers connected by tiny doors called valves. The chambers work to keep the blood flowing round the body in a circle. At the end of each circuit, veins carry the blood to the right atrium, the first of the four chambers 2/5 oxygen by then is used up and it is on its way back to the lung to pick up a fresh supply and to give up the carbon dioxide it has accumulated. From the right atrium the blood flow through the tricuspid valve into the second chamber, the right ventricle. The right ventricle contracts when it is filled, pushing the blood through the pulmonary artery, which leads to the lungs – in the lungs the blood gives up its carbon dioxide and picks up fresh oxygen. Then it travels to the third chamber the left atrium. When this chamber is filled it forces the blood through the a valve to the left ventricle. From here it is pushed into a big blood vessel called aorta and sent round the body by way of arteries   Heart disease can result from any damage to the heart muscle, the valves or the pacemaker. If the muscle is damaged, the heart is unable to pump properly. Until the twentieth century, few doctors dared to touch the heart. In 1953 all this changed after twenty years of work, Dr. John Gibbon in the USA had developed a machine that could take over temporarily from the heart and lungs.

Appendix I(1)
UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION
TEST OF READING COMPREHENSION IN ENGLISH

Name:.. Class:............. No.:..............

School:.. Division:............ Boy/Girl:................

Appendix I(2)
TEST OF READING COMPREHENSION IN ENGLISH
Scoring Key
(Draft)

SI.No	Questions	Marks
1.	Turbulence of partition	1
2.	Nikhil's wife	1
3.	Denial of everything British	1
4.	Mother India	1
5.	Sandip	1
6.	Embark	1
7.	go on board ,disembark,	1
8.	conventional , Modern	1
9.	magnetize, gruesome	1
10.	Road	1/2
11.	long	1/2
12.	lay	1/2
13.	wear	1/2
14.	down	1/2
15.	Grassy	1/2
16.	Wood	1/2
17.	Trodden	1/2
18.	leads	1/2
19.	Yellow	1/2
20.	where two roads cross	1
21.	he continues to follow the road he chooses	1
22.	It was grassy and wanted wear	1
23.	It needed to be explored	1
24.	choices we make in life	1
25.	Adventurous	1
26.	two roads, the one he chose and the reason for his choice	1
27.	It had worn out by continuous use	1
28.	regret	1
29.	Magician	1
30.	biological	1
31.	Musician	1
32.	Mathematics	1
33.	put up	1
34.	look after	1
35.	call in	1
36.	get in	1
37.	pale	1
38.	find	1
39.	pain	1
40.	me	1
41.	Heading ,Sub heading ,Suitable title, Meaningful Sentence , Grammar	5

Appendices

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION
TEST OF READING COMPREHENSION IN ENGLISH
(Final)

Dr.A.Hameed   SABNA.E.P
Assistant Professor   Research Scholar

Instructions

We are going to conduct a reading comprehension test to check your skill of Reading comprehension .You will be provided with worksheet for each question. please follow the instruction. Read the questions carefully and write the answers.

Part-I

Questions 1 - 5: Read the following Passage *'Home And The World'* and answer the questions that follow:

HOME AND THE WORLD

A prolific Bengali writer ,Tagore structured this novel in which three main characters represent the turbulence of the partition looming on India's horizon in 1947.nikhil is married to Bimala, existing in the traditional domestic manner, for herself, Bimala has no expectation for her life ever deviating from her wifely path. the concept of Swadeshi Movement a renewed appreciation of everything Indian and denial of everything British, particularly British imported goods and grains, rages throughout the country, as are pressed citizenry wakes after a long slumber of indignities and patronization.

The egocentric Sandip ,a guest in Nikhil's house ,is a fierce proponent of Swadeshi. Sandip is passionately attracted to Bimala, idealizing her as the epitome of 'Mother India'. He purses Bimala without reservation, driven by his mission. Flattered by Sandip's attention, Bimala questions the nature of her marriage and her role as a woman. The three embark upon an emotional journey that will forever alter their lives, just as India lurches into a lengthy period of upheaval and unrest.

1)   What is the underlying theme of this great novel written by Tagore?

    (1)

    (a)   Devoted wife

    (c).   Turbulence of partition

    (b)   Cheating wife

    (d)   Love triangle

    2)   Who is Bimala?

(2)

    (a)   Nikhil's mother

    (b)   Nikhil's sister

    (c)   Nikhil's wife

    (d)   teacher

3)   What was the theme of Swadeshi movement?

    (1)

    (a)   acceptance of everything British

    (c)   denial of everything British

    (b)   denialof everything Indian

    (d)   acceptance of everything cheap

4)   Bimala has been epitomized by Sandip as

    (1)

    (a)   Mother in India

    (c)   Mother Nature

    (b)   Goddess

    (d)   Goddess kali

5) Who in the novel has been shown egocentric?

1)

    (a)   Nikhil   (c) Tagore   (b) Bimala   (d) Sandip

6) Which word the above passage mean 'get on'?

(1)

a) Turbulence
b) Traditional
c) Embark
d) Slumber what is the meaning of the word

Choose the following Three words from the given passage and find their synonyms and antonyms

word	Synonym	Antonym

7)` Embark

    a)   go on board   b)robes   a)disembark, b)un embark

8) Traditional a) conventional b) contemporary a)old b) Modern

9) Attract   a) hideous b)magnetize   a) gruesome   b) gorgeous

Part -II

Read the following poem '*The Road Not Taken'* and answer the questions that follow

Two roads diverged in a yellow wood,
And sorry I could not travel both
And be one traveler, long I stood
And looked down one as far as I could
To where it bent in the undergrowth;

Then took the other, as just as fair,
And having perhaps the better claim,
Because it was grassy and wanted wear;
Though as for that the passing there
Had worn them really about the same,

And both that morning equally lay
In leaves no step had trodden black.
Oh, I kept the first for another day!
Yet knowing how way leads on to way,
I doubted if I should ever come back.

I shall be telling this with a sigh
Somewhere ages and ages hence:
Two roads diverged in a wood, and
I took the one less traveled by,
And that has made all the difference.

(Robert Frost)

III

Solve the following crossword on the basis of the reading of the above poem

Clues :

Across

10)	a hard surface	(1/2)
11)	opposite of 'short'	(1/2)
12)	spread	(1/2)
13)	to be used	(1/2)
14)	opposite of 'up'	(1/2)

Down

15)	covered with grass	(1/2)
16)	forest	(1/2)
17)	to put your foot down	(1/2)
18)	guides	(1/2)
19)	a colour	(1/2)

20) Two roads diverged in a yellow wood, And sorry I could not travel both And be one traveler, long I stood To where it bent in the undergrowth . The poet is standing :

(1)

(a)   at a crossing   (b)   at a crossing in autumn season

(c)   where two roads cross   (d)   in a forest

21) The poet doubts his comeback because

(1)

(a) he continues to follow the road he chooses   (b) he is very lazy

(c) he is a man on the move   (d) he never repeats himself

22) The second road had better claim as :   (1)

(a) It had been lying waste   (b) It was attractive with green grassy carpet

(c) It needed to be explored   (d) It was full of surprises

23). The poet's decision to take the other road indicates that he is :

(a) Adventurous   (b) Calculative   (c) Opportunist   (d) Careful

24). Then took the other, as just as fair, And having perhaps the better claim, Because it was grassy and wanted wear; The poet didn't take the first road as :   (1)

(a) It had worn out by continuous use   (b) It had been tried and tested

(c) It was expected of him   (d) It looked shabby

25). I shall be telling this with a sigh Somewhere ages and ages hence : Two roads diverged in a wood, and I – I took the one less travelled by, And that has made all the difference. 'Sigh' means :

(a) regret (b to hate (c) not to feel sorry (d) to be indifferent

Part- III

Complete the following table (4)

Subject	Person	Adjective
Magic	………… …	magical
Bioblogy	biologist	…… …………
Music	…… ………	musical
. ……… ………	Mathematician	mathematical

26).................................

27).................................

28).................................

Part -IV

Check the phrasal verbs you can find in the pictures. (4)

call in, write down, look after, look for, call off, Put up, get in

29)

30)

31)   32)

Part -V

Give the correct homophone to complete each sentence.   .   (2)

33). How (pale, pail) she looks!

34). If you are in (pain, pane) please call the doctor.

Write the correct form of the Pronoun as shown in the brackets.

35). Let you and .... try what we can do (I, me).   (1)

Part -VI

36)   **Read the following passage carefully .On the basis of your reading of the following passage make notes on it, using headings & Sub headings. Supply an appropriate title to it.**

(5)

The work of the heart can never be interrupted The heart's job is to keep oxygen rich blood flowing through the body. All the body's cells need a constant supply of Oxygen, especially those in the brain. The brain cells like only four to five minutes after their oxygen is cut off, and death comes to the entire body. The heart is a specialized muscle that serves as a pump. This pump is divided into four chambers connected by tiny doors called valves. The chambers work to keep the blood flowing round the body in a circle. At the end of each circuit, veins carry the blood to the right atrium, the first of the four chambers 2/5 oxygen by then is used up and it is on its way back to the lung to pick up a fresh supply and to give up the carbon dioxide it has accumulated. From the right atrium the blood flow through the tricuspid valve into the second chamber, the right ventricle. The right ventricle

contracts when it is filled, pushing the blood through the pulmonary artery, which leads to the lungs – in the lungs the blood gives up its carbon dioxide and picks up fresh oxygen. Then it travels to the third chamber the left atrium. When this chamber is filled it forces the blood through the a valve to the left ventricle. From here it is pushed into a big blood vessel called aorta and sent round the body by way of arteries   Heart disease can result from any damage to the heart muscle, the valves or the pacemaker. If the muscle is damaged, the heart is unable to pump properly. Until the twentieth century, few doctors dared to touch the heart. In 1953 all this changed after twenty years of work, Dr. John Gibbon in the USA had developed a machine that could take over temporarily from the heart and lungs.

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

TEST OF READING COMPREHENSION IN ENGLISH LANGUAGE
(Response sheet)

Name:..

Class:.............. School:...

Division:

Appendix I(4)
TEST OF READING COMPREHENSION IN ENGLISH
Scoring Key
(Final)

SI.No	Questions	Marks
1.	Turbulence of partition	1
2.	Nikhil's wife	1
3.	Denial of everything British	1
4.	Mother India	1
5.	Sandip	1
6.	Embark	1
7.	go on board ,disembark,	1
8.	conventional , Modern	1
9.	magnetize, gruesome	1
10.	Road	1/2
11.	long	1/2
12.	lay	1/2
13.	wear	1/2
14.	down	1/2
15.	Grassy	1/2
16.	Wood	1/2
17.	Trodden	1/2
18.	leads	1/2
19.	Yellow	1/2
20.	where two roads cross	1
21.	he continues to follow the road he chooses	1
22.	It needed to be explored	1
23.	Adventurous	1
24.	It had worn out by continuous use	1
25.	regret	1
26.	biological	1
27.	Musician	1
28.	Mathematics	1
29.	put up	1
30.	look after	1
31.	call in	1
32.	get in	1
33.	pale	1
34.	pain	1
35.	me	1
36.	Heading Subheading Suitable title Meaningful Sentence Grammar	5

Appendix J

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION
TEST OF WRITING SKILL IN ENGLISH
(Draft)

Time : 2 hours

Total score:64

Dr.A. Hameed	Sabna.E.P
(Assistant Professor)	Research Scholar

Instructions:

- It is a Test of Writing Skill in English language.
- The first 5 minutes is cool-off time
- The time is to be spent for reading the question paper.
- You are not supposed to write anything during the cool-off time.
- Read the instructions carefully and attempt the questions

1.prepare and advertisement for a Automobile. A sample is given below [3]

DIGITAL WORLD
A studio with modern machinery to create picture that touch your heart. We undertake all kinds of photographic works for quality photos please visit us
WAVE PHOTOGRAPHERS
Calicut
Mobile:94000014000
Email:wavedigital@gmail.com

2.   Imagine that your class had a discussion on the subject "the government should spend more on the welfare of the elderly". Here are the ideas that have been put forward by the students. Develop it into a writing of about 80 words.   [5]
(The breakdown of the common family system, the elderly are neglected, selfishness, the elderly abandoned by their children, the number of older people increases,)

3. **Read the conversation and complete the passage that follows.**

[5]

Kiran   :   I have invited five of my friends for lunch today.

Dinesh   :   Then I'll invite my friends also.

Kiran   :   That will be a good idea.

Dinesh   :   So what should we have for dinner?

Kiran   :   Let's decide the menu now.

Kiran told Dinesh that (a)..

Then Dinesh said(b)..

....

Which Kiran thought(c)..

....

When Dinesh asked (d)...

....

Kiran replied (e)..

....

4. **Choose the best sentences from the given box to complete the following letter.**

[5]

Family doctor examined him
Dislocated and later an ortho surgeon
Need not cancel your
W'ell take care
Amidst your hectic office tour
George met with an accident
Please don't worry
Advised bed rest for a week

Dear Pappa

How are you papa? I am fine. I hope this letter finds you in good health
(a) .... .I'm sorry to inform you that
(b)........................... . While returning from school yesterday. Our
(c)....................................... and found that the bone joining the knee and
the ankle was (d)...............................has rest it and plastered it. George has
been (e) and he has taken it sportively. So
(f)....................................Mummy feels you
(g)...................................tour and come back now as there is no
urgency. (h).., don't worry.

With regards

Yours lovingly,

Albin

5) **Find four different meaningful words from this table**

[4]

M	A	S	L	E	E	P
V	L	I	Q	U	I	D
A	E	B	J	W	N	R
P	A	I	N	X	H	U
O	F	G	H	Z	A	G
U	N	O	R	C	L	Y
R	L	E	T	H	E	R

6. The nature club of your school organization program called "Suvarna Keralam Sundara Keralam". As part of the program, the club is organizing a rally to raise public awareness of the need to protect nature. Prepare three captions to be displayed as play cards in the rally. A sample is given below.

[3]

> TREES ARE THE BOON OF NATURE

7. **Read the following dialogue between a mother and daughter .Complete the dialogue below in a suitable way .write your answer in the space provided.**

[5]

Mother   : why do not you clean up your room?
Daughter : I do not have time ma?
Mother   : But how can you study in this untidiness?
Daughter : Its' alright (a) ....
Mother   : It may not bother you, but it is not the right habit (b) ....
Daughter : No, I'll clean up my table also later.
Mother   : With such an untidy study table how are you going to write?
Daughter : (c)...
Mother   : Sitting on the bed to write! (d)...
Daughter   : Oh maaa, (d)...
Mother   : No do it right now.

8. Prepare a poster for releasing ceremony of manuscript magazine of eight standard students

[3]

9. Recently ,you read a newspaper report relating to the growing number of crimes in Kerala write a letter to editor expressing your views about the above mentioned problem. You are Deepu living in Malappuam,Kerala.

[5]

(Maximum crime cases, violent crimes- murder, rape, dowry death, molestation, kidnapping and abduction, crime against women ,)

10. Prepare a profile of M. T. Vasudevan Nair ,the well-known Malayalam poet ,using the details given below [3]

> Madath Thekkepaattu Vasudevan Nair, popularly known as MT, is an Indian author, screenplay writer and film director.
>
> **Born:** 9 August 1933 (age 84), Kudallur
>
> **Spouse:** Kalamandalam Saraswathi
>
> **Residence:** Sithara, Calicut, India
>
> **Movies:** Kerala   Varma   Pazhassi   Raja, Nirmalyam,
> **Awards:** Jnanpith Award, Padma Bhusha

11. Suppose your school is going to conduct a Book Fare ,2014.Prepare a newspaper report about it.

[3]

12. Make two meaningful sentence use the word 'beside' [2]

13. write a letter to your grandfather, congratulating him on his 50th birthday. Imagine you are studying at a school in Delhi, and that your grandfather is living with your parents in Kerala. [5]

14. **Complete the story in about 80-100 words with the help of hints provided below.** [5]

A shepherded boy –set to guard sheep –asked to cry "wolf-wolf" if he sees any – one day he shouts 'wolf' as a joke-people come running –find no wolf,-angry one day wolf comes-shouts-no one comes-the boy killed –Moral.

15 Read the proverb 'Unity is Strength' and frame five meaning full sentences.

[5]

16. Write a notice for the school notice board regarding an ensuring tree plantation ceremony to be held on 5th june20xx in the school premises inviting students to participate in it by contributing at least four plants from each class. [3]

Appendix J1
UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

TEST OF WRITING SKILL IN ENGLISH

(ANSWER SHEET)

Name:.. Class:.............. No.:..............

School:... Division:............ Boy/Girl:......................

Appendix J2
SCORING KEY OF TEST OF WRITING SKILL

(Draft)

VALUE POINTS
Content organization
Arrangements of words
Spelling
Sequence of order
Grammar
Word group
Parts of speech
Sentence type (simple or compound sentence)
Editing style
Meaningful sentence using 'beside'.

Appendix J3
UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION
TEST OF WRITING SKILL IN ENGLISH
(Final)

Time : 2 hours

Total score:64

Dr.A. Hameed   Sabna.E.P
(Assistant Professor)   Research Scholar

Instructions:

- It is a Test of Writing Skill in English language.
- The first 5 minutes is cool-off time
- The time is to be spent for reading the question paper.
- You are not supposed to write anything during the cool-off time.
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2.Imagine that your class had a discussion on the subject "the government should spend more on the welfare of the elderly". Here are the ideas that have been put forward by the students. Develop it into a writing of about 80 words.   [5]

(The breakdown of the common family system, the elderly are neglected, selfishness, the elderly abandoned by their children, the number of older people increases,)

3. Read the conversation and complete the passage that follows.

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Kiran	:	That will be a good idea.
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Kiran	:	Let's decide the menu now.

Kiran told Dinesh that (a)...

Then Dinesh said(b)..

....

Which Kiran thought(c)...

....

When Dinesh asked (d)..

....

Kiran replied (e)...

....

4. Choose the best sentences from the given box to complete the following letter.

[5]

Family doctor examined him
Dislocated and later an ortho surgeon
Need not cancel your
W'ell take care
Amidst your hectic office tour
George met with an accident
Please don't worry
Advised bed rest for a week

Dear Pappa

　　　　　How are you papa? I am fine. I hope this letter finds you in good health
(a) .... .I'm sorry to inform you that
(b).......................... . While returning from school yesterday. Our
(c)..................................... and found that the bone joining the knee and
the ankle was (d)...............................has rest it and plastered it. George has
been (e) and he has taken it sportively. So
(f)................................…...Mummy feels you
(g)...................................tour and come back now as there is no
urgency. (h)..., don't worry.

With regards

Yours lovingly,

Albin

5) Find four different meaningful words from this table

[4]

M	A	S	L	E	E	P
V	L	I	Q	U	I	D
A	E	B	J	W	N	R
P	A	I	N	X	H	U
O	F	G	H	Z	A	G
U	N	O	R	C	L	Y
R	L	E	T	H	E	R

6. The nature club of your school organization program called "Suvarna Keralam Sundara Keralam". As part of the program, the club is organizing a rally to raise public awareness of the need to protect nature. Prepare three captions to be displayed as play cards in the rally. A sample is given below.

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Daughter : Its' alright (a) ....
Mother   : It may not bother you, but it is not the right habit (b) ....
Daughter : No, I'll clean up my table also later.
Mother   : With such an untidy study table how are you going to write?
Daughter : (c)...
Mother   : Sitting on the bed to write! (d)..
Daughter : Oh maaa, (d)...
Mother   : No do it right now.

8. Prepare a poster for releasing ceremony of manuscript magazine of eight standard students

[3]

9. Recently ,you read a newspaper report relating to the growing number of crimes in Kerala write a letter to editor expressing your views about the above mentioned problem. You are Deepu living in Malappuam,Kerala.

[5]

(Maximum crime cases, violent crimes- murder, rape, dowry death, molestation, kidnapping and abduction, crime against women ,)

10. Prepare a profile of O. N. V. Kurupp ,the well-known Malayalam poet ,using the details given below   [3]

> **Born:** 27 May 1931, Chavara
>
> **Died:** 13 February 2016, Thiruvananthapuram
> **Full name:** Ottaplakkal Neelakandan Velu Kurup
> **Title:** Professor; Doctor (2007)
> **Awards:** Jnanpith Award ,Padma Shri in 1998 and Padma Vibhushan in 2011
> **Works:** Ujjayini , Swayamvaram

11. Suppose your school is going to conduct inter school sports meet 2014, celebration on October 25th and 26 th 2014.Prepare a newspaper report about the inter school sports meet. [3]

13. write a letter to your grandfather, congratulating him on his 50th birthday. Imagine you are studying at a school in Delhi, and that your grandfather is living with your parents in Kerala. [5]

14. **Complete the story in about 80-100 words with the help of hints provided below.** [5]

A shepherded boy –set to guard sheep –asked to cry "wolf-wolf" if he sees any – one day he shouts 'wolf' as a joke-people come running –find no wolf,-angry one day wolf comes-shouts-no one comes-the boy killed –Moral.

15 .Read the proverb 'Necessity is the mother of invention' and frame five meaning full sentences. [5]

16. Write a notice for the school notice board regarding an ensuring tree plantation ceremony to be held on 5th june20xx in the school premises inviting students to participate in it by contributing at least four plants from each class. [3]

	time so as to gain from it.						
29.	I don't gain well from discipline.						
30.	I have individual models, and attempt to satisfy them.						
31.	I am set in my ways.						
32.	When I see an issue or test, I begin searching for conceivable arrangements.						
33.	I experience considerable difficulties objectives for myself.						
34.	I have a considerable measure of self control.						
35.	When I'm attempting to change something, I give careful consideration to how I'm doing.						
36.	I as a rule judge what I'm doing by the results of my activities.						
37.	I couldn't care less in case I'm not quite the same as a great many people.						
38.	When I see things aren't going right I need to make a move.						
39.	There is normally more than one approach to achieve something.						
40.	I experience difficulty making arrangements to help me achieve my objectives.						
41.	I am ready to oppose allurement.						
42.	I set objectives for myself and monitor my advance.						
43.	More often than not I don't focus on what I'm doing.						
44.	I attempt to resemble individuals around me. Assessing						
45.	I tend to continue doing likewise, notwithstanding when it doesn't work.						
46.	I can normally locate a few distinct conceivable outcomes when I need to change something.						
47.	When I have an objective, I can for the most part plan how to achieve it.						
48.	I have decides that I stick by regardless.						
49.	On the off chance that I roll out a determination to improvement something, I give careful consideration to how I'm doing.						

50.	Frequently I don't see what I'm doing until somebody calls it to my consideration.					
51.	I ponder how I'm doing.					
52.	Typically I see the need to change before others do.					
53.	I'm great at finding distinctive approaches to get what I need.					
54.	I as a rule think before I act.					
55.	Little issues or diversions throw me off base.					
56.	I feel awful when I don't meet my objectives.					
57.	I gain from my missteps.					
58.	I know how I need to be.					
59.	It irritates me when things aren't the way I need them.					
60.	I bring in others for help when I require it.					
61.	Before settling on a choice, I consider what is probably going to happen in the event that I do a certain something or another.					
62.	I surrender rapidly.					
63.	I normally choose to change and seek for the best					

Appendix K1
UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

SELF REGULATION QUESTIONNAIRE
(Final)

Dr. A. Hameed   **Sabna E.P.**
Assistant Professor   Research Scholar

Name of the Student:..

Name of the School:... Class:............

Male/Female:.. Govt./Aided/Unaided

Instructions:

The statements given below are to test how far you are aware of your Self Regulation capacities. For each statement, five responses - 'Strongly Agree', 'Agree', 'Uncertain , 'Disagree', and 'Strongly Disagree' are given. After reading each statement, carefully make a tick mark (✓) which suits the best in your case. Your data will be kept confidential and be used only for research purposes. Please mark your responses to all the statements.

Sl.NO	Items	Strongly Agree	Agree	Uncertain	Disagree	Strongly Agree
1.	I typically monitor my advance toward my objectives.					
2.	My conduct is not that unique in relation to other people's.					
3.	Others disclose to me that I continue with things too long.					
4.	I question I could change regardless of the possibility that I needed to.					
5.	I experience difficulty deciding on things.					

6.	I get effectively diverted from my arrangements.					
7.	I compensate myself for advance toward my objectives.					
8.	I don't see the impacts of my activities until it's past the point of no return.					
9.	My conduct is like that of my companions.					
10.	I am ready to finish objectives I set for myself.					
11.	I put off deciding.					
12.	I have such a large number of arrangements that it's hard for me to concentrate on any of them.					
13.	I change the way I do things when I see an issue with how things are going.					
14.	It's hard for me to notice when I've had enough(, food, desserts).					
15.	I ponder what other individuals consider me.					
16.	I will consider different methods for getting things done.					
17.	On the off chance that I needed to change, I am sure that I could do it.					
18.	With regards to choosing about a change, I feel overpowered by the decisions.					
19.	I don't appear to gain from my mix-ups.					
20.	I'm typically cautious not to try too hard when working, eating, drinking.					
21.	I tend to contrast myself and other individuals.					

22.	I appreciate a schedule, and like things to remain the same.					
23.	I have searched out counsel or data about evolving.					
24.	I can think of bunches of approaches to change, yet it's hard for me to choose which one to utilize.					
25.	I can adhere to an arrangement that is functioning admirably.					
26.	I don't gain well from discipline.					
27.	I have individual models, and attempt to satisfy them.					
28.	I am set in my ways.					
29.	When I see an issue or test, I begin searching for conceivable arrangements.					
30.	I experience considerable difficulties objectives for myself.					
31.	I have a considerable measure of self control.					
32.	When I'm attempting to change something, I give careful consideration to how I'm doing.					
33.	I as a rule judge what I'm doing by the results of my activities.					
34.	I couldn't care less in case I'm not quite the same as a great many people.					
35.	When I see things aren't going right I need to make a move.					
36.	There is normally more than one approach to achieve something.					

37.	I experience difficulty making arrangements to help me achieve my objectives.					
38.	I am ready to oppose allurement.					
39.	I set objectives for myself and monitor my advance.					
40.	I attempt to resemble individuals around me. Assessing					
41.	I tend to continue doing likewise, notwithstanding when it doesn't work.					
42.	I can normally locate a few distinct conceivable outcomes when I need to change something.					
43.	When I have an objective, I can for the most part plan how to achieve it.					
44.	On the off chance that I roll out a determination to improvement something, I give careful consideration to how I'm doing.					
45.	Frequently I don't see what I'm doing until somebody calls it to my consideration.					
46.	I ponder how I'm doing.					
47.	Typically I see the need to change before others do.					
48.	I'm great at finding distinctive approaches to get what I need.					
49.	I as a rule think before I act.					
50.	Little issues or diversions throw me off base.					
51.	I feel awful when I don't meet my objectives.					
52.	I gain from my missteps.					
53.	I know how I need to be.					

54.	It irritates me when things aren't the way I need them.					
55.	I bring in others for help when I require it.					
56.	Before settling on a choice, I consider what is probably going to happen in the event that I do a certain something or another.					
57.	I normally choose to change and seek for the best					