The Effect of Self Regulated Learning Cycle on Goal Setting and Achievement of Student Teachers

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Declaration

I hereby declare that the Minor Research Project File No. 23-670/12(WRO) was sanction by UGC on 29 March 2013 to Dr. Kamendu R. Thaker, Assistant Professor, Smt. S. I. Patel Ipcowala College of Education, Petlad.

I hereby declare that the work presented in this thesis is original and independent.

I further declare that it has not formed, as whole or in a part a basis for Minor Research Project file No. 23-670/12(WRO) sanction by UGC.

I have complied above mentioned project on 16 December 2016.

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Chapter 1

Panoramic view of the study

Introduction:

According to Zimmerman (1989), self-regulated learners are individuals who are "metacognitively, motivationally, and behaviorally active participants in their own learning process". One feature of this definition is how and why students choose to use a particular process or strategy.

"Self-regulated learning (SRL) as the three words imply, emphasis autonomy and control by the individual who monitors, directs, and regulates actions toward goals of information acquisition, expanding expertise, and self-improvement". In particular, self-regulated learners are cognizant of their academic strengths and weaknesses, and they have a repertoire of strategies. They appropriately apply to tackle the day-to-day challenges of academic tasks. These learners hold incremental beliefs about intelligence (as opposed to entity, or fixed views of intelligence) and attribute their successes or failures to factors (e.g., effort expended on a task, effective use of strategies) within their control.

The shift from behaviorism to cognitivism in educational psychology has placed an increasing responsibility on learners for their own learning, and self-regulated learning has become a frequent area of educational research.

This research focuses on the self-regulated learning processes of goal setting and perceived self-efficacy. Students enter learning activities with goals and self-efficacy for goal attainment. As learners work on tasks, they observe their own performances and evaluate their own goal progress. Self-efficacy and goal setting are

affected by self-observation, self-judgment, and self-reaction. When students perceive satisfactory goal progress, they feel capable of improving their skills; goal attainment, coupled with high self-efficacy, leads students to set new challenging goals.

This article describes how self-regulated learning (SRL) has become a popular topic in research in educational psychology and how the research has been translated into classroom practices. Research during the past 30 years on students' learning and achievement has progressively included emphasis on cognitive strategies, meta cognition , motivation, task engagement, and social supports in classrooms. SRL emerged as a construct that encompassed these various aspects of academic learning and provided more holistic views of the skills, knowledge, and motivation that students acquire. Whether SRL is viewed as a set of skills that can be taught explicitly or as developmental processes of self-regulation that emerge from experience, teachers can provide information and opportunities to students of all ages that will help them become strategic, motivated, and independent learners. Keeping these things in mind the researcher has selected this topic for further study.

Rationale of the study

Self-regulated learning is an unavoidable issue in learning especially in advanced education. In most of learning, learners required to be self-regulated learner, for instance, selecting goals to pursue, how to use the resources available to them, how to plan allocate resources, seek-help, evaluate their own performance revise and correct their own work by acquiring this ability or

by leading learners to this way as self-regulated students will take pride in their effort and meaning for teachers and students.

Statement of the problem

The Effect Of Self-regulated learning Cycle On Goal setting and Achievement of Student Teachers

Objectives of the problem

(1) To find out the goal setting of student teachers male & female teachers, control & Experimental group.

(2) To find out the effect of SRL Cycle on the goal setting of student teachers male & female teachers of Experimental group.

(3) To find out the achievement of student teachers male & female teachers, control & Experimental group.

(4) To find out the effect of SRL Cycle on the achievement of student teachers male & female teachers of Experimental group.

(5) To find out the effect of different strategies on the performance of student teachers male & female teachers of Experimental group.

(6) To find out the use of self-monitoring study schedule on the performance of student teachers male & female teachers (Experimental group).

(7) To study the co-relation Between score of Student teachers on Self Regulated Learning scale and Goal Setting.

(8) To study the co-relation Between score of Student teachers on Self Regulated Learning scale and Educational Achievement Test.

(9) To study the co-relation Between score of Student teachers on Goal Setting and Educational Achievement Test.

Operational definition of the study

(1) Self-regulated learning:

" self-regulated learning is active, constructive process hereby learners set goals for their learning and then attempt monitor regulate and control their cognition, motivation and behavior, guided and constrained by their goals and the contextual features of the environment. Those self-regulated activities can mediate the relationship between individuals and context and their overall achievement.

-Pintrich (2000) p.453

" Self-regulated learning is a form of learning in which individuals, depending on the type of their motivation to learn autonomously, deploy one or more. Self-regulatory measures(of a cognitive, meta cognitive, behavioral nature) and monitor the progress of their learning"

-Shiefele and Perkrum(1996) p.258

" Self-regulated learners have motivational advantage of high level of self efficacy and intrinsic motivation in which the learner actively select structure and create social and material environment which optimize their learning processes."

-Zimmerman.B. Bonners & Kovach,R 1996

Self-regulated is perhaps the issue that integrates most completely with a framework of lifelong learning in post-compulsory education.

SRL Means:

That a person is met cognitively, socially, motivationally and behaviorally active in his or her own problem-solving processes using self observation, self-judgment and self-reaction to attend to information plan and manage time process integrate and organize knowledge maintain a positive sense of self efficacy establish a productive work environment ;Use social resources effectively; and experience a positive anticipation about the potential outcomes of learning new information.

Therefore SRL Means:

1. Setting Goals
2. Monitor
3. Regulate
4. Control Cognitions
5. Motivation
6. Self-efficacy
7. Create Social environment
8. Select Structure
9. Material environment
10. Problem-solving process
11. Self-observation
12. Self-judgment
13. Using Social resources effectively

(2) Goal setting:

"Goal setting has been widely used to enhance work motivation."

"The end result or objective, which may be specified or required in advance."

http://www.About-goal-setting.com

Operational definition:

Therefore Goal setting means: Goal can be influenced at various stages of progression from goal setting to goal attainment.

(3) Achievement:

"In every case the achievement test calls for a demonstration of learning in some form that can be observed and assessed."

-Chauncy Henry p.448

"Achievement is the attainment of pupils in terms of marks obtained at the examination"

"Accomplishment or proficiency of performance in a given skill or body of knowledge"

Operational definition:

Achievement means scholarship achievement in subject.

Judge on the basis of scores obtained by the students.

Students scores on a test to be constructed and validated by the investigator.

(4) Student teachers:

People who are studying in the professional course of Teacher preparedness (B.Ed.) for the purpose of attaining a job as a teacher.

Importance of Research:

Self-regulated learning is an unavoidable issue in learning especially in advanced education. In most of learning, learners required to be Self-regulated learner, for instance, selecting goals to pursue, how to use the resources available to them, how to plan allocate resources, seek-help, evaluate their own performance revise and correct their own work by acquiring this ability or by leading learners to this way as self-regulated students will take pride in their and meaning for teachers and students.

Self-regulation concern the entire range of factors that affect student performance. Intelligence is a controversial construct describing factors about which teacher impact at best, is limited. Self-regulation is something that is teachable and not especially constrained by intelligence. Self-regulation accounts for the ability of persons of modest intelligence to become skilled master of very complex tasks.

Interventions aimed at improving Self-regulation are one way for teachers which impact student's lives. Teaching Self-regulation may be the most important thing a teacher can do for students, it may amount to empowering them to be lifelong learners. This kind of thinking pervades the community of educational psychologists studying these issues. A new vision of education is emerging. It is in which children are provided procedural instruction throughout their academic careers.

Understanding the notion of Self-regulation is important for teachers because teaching requires problem- solving and invention. Teachers face problems and challenges that are complex and rarely

straightforward. Teaching teachers fact and rigid decision-making models is less effective than nurturing.

Goal setting is a very powerful technique that can yield strong returns in all areas of one's life.

At its simplest level the process of setting goals and targets allow one to choose where one wants to go in life by knowing precisely what to achieve, one knows what one has to concentrate on and what is merely a direction. Goal setting gives one long-term vision and short- term motivation. It focuses one's acquisition of knowledge and helps one to organize one's resources.

Delimitation of the study:

Delimitation is the boundaries of a study and they help the researcher in conducting the study. The findings of the study also confine to these limitation. The present study is delimited to the following. (1) only B.Ed Colleges of Mehsana District in Gujarat will be selected for the study.(2) Only some Components of Self-regulated Learning will be selected for the study.(3) Only two topics of Educational Psychology will be deal with in the content schedule.

Population and Sampling of the research

According to David Fox:

In the social sciences, it is not possible to collect data from every respondent selection to our study but not only from some functional part of the respondent. The process of selecting functional part of the respondent is calling sampling. A sample may be defined as a selected number from the population to

represent it. Generally, this selection is done according to some rule or plan. By studying the sample, some inferences may be made about the population. In sampling studies conclusions derived from the population by just watching a few units or few individuals of the population. So it is necessary to examine the question of the degree of reliance which can be placed on the sample estimates. In this present study total 160 Student Teachers were selected by sampling of colleges.

Table 1.1

Sample of the study								
	First College 80 Student Teachers (Approximately)				**Second College 80 Student Teachers** (Approximately)			
	40 Male		40 Female		40 Male		40 Female	
Type of group	20 Control Group	20 Experimental Group	20 Control Group	20 Experimental Group	20 Control Group	20 Experimental Group	20 Control Group	20 Experimental Group
Total Sample	160 (Approximately)							

Method :

Experimental method will be used.

Tools:

The investigator will design, prepare and use the following tools for the study.

(1) Self-made Rating scale for self regulated learning:

Principles of planning Tool constructions.

1) Learning activities will be prepared.
2) Learning related actions will be executed (e.g. The cognitive strategies and processes necessary for understanding, retentions and transfer activated.)
3) The learning process will be regulated by means of control and intervention strategies.
4) Outcomes will be assessed. (e.g. by self-regulation.)
5) Motivation and concentration will be maintained.

(2) Self-made model of SRL cycle for regulated learning:

There will be three major phases in the SRL cycle: Planning one's learning, Monitoring progress while implementing the plan and evaluating the outcomes of the plan it's completed.

Below SRL cycle shows with the central importance of reflection throughout the process.

CYCLE OF SELF-REGULATED LEARNING

1) Planning phase:

The planning phase of SRL "sets the stage" for learning. During this phase. Investigator will do the following:

1) Analyze the learning task.
2) Set learning goals (make sure these goals are very clear).
3) Plan learning strategies (consider a variety of ways to approach the learning task).

2) Monitoring phase:

During the monitoring phase, implement plan from phase one.

While monitoring make sure that they are making progress forwards their learning goal.s

3) Evaluating phase:

During the evaluating phase investigator determine how well chosen strategy worked.

(3) Self-made Rating scale for goal setting:

In this tool investigator will measure following points of goal setting:

1) Mastery-development goals.
2) Performance approach goals.
3) Work related goals.
4) Self-assertive goals.
5) Efficacy Beliefs.
6) Control Beliefs.
7) Surface strategies.
8) Deep strategies.
9) Achieving strategies.
10) Self-regulatory strategies.
11) Time management.
12) Effort management.
13) Help seeking.
14) Attitudes towards the course.

(4) Survey for Achievement:

Techniques:

In this study following statistics will be use.

1) Product moment co-relation(r).
2) t-test.

3) ANOVA.

4) F-ratios.

Hypothesis of the study

H_o1 There will be no significant difference between mean score of Male and Female student teachers of control Group on Self Regulated Learning Rating Scale.

H_o2 There will be no significant difference between mean score of UHL and MHL student teachers of control Group on Self Regulated Learning Rating Scale.

H_o3 There will be no significant difference between mean score of Highly Intelligent and Lower Intelligent student teachers of control Group on Self Regulated Learning Rating Scale.

H_o4 There will be no significant difference between mean score of Male and Female student teachers of experimental Group on Self Regulated Learning Rating Scale.

H_o5 There will be no significant difference between mean score of UHL and MHL student teachers of experimental Group on Self Regulated Learning Rating Scale.

H_o6 There will be no significant difference between mean score of Highly Intelligent and Lower Intelligent student teachers of experimental Group on Self Regulated Learning Rating Scale.

H_o7 There will be no significant difference between mean score of Control Group and Experimental Group Male student teachers on Self Regulated Learning Rating Scale.

H_o8 There will be no significant difference between mean score of Control Group and Experimental Group Female student teachers on Self Regulated Learning Rating Scale.

H_o9 There will be no significant difference between mean score of Control Group and Experimental Group UHL student teachers on Self Regulated Learning Rating Scale.

H_o10 There will be no significant difference between mean score of Control Group and Experimental Group MHL of student teachers on Self Regulated Learning Rating Scale.

H_o11 There will be no significant difference between mean score of Control Group and Experimental Group Highly Intelligent student teachers on Self Regulated Learning Rating Scale.

H_o12 There will be no significant difference between mean score of Control Group and Experimental Group of Low Intelligent student teachers on Self Regulated Learning Rating Scale.

H_o13 There will be no significant difference between mean score of Control Group and Experimental Group of Total student teachers on Self Regulated Learning Rating Scale.

H_o14 There will be no significant difference between mean score of Male and Female student teachers of control Group on Goal Setting Rating Scale.

H_o15 There will be no significant difference between mean score of UHL and MHL student teachers of control Group on Goal Setting Rating Scale.

H_o16 There will be no significant difference between mean score of Highly Intelligent and Lower Intelligent student teachers of control Group on Goal Setting Rating Scale.

H_o17 There will be no significant difference between mean score of Male and Female student teachers of experimental Group on Goal Setting Rating Scale.

H_o18 There will be no significant difference between mean score of UHL and MHL student teachers of experimental Group on Goal Setting Rating Scale.

H_o19 There will be no significant difference between mean score of Highly Intelligent and Lower Intelligent student teachers of experimental Group on Goal Setting Rating Scale.

H_o20 There will be no significant difference between mean score of Control Group and Experimental Group Male of student teachers on Goal Setting Rating Scale.

H_o21 There will be no significant difference between mean score of Control Group and Experimental Group Female of student teachers on Goal Setting Rating Scale.

H_o22 There will be no significant difference between mean score of Control Group and Experimental Group of UHL student teachers on Goal Setting Rating Scale.

H_o23 There will be no significant difference between mean score of Control Group and Experimental Group of MHL student teachers on Goal Setting Rating Scale.

H_o24 There will be no significant difference between mean score of Control Group and Experimental Group of Highly Intelligent student teachers on Goal Setting Rating Scale.

H_o25 There will be no significant difference between mean score of Control Group and Experimental Group of Low Intelligent student teachers on Goal Setting Rating Scale.

H_o26 There will be no significant difference between mean score of Control Group and Experimental Group of Total student teachers on Goal Setting Rating Scale.

H_o27 There will be no significant difference between mean score of Male and Female student teachers of control Group on Educational Achievement Test.

H_o28 There will be no significant difference between mean score of UHL and MHL student teachers of control Group on Educational Achievement Test.

H_o29 There will be no significant difference between mean score of Highly Intelligent and Lower Intelligent student teachers of control Group on Educational Achievement Test.

H_o30 There will be no significant difference between mean score of Male and Female student teachers of experimental Group on Educational Achievement Test.

H_o31 There will be no significant difference between mean score of UHL and MHL student teachers of experimental Group on Educational Achievement Test.

H_o32 There will be no significant difference between mean score of Highly Intelligent and Lower Intelligent student teachers of experimental Group on Educational Achievement Test.

H_o33 There will be no significant difference between mean score of Control Group and Experimental Group of Male student teachers on Educational Achievement Test.

H_o34 There will be no significant difference between mean score of Control Group and Experimental Group of Female student teachers on Educational Achievement Test.

H_o35 There will be no significant difference between mean score of Control Group and Experimental Group of UHL student teachers on Educational Achievement Test.

H_O36 There will be no significant difference between mean score of Control Group and Experimental Group of MHL student teachers on Educational Achievement Test.

H_O37 There will be no significant difference between mean score of Control Group and Experimental Group of Highly Intelligent student teachers on Educational Achievement Test.

H_O38 There will be no significant difference between mean score of Control Group and Experimental Group Low Intelligent student teachers on Educational Achievement Test.

H_O39 There will be no significant difference between mean score of Control Group and Experimental Group of Total student teachers on Educational Achievement Test.

H_O40 There will be no significant difference between mean score control group of on Self Regulated Learning Rating Scale with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL

H_O41 There will be no significant difference between mean score of Experimental Group on Self Regulated Learning Rating Scale with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL.

H_O42 There will be no significant difference between mean score of Total Group on Self Regulated Learning Rating Scale with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL .

H_O43 There will be no significant difference between mean score control group of on Goal Setting Rating Scale with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL.

H_O44 There will be no significant difference between mean score of Experimental Group on Goal Setting Rating Scale with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL.

H_O45 There will be no significant difference between mean score of Total Group on Goal Setting Rating Scale with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL.

H_O46 There will be no significant difference between mean score control group of on Educational Achievement Test with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL.

H_O47 There will be no significant difference between mean score of Experimental Group on Educational Achievement Test with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL.

H_O48 There will be no significant difference between mean score of Total Group on Educational Achievement Test with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL.

H_O49 There will be no significant co-relation between Post-test of Self-Regulated Rating Scale, Goal setting Rating Scale and Educational Achievement with reference to Male Control Group.

H_O50 There will be no significant co-relation between Post-test of Self-Regulated Rating Scale, Goal setting Rating Scale and Educational Achievement with reference to Female Control Group.

H_O51 There will be no significant co-relation between Post-test of Self-Regulated Rating Scale, Goal setting Rating Scale and Educational Achievement with reference to Male Experimental Group.

H_O52 There will be no significant co-relation between Post-test of Self-Regulated Rating Scale, Goal setting Rating Scale and Educational Achievement with reference to Female Experimental Group.

H_O53 There will be no significant co-relation between Pre-test and Post-test of Self-Regulated Rating Scale, Goal setting Rating Scale and Educational Achievement with reference to Male Control Group.

H_o54 There will be no significant co-relation between Pre-test and Post-test of Self-Regulated Rating Scale, Goal setting Rating Scale and Educational Achievement with reference to Female Control Group.

H_o55 There will be no significant co-relation between Pre-test and Post-test of Self-Regulated Rating Scale, Goal setting Rating Scale and Educational Achievement with reference to UHL Control Group.

H_o56 There will be no significant co-relation between Pre-test and Post-test of Self-Regulated Rating Scale, Goal setting Rating Scale and Educational Achievement with reference to MHL Control Group.

H_o57 There will be no significant co-relation between Pre-test and Post-test of Self-Regulated Rating Scale, Goal setting Rating Scale and Educational Achievement with reference to Highly Intelligence Control Group.

H_o58 There will be no significant co-relation between Pre-test and Post-test of Self-Regulated Rating Scale, Goal setting Rating Scale and Educational Achievement with reference to Lower Intelligence Control Group.

Design of the study

The report will be written according to MLA Pattern.

Chapter 1: Panoramic view of the study.

In first chapter the problem and its rationale will be discuses. The statement of the problem its objective, delimitation, method, tools and techniques and definition of the terms used and procedure of the study will be discuses.

Chapter 2: Review of Related Literature.

This chapter consists of the summary of some of the relevant researches done in India and abroad on self-regulated learning, goal setting and achievement and their related aspects etc.

Chapter 3: Method, Tools and Techniques.

In this chapter the procedure adopt during the investigation of problem will be describe. It will deals the methodology and tools, techniques employee for analyzing the data collection, administration & scoring of various self made tools.

Chapter 4: Data collection and analysis.

This chapter will deals with the data collected and its interpretation through various tools and techniques according to the objective laid down for the study.

Chapter 5: Summary, Conclusion and suggestions.

This chapter will attempt to present the main finding and conclusion of the study and give educational implication & also offer suggestions for future study.

Chapter 2

Review of Related Literature

2.1	Introduction
2.2	Review of work already done on the subject
2.3	Major Findings of Related researches
2.4	Research Gaps identified in the proposed field of investigation
2.5	General Conclusion

Chapter 2

REVIEW OF RELATED LITERATURE

Introduction:

The Review of related literature leads the Research towards new horizon of the knowledge, where research gets an opportunity to analyze and interpret the data and gets the chance to know the gap in the field of knowledge.

According to researcher related literature is like a light house, which throws light over a huge, vast, boundless and fathomless deep ocean of knowledge for an unknown sailor who is unaware of the dangers and hurdles therefore helps her to attain the desired route and destination. Related literature means books ,dictionary, magazines, published and unpublished research project related with the problem of the research.

C. V. Good (1941) writes about the related literature through which any research can find and follow the practical utility of going through it. He writes "The bibliographical survey of related, factual , experimental ,theoretical and historical materials, orients the investigators and the problem in terms of the adequacy of the available evidence , current ideas and hypothesis and appropriate methods of research".

"Practically all human knowledge can be found in books and libraries. Unlike other animals that must start a new with each generation, man builds, upon the accumulated and recorded knowledge of the past. His constant adding to the vast store of knowledge makes possible progress in all areas of human Endeavour." -Best, John. W.P-111, 2003

In the light of above mentioned importance of review of related literature researcher tried her level best to go through the whole of the literature related to the field .The researcher has studied the studies available in the field to the extend possible.

Review of work already done on the subject :

(1) King,Mellissa DiGennaro, (2003) "The Effect of Formative Assessment on Student Self-regulation, Motivational Beliefs, and Achievement in Elementary Science."

Goals 2000 set forth a bold vision for U.S. students: they would be " first in the world in science and mathematics" by the year 2000.This study intended to learn how specific assessment strategies might contribute to improved student performance in science. This quasi- experimental study investigated the effects of formative assessment with reflection on students' motivational beliefs, self-regulatory skills, and achievement in elementary science. The study aimed to find out whether and how classroom application of formative assessment during science instruction might influence fifth grade student's attitudes and self-perceptions about science learning, self-regulatory learning behaviors, and achievement.

Findings indicated that the fifth-grade in this study had positive attitudes towards science and high levels of self-efficacy for science. Result suggested that these elementary students employed a wide variety of cognitive and met cognitive strategies to support science learning. Finding revealed that these fifth graders believed formative assessment with did not show that the formative assessment intervention contributed to significant

differences between levels of academic achievement and self-regulation for student in specific instructional services subgroup(i.e., gifted, regular, education, special education, and ESL).For example, high achieving students reported higher levels of self-regulatory learning behavior than other fifth grade students.

(2) Martens,Lynn R., (2004) "The Development of Students Meta cognition and Self-regulated Learning in the Classroom by Monitoring Learning Strategies and Response- Certitude Assessment".

This study investigated the development of student meta cognition and self-regulated learning through the use of self-monitoring study schedules, with analysis of response certitude (RC) on test items as related to student selection of learning strategies. During the course of one school year, high school students(n= 80) in an elective life science course, Anatomy and Physiology for Health Careers, employed self-monitoring schedules of 15 different learning strategies on a weekly basis through the course of seven class units to determine the effectiveness of regular monitoring of study strategies on test scores. Student in the experimental group then compared response certitude ratings on test items to selection of learning strategies during each unit to determine the effectiveness of those strategies that they elected to use. Comparisons were made on student selection of strategy types (personal /cognitive, behavioral, or environmental) between the control and experimental groups through out the year.

Results indicated that students in the control group used a greater variety of strategies, but achieved lower means of test

scores than experimental group; indicating that the experimental group was more selective with strategy types and more effective in those methods applied. There was no significant support for the hypotheses addressing self- monitoring schedules to student selection of types pf strategies. In addition, there was no statistical significance in student RC ratings to student selection of specific types of learning strategies.

(3) Zealand,Ruth Adrienne, (2004) "Relationships Among Achievement Perceptions of Control Self-regulation and Self-determination of Students with and without the Classification of Learning Disabilities."

Currently, there is a lack of understanding of the interrelationships among the variables of perceptions of control, self-determination, and self-regulation with regard to students with and without learning disabilities, and how they relate to achievement of students with learning disabilities. This study examined relationships among reading and mathematics achievement, locus of control, learned helplessness, verbal and math self-efficacy, self-determination and self-regulation. Two hundred forty two participants, in grade 6-12, attending 4 urban schools, were divided into 2 groups : those classified by districts as having learning disabilities (LD), (N=121) and age, grade, race, gender, and school. Students were given the K-TEA reading and math Achievement tests (Kaufman, 1985). Intellectual Achievement Responsibility Scale (Crandall, Katkousky & Cradall, 1965) Zimmerman's Verbal and Math Self-Efficacy Scale (Zimmerman, 1990) the AIR Self-Determination Scale (Wolman, Campeau, DuBois, Mithaug, and Stolarski, 1993) and the Self-

Regulation Scale (Zimmerman, 1993). As Expected, students with LD earned significantly lower reading and math achievement test scores than the students with NLD. For both groups, math self-efficacy significantly predicted reading and math achievement. Students with NLD gave more strategies for academic work than did students with LD, and reported using 4 self-regulation strategies for reading achievement and 2 for more achievement, as opposed to students with LD who used to self-regulation strategies that correlated significantly with math achievement; and used none for reading achievement. Students with LD had and inverse relationship between mathematics achievement and learned helplessness. Verbal Self-efficacy correlated with reading and math achievement. Overall minimal differences between the groups on measures suggest that these collective variable did not greatly impact on achievement; and secondarily, that there may be problems in the classification process of students with and without learning disabilities.

(4) Missildine,Melanie L., (2004) "The Relations Between Self-regulated Learning, Motivation, Anxiety, Attributions, Student factors, and Mathematics Performance between Fifth and Sixth-grade Learners."

The purpose of this study was to investigate the relations between self-regulated learning, motivation, mathematic anxiety, attributions, gender, ethnicity, SES and academic performance of fifth and sixth- grade students in mathematics. Specifically, the study investigated whether relation exists between the factors of self-regulated learning, motivation, anxiety in mathematics, attributions and mathematics performance among fifth and sixth -

grade learner, whether relations exists between individual learner variable (i.e. gender, ethnicity, SES), self-regulated learning, motivation, anxiety in mathematics, and attributions whether development difference exist between individual learner variable (i.e. gender, ethnicity, SES) and mathematics performance and whether differences exist in the degree to which individual learner variables (i.e. gender, ethnicity, SES) affect mathematics achievement for fifth and sixth - grade learners.

Subject were 761 fifth and sixth - grade mathematics students currently in elementary and middle schools. All subject completed the four instruments; a version of the Motivation Strategies for Learning Questionnaire (MSLQ, an adaptation of the test Anxiety Inventory revised for mathematics (TAI-R-M); a mathematics attribution scale and an adaptation of the self-regulated Learner Interview Schedule (SRLIS). Statistical measures, including multiple regression co-relations, a factorial MANOVA, and a two-way path analysis were performed in analyzing data.

Significant relations were noted between motivation, anxiety and test score for both Fifth and sixth - grade learners in mathematics. With respect to motivation, relations existed for gender and ethnicity and free-reduced lunch (SES) significantly affected motivation, anxiety, and attribution. Further results indicated that when combined gender, ethnicity, and free reduced lunch affect motivation. Relations were noted between free reduced lunch and test scores and between gender, free reduced lunch, and math grade. Difference were observed for the two grade levels in relations between strategy use and strategy frequency. Further,

differences were observed for the two grade levels in relations between strategies used across the six different learning contexts.

(5) Muis, Krista Renee, (2004) "Epistemic Styles and Mathematic Problem Solving: Examining Relations in the Context of Self-regulated Learning."

The dissertation examines relation between personal epistemology and facets of self-regulated learning, moves away from co-relation design and adopts a more process oriented methodology. For this study a philosophical conceptualization of epistemology and mathematics education. The primary purpose of this study was to examine relations between approaches to knowing, mathematics problem solving and regulation of cognition. A more rational in their approaches to knowing and whether their epistemic beliefs change through higher levels of education.

One hundred twenty seven students were sampled from undergraduate University mathematics and statistics courses. Students completed self-report measures to reflect epistemic styles, epistemic beliefs and dispositions regarding elements of self-regulated learning, Students were profiled as predominantly rational, predominantly empirical or both rational and empirical in their approaches to knowing seventeen students were chosen to participate in two problem-solving sessions. Problem-solving episodes were coded for evidence of planning, monitoring, control, use of empirical and rational argumentation and justification for solutions.

Differences in self-reported met cognitive self-regulation were found between students profiled as high on rationalism and empiricism and students profiled as predominantly empirical. No other self reported differences were found. When problem-solving students profiled as predominantly rational had the highest frequency of planning, monitoring and control. These differences in rationalism scores were found between lower and upper year University students but differences were found in their beliefs about the structure of knowledge and the source of knowledge. Differences were also found in the quality of rational arguments between lower and upper year University students when solving problems.

Students profiled as predominantly rational in their approaches to knowing were predominantly rational in their approaches to problems solving. Similarly, students profiled as predominantly empirical in their approaches to knowing were predominantly.

Empirical in their approaches to problem solving. Finally, students profiled as both rational and empirical in their approaches to knowing were predominantly rational in their approaches to problems solving. Results are discussed in the context of various theoretical frameworks.

(6) Hierholzer, Sandra G., (2005) "The Self-regulated Learning of Elementary Students Receiving Modified, Regular, or Gifted Instruction."

Student who are self-regulated learners take active roles in their own learning (Schunk, 2001, Zimmerman, 1989, 2001). Self-

regulated learning has been tied to increased use of strategies such as planning and monitoring, increased motivation and increased academic achievement (Alexanderet al.1998; Schraw, 1998; Swanson, 1990) Certain components of have been studied with students in special populations. However, few studies have looked at multiple components of self-regulated learning with in one study as they relate to the academic achievement of students in special populations. The purpose of this study was to examine relations among strategy use, motivation, and achievement within three groups of fourth and fifth grade students, those receiving modified instruction, regular and gifted instruction.

Participants (n = 326) were drawn a population of fourth and fifth graders enrolled in there public elementary schools. Achievement was measured at three levels using classroom grades, local school district created math test and the math portion of a standardized state achievement test. Strategy use and motivation were measured using a self-report survey administered to students in the spring. Items used were adapted from the Motivated strategies for learning questionnaire (Pint rich, Smith, Garcia, & McKeachie, 1993). The Motivation items measuring self efficiency and three goal orientations were adapted from the Patterns of Adaptive Learning Survey (Midgley et al., 2000).

The primary analyses consisted of multivariate analyses of variance (MANOVA) and hierarchical multiple regressions. Result of MANOVA indicated no statistical differences among the instruction groups in their self-reports of strategy use and motivational variables. Multiples regressions indicated that grouping variables (modified, regular, and gifted instruction)

predicted achievement over and above self-reports of strategy use and motivational variables. These analyses also indicated slight variations in the way strategy use was related to different achievement measures, Finding were used to evaluate the appropriateness of models of self-regulated learning for students from special populations. In addition, finding were discussed with regard to the insight and assistance they provide to educators who want to ensure that all students have the tools they need to be academically successful.

(7) Trudel, Remi, (2009) "Self-regulation Through Information Processing."

Self-regarding is more than regulatory strength or willpower, more than l pursuit; it is the ability for individuals to guide themselves using any processes necessary to attain their goals or preferred standards. This research introduces an information processing model of self-regulation that integrates. Hoch and Loewenstein's (1991) desire-willpower model of self-control with propositions developed in prior work on information processing Bettman 1979, Payne, Bettman and Johnson 1998) The result is a do acriptive model demonstrating how the processing of information (utilitarian versus hedonic) can aid or impede attempts to self-regulated.

Keywords : self-regulation, information processing, hedonic, utilitarian, adaptive processing, consumer decision making, ego depletion, resource depletion.

(8) Lewis, Tosha Michelle, (2010) "The Influence of Authenticity and Emotional Intelligence on the Relationship Between Self-monitoring and Leadership Effectiveness."

The current study explored how key leadership variables (i.e., self-monitoring, emotional intelligence, authenticity, trust, find leader-member exchange) interact to create higher levels of leadership effectiveness. Specifically, the current study sought to explore (a) the relationship between self-monitoring and leadership effectiveness, (b) the degree to which authenticity moderates the relationship between self-monitoring and leadership effectiveness, (c) the degree to which trust mediates the relationship between authenticity and leadership effectiveness, (d) the degree to which emotional intelligence moderates the relationship between self-monitoring and leadership effectiveness, (e) the degree to which authenticity mediates the relationship between emotional intelligence and leadership effectiveness, and (f) the degree to which the leader-member exchange mediates the relationship between self-monitoring and leadership effectiveness. Using on online survey, the study gathered self-report data on self-monitoring and emotional intelligence levels from 102 leaders. In addition, ratings on the leaders' levels of authenticity, trust, and leader-member exchange, were gathered from direct reports, and were analyzed to determine how the variables interplayed to increase or decrease the level of the effectiveness for the leader participant.

The current study found that self-monitoring was not significantly correlated with leadership effectiveness. However, self-monitoring was found to be significantly correlated with trust,

leader-member exchange, and emotional intelligence. A factor analysis revealed that the self-monitoring scale had several overlapping items with the emotional intelligence scale. When the overlapping items were removed, self-monitoring was no longer related to emotional intelligence, trust, or the leader-in ember exchange.

The current study also found that authenticity was strongly related to leadership effectiveness and mediated the relationship between trust and leadership effectiveness. In addition, the leader-member exchange mediated the relationship between authenticity and leadership effectiveness.Leaders who were seen as trustworthy and authentic were better able to form relationships with their direct reports, thus were seen as more effective.

Overall, the results showed that a leader's ability to be genuine, transparent, trustworthy, and authentic allows him or her to create a successful exchange with their direct reports. In turn, this relationship enhances the leader's ability to be effective.

(9) Suveg Bitar,Mary Louise, (2010) "Challenging Behaviors:Early Childhood Teachers' Perspectives on Young Children's Self-regulation."

Early childhood teachers are reporting increasing concerns about young children who appear to need significant support in developing the social and emotional skills necessary for school success and lifelong learning. The purpose of this exploratory study was to examine early childhood teachers' self-reported experiences and attitudes that have shaped their beliefs about guiding young children's

behavior, as well as the strategies they use to promote children's self-regulation and their reflections on those practices.

The 11 participants who volunteered to participate In this study taught ill preschool programs in three early childhood setting; a public school, a Montessori school, and a center-based childcare program. The two methods of data collection used to gather information from the 11 participants were semi-structured interviews and Anderson's (2007) Behavioral Challenges in Early Childhood Education: Professional Survey (BCECE: PS). Hatch's description of typological analysis was used to analyze the interview transcripts. Descriptive statistics and frequency tables of the 11 strategies the participants recommended in response to the three types of challenging behaviors (e.g., physical aggression, verbal aggression, and noncompliance) were created using the SPSS 16.0 statistical software.

The interview data suggested that whether the 11 participants in this study primarily cited positive or negative experiences with their first teachers, those early experiences influenced their child guidance approaches in the classroom and the ways they incorporated these experiences into their teaching. Participants also cited self-regulation skills as important behaviors critical for young children's transition into kindergarten.

The survey data indicated that when addressing verbal aggression and noncompliance the teachers were least likely to recommend suspension.

(10) Song,Hyuksoon S., (2010) "The Effects of Learners' Prior Self-regulation, and Motivation on Learning Performance in Complex Multimedia Learning Environments."

Many medical schools have developed computer-based, multimedia learning environments to fill the knowledge gap and provide common cases and resources to students. However, considering that multimedia in education may impede effective learning if the characteristics of learners and tasks are not considered thoroughly in instructional design, it is critical to develop a comprehensive understanding of learner characteristics in medical multimedia learning environments. Although many researchers agree that learners' prior knowledge, self-regulation, and motivation are important to explain learning processes, few studies have investigated their combined effects. Therefore, the current study examined the direct and indirect effects of medical clerkship students' prior knowledge, self-regulation, and motivation on learning performance in multimedia learning environments using structural equation modeling. The data of 386 medical clerkship students from 6 U.S. medical schools were analyzed. Students completed a prior knowledge test, the Self-Regulation Measure in Computer-assisted learning (SPMC), and motivational questionnaires (self-efficacy, goal-orientation, task value) during the first week of clerkship. From the second to the fourth week of clerkship rotation, the participants were asked to use the 45-minute Web Initiatives for Surgical Education-MD (WISE-MD) module on carotid artery disease. Right after taking the module, they completed post test measures including the knowledge post test and the Script

Concordance test. The structural model showed that medical clerkship students' prior knowledge directly positively affected their learning outcome (β = .422, p < .001), self-efficacy (β = .300, p < .001) and performance approach goal orientation (β = .294, p < .001). The learners' self-regulation showed a significant positive direct effect on learning outcome (β = .581, p < .001). In terms of motivational constructs, learners' mastery goal orientation directly affected their learning outcome (β = .358. p = .006). However, inconsistent with the hypothesis, learners' performance approach goal orientation showed a significant negative direct effect on learning outcome (β = -.261, p = .024), and performance avoidance goal orientation bad a significant positive effect on learning outcome (β = .259, p = .010) The findings were discussed to develop a more comprehensive understanding of the role of individual characteristics in medical multimedia learning environments.

(11) Platten, Peter, (2010), "Initiation of the Self-regulated Feedback Loop: The Effects of Feedback and Strategy Mollification on Vocabulary Learning, Motivational Beliefs and Self-regulation Processes."

Previous research has shown Incremental Rehearsal (IR) to be an effective, albeit inefficient, method for increasing sight-word vocabulary. Attempts have been made to increase the efficiency of this strategy by identifying the causal mechanisms that contribute to its effectiveness. However, few studies have explored the effects of this potentially inefficient strategy on motivation. The present study applied a self-

regulatory framework to investigate IR, by examining the effects of performance-related feedback and strategy modification on vocabulary learning, motivational beliefs and self-regulation processes. Sixty-five middle school students participated individually in this study, which involved using IR for nine minutes to learn from a set of twelve unfamiliar words. All participants were quizzed three times and received one of three types of feedback on how well they learned from the set of words. In the first condition, no explicit feedback was given related to performance. In the second condition, outcome feedback, a graph depicting the number of words correctly identified for each trial was shown. Participants in the third feedback condition received outcome feedback and were shown the words that they either incorrectly or were unable to identify, which was called outcome plus corrective Feedback. Additionally, half of all students were both instructed how to modify IR and given a modification prompt after three minutes of studying. Among the significant results, participants prompted to modify their use of IR learned significantly more words than those not prompted, in addition to endorsing significantly greater levels of self-efficacy and higher self-evaluative standards, irrespective of the type of quiz feedback they received. Additionally, participants who received outcome plus corrective feedback but were not allowed to modify IK displayed significantly lower task interest and perceived.

(12) Gramlich, Stephen Peter, (2010) "Regression Analysis of Self-regulatory Concepts to Predict Community College Math Achievement and Persistence."

Open door admissions at community colleges bring returning adults, first timer. low achievers, disabled persons, and immigrants. Passing and retention rates for remedial and non-developmental math courses can be comparatively inadequate (LAVC, 2005; CCPRDC, 2000; SBCC, 2004: Seybert\Soltz, 1992; Waycaster, 2002). Mathematics achievement historically has been a subject of concern with community colleges, universities, and primary schools (Davis, 1994; MEC, 1997; NCTM, 1989, 2000; Wang-Iverson, 1998). An important statistic of community colleges is that more than 83% of students work full or part-time (NEDRC, 2000, Phillippe Patton, 2000). Conventional homework time estimates can range from 1-3 hours of homework for every hour of in-class instruction. Self - regulatory learning has been proposed to improve opportunity for math achievement (Bembenutty. 2005: Ironsmith et.al., 2003; Jones & Byrnes, 2006; Pajares &: Graham, 1999; Schunk, 1990).

Seventeen research questions were made to explore the relative influences of goal setting, time planning, and time usage on mathematics achievement mid persistence. Math students from 8 classes at a large, northeastern community college were administered 3 surveys asking self- regulatory questions. Results were found from descriptive statistics, frequency distributions, co-relation matrices, t-tests, multiple regressions, and logistic regressions.

Goal setting and time management were significant contributors in the model for predicting non-remedial students' final average. With respect non-remedial students' Final average, goal setting was related but all of the time planning and usage variables were not. Non-remedial students may have been more realistic about their course goals. However, non-remedial students were overly optimistic about allocating their time. No practical information regarding math student persistence beyond the first exam was found. Notable statistics from this study included: students spent about 5 to 6 month per week on then main homework and over 80% worked at least 18 hour per week. Students worked more job hours on average than on full class homework. A possible recommendation to improve achievement is an extra class time for doing homework. Another implication is math educations, first-year workshops. And textbooks could teach the skills necessary for students to create suitable time management schedules and strategies that support students' course goals.

(13) Ragosta,Patrick, (2010) "The Effectiveness of Intervention Programs to Help College Student Acquire Self-regulated Learning Strategies a Micro-analysis."

A Meta- analysis was conducted to determine the effectiveness of interventions designed to help college students acquire self-regulated learning strategies. Fifty-five primary studies were included in the analysis, and ninety-three effect sizes were calculated and grouped into three outcome categories: academic achievement, strategy use, and self-efficacy. Total sample size consisted of 6, 669 students. The overall weighted effect size (Hedge's g) for all studies was 0.335 (95% CI = 0.240, 0.431), a

significant small to medium effect. Interventions were coded based on their theoretical bases: metacognitive, social-cognitive, motivational, or an integration of these. Interventions based on social-cognitive theory produced the largest effect sizes. Moderator analyses were conducted on several variables: content area, group work, type of assessment instrument, computer-mediated instruction, type of college/university, randomization of subjects, and intervention length. These analyses showed differential effect sizes for some variables, although moderators accounted for little of the between-studies variation. Educational implications and recommendations for future research are proposed.

(14) Shi, Yongchao, (2010) "Culturally Situated Self-Regulated Learning in Statistics in a Computer-Supported Collaborative Environment."

This thesis examines the role of context, especially cultural context it contemporary theoretical models of self-regulated learning A critical review of prominent models revealed that although current models of self-regulated learning recognize the role of social contexts in forming self-regulatory competency, they assume that, once established, self-regulation functions larger independently of the social context. However, this is not the case in social situations, nor is it the case in Eastern cultures and many non-mainstream Western sub-cultures, in which individuals typically self-regulate in relative to others. To address this issue, a situated discourse model of self-regulative learning was developed to involve both individually oriented and social oriented regulatory processes.

This model was then tested in a context of computer-supported learning in statistics Participants were 30 Canadian male students and 30 Chinese male students who were enrolled in a major university in Canada. The students were randomly paired to learn analysis of variance for one hours they solved a data analysis problem by using a computer tutor. Pairs were allowed lo learn in a way of their own choice or simply by following the directions prescribed by the researcher. The students had little or no prior knowledge of analysis of variance.

The results were consistent with research hypotheses derived from the proposed model. Compared with Chinese pairs, Canadian pairs engaged more with tasks of their own choice as revealed in the computer logs and favored more individually oriented actions both in solving their problem and in learning on the computer tutor as shown in their discourse moreover, Canadian pairs demonstrated a stronger preference for the employment of individually oriented self-regulatory strategies in the forethought and performance phases of self-regulated learning than did Chinese pairs. Furthermore, there were significant differences between Canadian pairs and Chinese pairs in monitoring, motivation, elaboration, clarification, and enrolment structuring with stronger individual orientation for the Canadian pairs. In addition, the findings from comparisons between the Canadian pairs and Chinese pairs were largely replicated by those findings from contrasts between Canadian participants and Chinese participants mixed pairs.

(15) White, (2011) "Self Regulated Learning Strategies and Beliefs of International Baccalaureate Students in an Urban Secondary High School."

Self-regulated learning refers to student taking responsibility for what and how they learn in the classroom, and how it affects their thoughts and actions in their academic requirements. This action research case study sought to investigate the use of self-regulated learning (SRL) strategies and beliefs of secondary high school juniors enrolled in the International Baccalaureate English Al curriculum at an urban secondary school. The focus of this study was students' behavior and beliefs through LASSI testing phenomenological interviews, student journaling, classroom observation and artifacts in an authentic classroom setting in the final semester of junior year.

The self-regulated learning strategies of Zimmerman and Pons (1986) were the foundation for this study in an attempt to align the SRL strategies and student beliefs with the International Baccalaureate student profile Data were gathered through LASSI testing, triadic interviews, student journaling, external observations, and artifacts (an assigned research paper) and the results triangulated with the International Baccalaureate profile and mission of "learning to learn."

Emerging themes became apparent and were explored as the interviews process continued at 3-week intervals. The emerging self-efficacy beliefs and strategy use elicited future questions as the results were analyzed interview questions were formulated. LASSI

telling results were with students' interviews and journaling, as well as their reflection concerning their research projects.

The SRL strategy of collective efficacy, or social assistance from peers. It considered to be the key factor in achieving academic success by all the subjects. The successful students employed forethought and goal-setting and strategic planning, and found particular intrinsic value in their academic tasks. They valued student engagement, social assistance, and self-control processes. Their volition, or will to succeed, overcame earlier stress anxiety, as strong collective efficacy meshed with their individual academic goals.

This study demonstrated the importance of determining and examining student beliefs concerning their use of SRL strategies and perceived set efficacy in academic settings: accurate and continuous feedback is essential for student success, Self-efficacy and student autonomy are necessary a student-centered classroom, and the demonstration and incorporation SRL strategies could aid in promoting "learning to learn" at all levels of an English language Arts curriculum.

(16) Mullin, Arlene, (2011) "Teacher knowledge of Cognition, Self-regulated Learning Behaviors, Instructional Efficacy, and Self-regulated Learning Instructional Practices In High, Moderate, and Low ELA Achieving and Moderate Need Elementary Schools."

Schools are facing an unprecedented call to action to equip students with the knowledge and skills required Lo succeed in the twenty-first century, To succeed as effective citizens, workers, and leaders in u global economy, educators

must teach students to be strategic, adaptable, and self-regulated.

The purpose of this study was to investigate the relationship between teachers' knowledge of cognition, self-regulated learning behaviors, instructional efficacy, and the instructional practices employed by teachers to promote self-regulated learning in students. Further, this study examined the influence of teacher self- regulated learning in students on academic achievement in moderate need elementary schools.

A survey focused on self regulation and teacher efficacy for instruction was developed from two published surveys. The survey was administered to 218 teachers from 18 elementary schools representing schools with moderate needs located in Long Island, New York. Academic achievement was measured by the percent of students that scored at the mastery level on the grade 3 English Language Arts Assessment for the years 2007, 2008 and 2009 combined.

A paired-samples f test found that there were significant differences between teacher beliefs and instructional practices for the variables Monitoring Strategy Use and Conditional Knowledge. A one-way between groups ANOVA indicated that there were significant differences for the instructional practice variables Self-Evaluation, Declarative Knowledge, Monitoring Strategy Use and Conditional Knowledge when schools were divided into high-achieving, moderate-achieving, and low-achieving, A co-relation analysis indicated Conditional Knowledge

Instructional Practices, Self-Evaluation Instructional Practices, Declarative Knowledge Instructional Practices, and Monitoring Strategy Use Instructional Practices were positively related to academic achievement. Results of the stepwise discriminate analysis indicated that Conditional Knowledge Instructional Practices was the variable that predicted teacher positions in the achievement rankings of these schools.

The findings In this study indicate that teacher self-regulated learning behaviors and the Instructional practices they use to promote self-regulated learning in students influence academic achievement in English Language Arts.

(17) Maxeiner, Amy Marie, (2011) "A Study of Environmental Factors Related to Self-regulated Learning among Graduate-level Physical Therapist Students in the Clinic."

The Commission on Accreditation in Physical Therapy Education (CAPTE) requires physical therapist education to be a minimum of 30 weeks spent in full-time clinical education experiences. Therefore, physical therapist students (SPT) spend approximately one-third of their education in clinical education experiences. SPTs need to be self-directed and self-regulated learners in the clinic as well as the classroom. The purpose of this quantitative study is to examine how specific environmental factors (teaching orientation of Clinical Instructor (CI), collaborative or one-to-one experience) and satisfaction with the current clinical setting (in a setting of interest or required setting) relate to the

graduate-level SPTs motivation, level of self-regulation and depth of learning in the clinical context. Twenty-eight PT programs within the United States agreed to participate. SPTs were asked to complete the Motivated Strategies for Learning Questionnaire (MSLQ), and Revised Study Processes Two Factor Questionnaire (R-SPQ-2F) and their CI the Conceptions of Teaching Questionnaire. Both groups also provided demographic information. All three instruments were modified for the clinical context. Ninety-six SPT packets were returned with seventy-five corresponding CI packets.

Profile analysis was used to analyze the data. Findings indicated that the teaching orientation of the CI and type of learning experience were not related to the learning aspects of the student's self-regulated learning profile. There was a relationship between the motivation subscales of the MSLQ and The type of clinical setting was in. but not the R-SPQ-2F. The two instruments, MSLQ and R-SPQ-2F, were related, but the extent to which they are related is still unclear.

The lark of a significant relationship between the collaborative learning experiences and use of MSLQ learning strategies provides insights for clinical education practice, including the ability to encourage more part-time CIs to participate in collaborative clinical education experiences for students. The significant relationship between the motivational factors of the clinical setting and the motivational aspects of the MSLQ indicates further need to prepare students for completing required clinical settings. The lack of consistency of results between the two instruments for clinical setting motivation indicates the need for further research.

(18) Michna, George Albert, (2011) "Self-regulation and Culture: Illuminating Respondents' Understanding of Metacognitive Self-regulation Strategy Use."

Self-regulated strategy-use has been extensively examined, and, as a result has yielded insight into the processes necessary for academic achievement and learning, in general. However, a majority of this research has relied on self reported measures among a population of predominantly White, Anglo-American, middle class learners. Second methodological issues have called into question the validity of self-regulation and ethnic identity among a population of African American, Hispanic and white undergraduate college student. Two hundred and fourteen students were administered a self-report questionnaire and a sub-sample of 40 students participated in a structured interview procedure commonly known as cognitive pre-testing to further understand patterns of verbal interpretation, coherent elaboration, mid overall cognitive validity of common items used to assess metacognitive self-regulation strategy use. First semester grade point average was also collected. Results from MANOVAs failed to find any differences in the measures of cognitive validity by ethnicity. Results from cognitive pre-testing suggest that no statistically significant differences were noted among ethnic groups. When the metacognitive self-regulation items were examined for the total sample, two items were found to have relatively lower levels of cognitive validity, whereas one item received a comparatively higher cognitive validity rating. Taken together, this study lends preliminary support for the use of this scale with ethnically diverse populations. It also calls attention to the need to examine self-regulatory processes among diverse samples and the continuing use of cognitive pre-testing to improve the measurement of self-

regulatory constructs. Implications for research and assessment of self-regulated learning is discussed.

(19) Griffith, Shirley, (1994), "Goal Setting Improve Participation and Outcomes Among University Career Counselling Clients: A Randomized Evaluation."

The objective of the present thesis was to carry out a controlled evaluation of the impact of a new goal-setting intervention on clients' participation in a benefits from the process of career counselling.

Goal setting is a technique originally developed by researchers in industrial and organization psychology to help managers motivate employees to set difficult but reachable goals and thereby improve their work-related performance. The present thesis marked one of the first times that goal-setting,

The thesis involved random assignment of subjects to either a control (n=31) or an experimental (n = 32) group. The control group received the standard, group-oriented, career-counselling program that is offered at the University of Ottawa, Career and Counselling Services (UOCCS), where the study was conducted. The experimental group, received in addition (counsellor-client) goal-setting intervention that included feedback to subjects on progress towards the attainment of their goals. The intervention aimed at increasing the amount of time spent by clients on self-chosen career-counselling activities and, thereby, the overall benefits derived from the career-counselling process.

It was anticipated that goal-setting would help counsellors to motivate clients to set specific, challenging, but attainable

career-counselling goals and to pursue and implement these goals. The basic hypothesis was that subjects in the experimental (goal-setting) group, compared with those in the control group, would participate to a greater extent in and obtain greater benefits from the career-counselling process. Participation was operationalized as an equally weighed combination of the total amount of time spent on career-counselling activities and the total number of activities engaged in. The following variables were used as career-counselling out comes : satisfaction with services, number of problem issues interfering with career decision-making, career decidedness, degree of comfort with level of career decidedness, self-clarity about interests and abilities, knowledge of pertinent occupations and training, decisiveness, career-choice importance, and objectives in coming for career counselling (i.e., gaining reassurance on the appropriateness of career options, expanding or narrowing career options, exploring "backup" career options, deciding on an academic major, and gaining an understanding of occupational interests and abilities).

The results of t-tests and a series of split-plot ANOVAS revealed that there was no significant effect (at the $p < .05$) of treatment on participation in career counselling or on any of the 15 career-counselling outcomes. It therefore seems appropriate to regard the two Interventions (i.e., goal-setting plus group career counselling, versus group career counselling alone), as about equally (rather than differentially) effective in motivating students to participate in, and thereby benefit from, the career-counselling process. Although there was no main effect for treatment, a series of hierarchial regressions revealed

significant interactions between treatment and level of conscientiousness. The goal-setting intervention produced greater benefits than the control condition (i.e., greater participation in career counselling), but only for subjects low in conscientiousness.

The failure to find differential benefits should not lead one to conclude that the programs were not effective (even though the absence of a no-intervention control group does not allow us to say just how effective they were, compared with no career counselling program at all). Members of both groups spent, on the average, 21.7 hours on career counselling. A t-test and a series of split-plot ANOVAs revealed that subjects in both groups were generally satisfied with their respective programs and experienced many important benefits: a decline in the number of problems that were interfering with career decision-making; an increase in their level of career decided-ness; a sharp rise in their levels of comfort about making a career decision, self-clarity about their interests and abilities, and knowledge of pertinent occupations end training; and a modest increase in level of decisiveness. Furthermore, subjects in both groups experienced an appropriate degree of attention by their programs to many of the broad objectives they had in coming to career counselling: gaining reassurance on the appropriateness of career options, exploring "backup" career options, and deciding on a major. A series of hierarchial regressions provide only marginal evidence that increased participation, collapsing across groups would lead to better career-counselling outcomes. There was only a trend for increased participation to lead to greater

satisfaction with remits, increased comfort with the level of career decidedness, and a greater understanding of occupational interests.

A Fishers' r-to-z transformation revealed that the relationship between collaboratively set goals, personal goals, self-efficacy and participation in a career counselling context was similar to that previously reported for work environments.

(20) Barbara, j Gill (2001) " Students Goals and Self-regulation in a Classroom Context."

The purpose of this study was to define and describe student's conceptions of goals and how those conceptions affect their self-regulation and ultimately their achievement within the context of a classroom. The researcher sought to answer the following questions: (1) What is the relationship of student's beliefs and interpretations of events in the environment to the goals they adopt? (2) How do student's goals affect their self-regulation? (3) How are students' goals and self- regulation related to achievement?

The research was a case of study of five students who were enrolled in one of three sixth grade geography classes taught by the same teacher. Three of the students were identified by the teacher as highly self-regulated, and two were identified as less self-regulated. Multiple methods, including observation, formal and informal interviews, and document analysis were used to collect data. Data were collected over a period of seven weeks.

Findings are presented in terms of context description and student case descriptions. Included in the context descriptions are

factors at both the school and classroom level that have the potential to influence students goals and self-regulation. Finally, following a model that explains students goals and self-regulation as being influenced by factors within the individual student and by factors in the environment, each case description was presented in two sections:(a) The students as individual and (b) the students in context.

Discussion focuses on comparing the findings to current literature on goals and self-regulation. Implications for instructional design and suggestions for future research are presented. A general conclusions drawn from the study is tat experimental studies on goals and self-regulation probably over-generalize specific effects, as this researcher found many discrepancies between the students she observed and the conclusions from experimental studies.

(21) Payant, Sean Christopher, (2005) "An Analysis of the Relationship among Structured Goal Setting, Goal Achievement,Motivation and Performance of Novice Adult Learners at the School of Banking."

As a whole associations are considered the largest and most diverse providers of adult education services in the United States; however, little to no research has been conducted that examines methods for enhancing the professional development experiences of the individuals participating in these programs.

This study utilized a goal setting intervention to determine if structured goal setting (individually or collectively with a supervisor) prior to participating in a professional development

program would have a significant impact on goal achievement beliefs about goal setting, beliefs about goal setting with a supervisor, overall expectations, overall program evaluations, and final examination scores.

Participants for the study were drawn from two banking schools designed for novice learner. The banking schools were conducted by the schools of banking Inc The schools of banking is a not for profit corporation that has been jointly owned by the Kansas and Nebraska Bankers Associations for 40 years and conducts up to 14 curriculum based residential banking schools annually. Depending upon the specific school, students attend for three, five or six consecutive days. As designed, each of these schools serves as training and development resources to financial institutions, financial related organizations and government entities who wish to educate their employee.

The data were analyzed using analysis of variance (ANOVA) and a series of a t test. Results indicated that structured goal setting did have a positive impact on a goal achievement, point estimate on error bar graphs related to mean scores by group were also utilized to illustrate the theory related to goal setting and goal achievement. Co-relations between goal orientation (mastery or performance) and the dependent variable were not significant Implications of the study as well as future research directions are discussed.

(22) Chasteauneuf, Colin Arthur, (2005) "The Role of Goal Orientation is Text-based Learning."

A newly- emerging perspective of text-based learning conceptualizes reading as a strategic, goal determine their reading strategies. This study examined in a direct and controlled manner, the role of motivational processes and goal in text-based learning. The study employed a 2*2 factorial between groups and truncated control group design in which two independent variables motivational state and processing task- were manipulated to determine their effect upon two dependent variables- reading times of sentences and cured recall verbal protocols. One hundred thirty three university - age subjects participated in the experiment. The results indicated that motivational states influenced the subject's goal orientations and their subsequent selection of processing strategies and processing of text. Analysis of the cued recall verbal protocols demonstrated that, when reading unfamiliar text, subjects induced to adopt a mastery-goal orientation recalled significantly more textually correct though units than did subjects induced to adopt a performance goal orientation. These results suggest that educators and researchers should in the future, begin to ficus on conceptualizing differences in text-based learning as consequences of different motivational patterns.

(23) Sapio, Mellissa, (2010) "Mastery Goal Orientation, Hope, and Effort among Students with Learning Disabilities."

Student hope and effort are often considered by educators to be important factors related to learning and achievement. Yet few studies have been conducted to understand the relation between these constructs and achievement motivation, particularly within the academically vulnerable population of students with learning

disabilities (LD). The effects of Mastery goal orientation and LD status among 6th- through 10th-grade student were under consideration in this study. Specifically, the moderating effect of mastery goal orientation was investigated to offer a clearer understanding of the academic resilience of students. This research incorporated time achievement emotion of hope with achievement goal theory and its scope to the population of students with LD.

(24) Edwards, Ordene V., (2010) "The Effect of Goal Orientation on Attention, Learning, and Metacognitive Awareness."

An experimental study was conducted to examine whether achievement goals affect attention, comprehension, and metacognition. One hundred and twenty undergraduate students enrolled in introductory educational psychology classes participated. Students were randomly assigned to one of four goal groups (mastery, performance approach, performance avoidance or control group) and one of three question group, Emotions, brain, and no questions).

The study was conducted in two session First, students were given a reading test, and questionnaire to measure their prior knowledge and personal goals. Second, students read the text on a computer. Then they completed an interest questionnaire, a manipulation check, a post test and an interview to assess their metacognition.

A 4 (Type of Goal Instruction mastery, performance approach, performance avoidance, and control) X 3 (Type of Questions- emotion, brain, and no questions) X 3 (Type of Text

Segment Information, emotion, brain, and neutral) mixed factorial design was used. Type of goal instruction and type of questions were between subject factors, type of text segment information was within-subject factor. The dependent measures were attention, comprehension, and metacognitive awareness Personal goal orientation, prior knowledge, and reading ability were covariates.

The analyses were conducted in seven parts; (1) a series of repeated measures ANOVAs were ran as general analyses, (2) causal analyses was used to determine whether attention mediated the relationship between goals arid learning, (3) Attention data were analyzed to determine when participants became aware, (4) ANOVAs were ran to examine whether there were among goal groups on metacognition, (5) interview data were examined to determine whether participants differed on reading strategy use after they became metacognitively aware, (6), standard regression was conducted to teat whether metacognition affected the amount of time spent, on salient and non-salient text information, and (7) path analysis was used to test whether motacognition was a causal mediating variable between goals and learning. Results show that the attention was a partial mediating variable between goals and learning; metacognition mediated goals and learning a mastery goal leads to better metacognition: and met accent ion affect attention theoretical and educational finding are discussed.

(25) Carrell, Julia Louise, (2011) "Cognitive Pretesting of Goal Statements in Math: Responses from Middle-school Students."

Achievement goal theory is considered to be a well-researched field. However, This research has been primarily through surveys, and not enough attention has been paid to the cognitive aspects of how children perceive goals. Additionally, the mastery-avoidance construct is relatively new to the achievement goal literature, with little research to support that individuals understand this construct, or even endorse it. The present study explored the extent to which eighth-grade students from low-, average-, and high-avoidance, math classes could understand mastery-approach, mastery-avoidance, performance-approach, and performance-avoidance goals in relation to their own experience. Students' reasons for pursuing their goals were also explored. The sample consisted of 37 eighth-grade students from low- average-, and high- achieving math classes (27 female, 10 male, mean age 13,81). Participants completed an informed assent, a cognitive pre-testing. interview with 18 goal statements from three different measures, and a follow-up interview to investigate students' most and least important goals. Result from *t* tests indicated that students displayed greater understanding of the mastery-approach. performance-approach, and performance- avoid once goal statements than the mastery avoidance goal statements. For one of the mastery-avoidance statements, participants interpreted the statement as an approach goal. Results from MANOVAs found that student's achievement level did not affect the range of scores. Results from the follow-

up interview revealed that students identified the mastery-approach statements as the most important goal statements. The participants endorsed understanding and future-oriented reasons in support of their selections. Participant chose performance-avoidance and performance- approach statements us the least important goals, and gave anti-comparison responses when **ex-**plaining their choice. Throughout the interview, student' comments were often found to be both approach and avoidance in nature, which supported a multiple goals perspective. This study lends support for future study of mastery-avoidance goals, the importance of exploring students' reasons for pursuing goals, and the continued use of cognitive pre-testing with children', surveys.

(26) Collins, Melissa Salana, (2011) "An Investigation of Support, Goals, and Incentives among Minority and Nonminority National Board Certified Teachers."

National Board professional for Teaching Standards play a pivotal to in the classroom of National Board Certified Teachers (NBCT) NBCT than been recognized for increasing student achievement. There are more than 90,000 NBCTs in schools across the United States, but the ratio of nonminority to minority NBCTs, according to the National Board for Professional Teaching Standards report of 2004 was 89% to 11%. The intent of this study was to examine the levels of support among minority and nonminority NBCL to determine which combination of support factors and incentives would best predict the successful completion of the NBCT process by minority vs. Nonminority candidates.

To answer this question, the author used a survey designed by Dr. Vonda Benham, a graduate from the University of Sarasota, to collect the dates needed to examine the level of support provided by six organizations. The support categories were: financial, moral, collaborative, and assistance wit) the portfolio and assessment center. The author also examined the goal and incentives categories such as, self-improvement, salary, recognition, opportunity for leadership roles, consultant roles, and certification reciprocity offered to NBCTs during their candidacy.

The survey also allowed the NBCTa the opportunity to provide additional written comments about the support, goals, and incentives received, The sample population of the study consisted of 246 NBCTs.

The results of the study suggest that there was no statistical different in the levels of support, goals, and incentives received among minority and nonminority NBCTs during their candidacy.

The basic behavioral assumption of the research hypothesis, that minority and nonminority NBCTs hold different attitudes toward cognitive and abstract objects related to their occupational roles, was not supported.

(27) Woolwine, Andrew J., (2011) "Goal Attainment Scaling to Determine Effectiveness of Individual and Group Counseling."

The purpose of this study was to utilize the Goal Attainment Scale (GAS) during the Marshall University Summer Enrichment Program (MUSEP) to determine the

effectiveness of individual counseling, group counseling, and a combination of both, on student academic and behavioral goals. Results indicated that no significant differences were found when comparing the type of counseling students received with their scores on the GAS in academics or behavior. Also, no significant differences were found when hours of treatment, combined with the type of counseling were compared to students' scores on the GAS.

(28) Haymann, Denise R., (2005) "**Underrepresented Engineering College Student Academic Achievement through Self-regulated Learning Behaviors."**

This investigation examined if high and achieving minority engineering college students used self-regulated learning strategies while studying science, engineering, and mathematics. Thirty students interviewed and responded to learning contexts related to these subjects. The research design was modeled after Zimmerman's and Martinez- Pons 1986 structured interview format. High achiever reported use of more self-regulated learning strategies then low achievers when taking chemistry test writing chemistry lab procedures, completing mathematics homework and taking calculus tests. This study suggests that engineering students use self-regulated learning strategies and high achievers use more learning strategies than low achievers.

The analysis revealed that learning contexts were the most important feature in differentiating group membership was determine by classifying students across all contexts by strategies used. Nine strategies were used in four contexts. The strategies

were : goal setting and planning, seeking the professor's assistance, seeking TA assistance, seeking information, keeping records and monitoring, seeking peer assistance, reviewing notes, reviewing texts and reviewing tests.

Of the 653 strategies used overall high achievers used 429 (66%) and low achiever used 224 (34%). Of the nine strategies used, seeking assistance, utilizing notes, and reviewing text were the most frequent approaches used for high achievers. These finding were similar to those noted by Zimmerman in his work with high school students, where he determined that help-seeking from others was determine to be important to academic performance. It also should be noted that the interview protocol adapted from Zimmerman's study is a reliable instrument to gather evidence on engineering student's academic achievement.

(29) Miksza, Peter, (2007) "Relationships among Impulsivity, Achievement Goal Motivation, Practice Behavior, and the Performance Achievement of High School Wind Players."

The primary purpose of this study was to investigate relationships among impulsivity, achievement goal motivation, and the performance achievement of high school wind players. Additional purposes of this study were: (a) to observe what types of practice behaviors were exhibited across three practice sessions; (b) to examine how the behaviors were related to the selected individual difference variables and performance achievement; and (c) to examine relationships among self-reported practice habits, selected individual variables, performance achievement, and observed practice behaviors. The sample for the study consisted of

60 high school wind players drawn from six schools in Indiana and New Jersey The specific instruments played included flute, oboe, bassoon, clarinet, bass clarinet, alto saxophone, tenor saxophone, F horn, trumpet, trombone, and euphonium. Subjects completed the Eysenck Impulsiveness[7] Questionnaire (1985), a researcher-adaptation of the Elliot and McGregor (2001J 2x2 Achievement Goal Questionnaire, and a researcher-designed practice habit questionnaire. Reliability for the impulsivity and achievement goal sub-scales ranged from r=.74 to .92. Subjects participated in three practice sessions of 25 minutes each across three consecutive days. Subjects practiced a researcher-composed performance etude and rated their practice efficiency following each session. The subjects' performances yielded six measures of performance achievement: day one pre-test, day one post-test, day two pretest, day two post-test, day three pre-test, and day three post-test. Alpha coefficients for three independent raters on 50% of the performances ranged from ct=.86 to 97. Interjudge reliability for practice reliability for practice behaviors between two observers on 25% of the sessions ranged from adequate to excellent (r=.65 to 1.00).

Results showed significant curvilinear growth in performance achievement across the study with rapid gains made across day one, a peak in the rate of improvement at day two, and a relative plateau at day three. The magnitude of the overall change in performance achievement was large (d=-85). Impulsiveness, vent tiresomeness, and mastery-app roach motivation were significant predictors of performance achievement. Multi-level model analyses indicated that including venturesomeness and mastery approach AS

simultaneous predictors explained 19% of the variance among subjects' initial performance achievement score. The behaviors exhibited the most were repeat measure, repeat section, and marks part, whereas those exhibited the least were chaining, repeat etude, varying pitch, varying articulation, varying rhythm, and singing/ whistling/ buzzing. Moderate co-relations were found: (a) among the behaviors repeat section, whole-part-whole, and slowing (b) between performance achievement and the behaviors repeat section, whole-part-whole, slowing, and skipping directly-to or just before critical musical sections of the etude. Small co-relations were detected: (a) between impulsiveness and the behaviors whole-part-whole and slowing; (b) between mastery-goal motivation and skipping directly to or just before the critical musical sections of the etude; and (c) between performance achievement and self-reports of percentage of time spent on formal and informal practice and use of metronome. Self-evaluations of practice efficiency were strongly related to performance achievement scores at day one, less so at day two, and not at all on day three Lastly, several small relationships were also found between self-reported practice habits and observed practice behaviors.

(30) Lindt, Suzanne F., (2010), "Parents and Ethnic Identity as Influences on College Students' Achievement Goals."

The present research was designed to establish the influence of parental academic communication, living situation, perceived parental achievement goals, and ethnic identity (REI connectedness, REI awareness of racism, und REI embedded achievement) on minority college students' adoption of personal achievement goal orientations (mastery approach mastery avoid-

ance, performance approach, and performance avoidance) in college courses. A factor analysis was initially conducted to reveal three separate perceived perceived goals: perceived parental mastery approach goals, perceived parental mastery avoid goals, and perceived parental performance goals Additional regression analyses conducted revealed the influence of ethnicity, living situation, gender, perceived parental achievement goals, and racial ethnic identity on students' adoption of mastery approach, performance approach, and performance avoid goals. The results of the current research also suggest that increased parent academic communication may influence students' personal goals for improving their skills and their grades in college. Results suggest that in the period of emerging adulthood. parents may continue to have an influence on ethnically diverge students' adoption of achievement goals in college. In addition, as these students from their identities a greater belief of the importance of achievement to their ethnic groups may also play an influential role in their adoption of achievement goals.

(31) Kuo, Yi- Lung, (2010) "The Impact of Psychosocial Factors on Achievement Gains Between Eighth and Tenth Grade."

This study investigated the roles of the psychosocial factors (PSFs) of motivation, social control, and self-regulation, in the prediction of 10^{th} grade academic achievement for a large sample of 8th grade students. The differential effects of PSFs for male and female students with different levels of 8^{th} grade achievement were also examined. Of the 4,660 middle-school students in the ACT database, 1,384 8th grade students were included in the study. The Student Readiness Inventory-Middle School (SRI-MS) was used to assess three broad PSFs based on ten scales, which were named

motivation (consisting of Academic Discipline, Commitment to School, and Optimism) social control (consisting of Family attitude toward Education and Family Involvement, Relationships with School Personnel, and School Safety Climate), and self-regulation (consisting of Managing Feeling, Orderly Conduct, and Thinking before Acting). The students' EXPLORE and PLAN Composite scores served as measures of initial and later academic achievement, respectively. Multiple regression models were constructed for each PSFs to test the hypotheses. Post hoc probing techniques were used if significant interaction terms were found. If no significant interaction terms were found, the effects of PSFs on achievement gains were examined using a psychosocial mediation model.

The results showed that 8^{lh} grade females demonstrated greater motivation, social control, and self-regulation than 8th grade males. Also, motivation and social control each interacted significantly with sex and 8th grade achievement when predicting 10th grade achievement. Specifically, among female students, effects were positive for females with higher prior achievement and negative for females with lower prior achievement for both motivation and social control. For male students, neither motivation nor social control added significantly to the prediction of later achievement.

(32) McGhee, Rosie M., (2010) "Asynchronous Interaction, Online Technologies Self-efficacy and Self regulated Learning as Predictors of Academic Achievement in an Online Class."

This research is a co-relational study of the relationship among the independent variables: asynchronous interaction,

online technologies self-efficacy, and self-regulated learning, and the dependent variable; academic achievement. This study involves an online computer literacy course at a local community college very little research exists on the relationship among asynchronous interaction, online technologies self-efficacy and self-regulated learning on predicting academic achievement in an online class. Liu (2008) in his study on student interaction in online courses, concluded that student interaction is a complex issue that needs more research Lo increase our understanding as it relates to distance education.

The purpose of this study was to examine the relationships between asynchronous interaction, online technologies self-efficacy, self-regulated learning and academic achievement ID an online computer literacy class at a community college. The researcher used quantitative methods to obtain and analyze data on the relationships among the variables during the summer 2010 semester. Forty-five community college students completed three web-based self-reporting instruments: (a) the GVU 10^{lh} WWW User Survey Questionnaire, (b) the Online Technologies Self-Efficacy Survey, and (c) selected items from the Motivated Strategies for Learning Questionnaire. Additional data was obtained from asynchronous discussions posted on Blackboard™ Learning Management System, The results of this study found that there were statistically significant relationships between asynchronous interaction and academic achievement ($r = .55$, $p < .05$) and between online technologies self-efficacy and academic achievement ($r = .50$, $p < .05$). However, there were low co-relations between self- regulated learning and academic

achievement ($r = -.02$, $p < .05$), The results of this study reflect the constructivist tenants that the student is at the center of the learning experience. Driscoll (2005) said constructivist pedagogy sees the learner as an active participant in their learning experience rather than a passive vessel to be filled with information.

This study is beneficial to theorists, administrators, leaders, online instructors, online coarse designers, faculty, students and other who are concerned about predictors for online student' success Also, it serves as a foundation for future research and provides valuable information for educators interested in taking online teaching and learning to the next level.

(33) Ballard, Amy Copeland, (2010) "Student Achievement, Personal Achievement Goal Orientations, and Perceptions of Classroom Goal Structures in a Standards-based Reporting System."

The purpose of this study was to analyze student achievement growth and motivational goal orientations in a standards-based reporting environment in a rural SC school district. More specifically, this study sought to determine if student achievement growth is related to the number of years students received standards-based reports in middle school. It also sought to determine if the intent of the district to promote mastery of standards rather than a focus on performance was realized by determining if students had a greater focus toward mastery or performance and if they perceived their classroom as having a greater focus toward mastery or performance. Finally, this study

sought to determine if there was a relationship between student achievement growth and their personal goal orientations, perceptions of classroom goal orientations, and understanding and use of standards-based reporting. For this study, four cohorts of students were studied. These cohorts represented the four groups of eighth graders for the following school years: 2006-2007. 2007-2008, 2008-2009, and 7009-2010. MAP data were collected on these students, and survey data from the Patterns of Adaptive Looming Scales (PALS) were collected for the last cohort. Results of the study indicated significant differences in the student achievement growth for students based on the number of years they received standards-based reports in middle school. However, the number of years of receipt explained only a small percentage of the variance in student achievement growth. Results also indicated that students had a significantly greater personal goal orientation for mastery rather than for performance in both English and math In addition, students perceived H significantly greater classroom goal orientation for mastery rather than for performance for both their English and math classrooms. Finally, results indicated there was no relationship between student achievement growth and students' personal goal orientations, perceptions of classroom goal orientations, and understanding and use of standards-based reports.

(34) Halloran, Roberta Kathryn, (2011) "Self-regulation, Executive Function, Working Memory and Academic Achievement of Female High School Students."

Self-regulation, executive function und working memory are areas of cognitive processing that have been studied extensively Although many studies have examined the constructs,

there is limited empirical support suggesting a formal link between the three cognitive processes and their prediction of academic achievement. Thus, the present study hypothesized that working memory performance would predict students' self-report of executive function and self-regulated learning strategies which would subsequently predict academic achievement. The sample consisted of 155 freshman and sophomore female high school students at a private school in New York City Students electronically completed questionnaires about their self-regulated learning strategies (i.e., The Motivated Strategies for Learning Questionnaire) and their executive functioning {i.e., The Behavior Rating Inventory of Executive Function—Self Report) Additionally students' working memory abilities were assessed with the Automated Operation Span task (AOSPAN); a computer-adapted task requiting dual processing of simple math operations and the recall of letter. Results from multiple regression analyses revealed that students' working memory performance did not predict students' report of self-regulation, executive functioning, or academic achievement as measured by final grades and PSAT scores. However, student's reports of self-regulated learning strategies, or cognitive engagement, were found to significantly predict academic achievement in English Cognitive engagement was not found to predict math achievement nor did it predict critical reading or math PSAT percentile score, It appears that self-regulated learning strategies are most predictive of achievement when the ultimate goal is mastering the content of verbal material in English classes. Therefore, by creating an environment that encourages the use of regulatory and organizational behaviors, teachers can begin to facilitate a change in cognitive strategies,

which could subsequently lead to increased retention of mathematical information in the classroom and on standardized testing Since the results indicate that working memory did not predict academic achievement, the construct should not be considered as a sole predictor of students' ability to succeed academically. These results are promising for students who demonstrate weaker working memory skills. Since working memory dues not directly impact academic achievement, students can compensate for working memory difficulties by employing other cognitive engagement strategies that successfully impact achievement.

(35) McMasters, Angela B., (2011) "Use of a Tier 3 Evidence-based Intervention With Progress Monitoring, Formative Assessment, and Student Goal-setting: An Evaluation of the Immediate and Long-term Effects on Student Reading Achievement."

Early identification and intervention for students at risk for reading failure is essential to establish the foundational skills necessary for students to become skilled readers. The focus on evidence-based practices and data-driven decision making leads educators to consider additional approaches, such as formative assessment (FA) and student goal-setting (SG), as part of an intervention program to prevent reading failure.

This quantitative and qualitative research study examines the effect of FA and SG on the reading achievement of student of students at risk for reading failure, as well as evaluates teachers' perceptions of its influence on students' learning habits,

motivation toward reading tasks, and self-efficacy. Further, a review of archival special education data investigates the effect of FA and SG on the identification of students with specific learning disabilities (SLD). Additionally, survey data and summaries from a focus group discussion gathered from reading specialists about FA and SG are discussed.

Overall, the analysis yielded insignificant results when examining the effect of FA and SG on students' reading achievement when comparing PSSA scores, however, closer examination of proficiency categories suggested a positive effect on reading skills. Based on the findings, significantly fewer students from the FA and SG group were identified with a SLD in reading than students instructed without an evidence-based intervention. The results from the survey and discussion group added further insight into the effects of FA and SG on reading skill acquisition. Commonly, teachers reported observing positive effects on students' achievement, learning habits, motivation toward reading tasks, and reading self-efficacy.

The use of a convenience sample and archival data collected over the course of different academic school years limits the generalizability of the results from the present study A review of archival data from the same academic year would have been more methodologically sound and produced more conclusive findings. Additionally, the results of the survey and discussion group are limited due to the small sample size and potential of respondents to respond in a. socially desirable way. Therefore, further research should be conducted to examine the impact FA and SG has on students' achievement.

Major Findings:

(1) Fifth Grade student had Positive attitudes towards Science and high levels of self-efficacy for science. And High Achieving students reported higher levels of Self-regulatory learning behavior than other fifth grade students.

(2) Students in the control group used a greater variety of strategies, but achieved lower means of test scores than experimental group; indicating that the experimental group was more selective with strategy types and more effective in those methods applied.

(3) Students with LD earned significantly lower reading and math achievement test scores than the students with NLD. And Students with NLD gave more strategies for academic work than did students with LD, and reported using 4 self-regulation strategies for reading achievement and 2 for more achievement, as opposed to students with LD who used to self-regulation strategies that correlated significantly with math achievement; and used none for reading achievement.

(4) Significant relations were noted between motivation, anxiety and test score for both Fifth and sixth - grade learners in mathematics. With respect to motivation, relations existed for gender and ethnicity and free-reduced lunch (SES) significantly affected motivation, anxiety, and attribution. Further results indicated that when combined gender, ethnicity, and free reduced lunch affect motivation.

(5) Problem-solving students profiled as predominantly rational had the highest frequency of planning, monitoring and control.

(6) Analyses indicated slight variations in the way strategy use was related to different achievement measures.

(7) The result shows do acriptive model demonstrating how the processing of information can aid or impede attempts to self-regulated.

(8) Self-monitoring was not significantly correlated with leadership effectiveness And self-monitoring was found to be significantly correlated with trust, leader-member exchange, and emotional intelligence.

(9) The interview data suggested that participants in this study primarily cited positive or negative experiences with their first teachers, those early experiences influenced their child guidance approaches in the classroom and the ways they incorporated these experiences into their teaching. And participants also cited Self-regulation skills as important behaviors critical for young children’s transition in to kindergarten.

(10) The learner’s self-regulation showed a significant positive direct effect on learning outcome.

(11) Endorsing significantly greater levels of self-efficacy and higher self-evaluative standards, irrespective of the type of quiz feedback they received.

(12) Goal setting and time management were significant contributors in the model for predicting non-remedial students' final average .And Non-remedial students may have been more realistic about their course goals.

(13) Analyses showed difference effect sizes for some variables, although moderators accounted for little of the between-studies variation.

(14) Compared with Chinese pairs, Canadian pairs engaged more with tasks of their own choice as revealed in the computer logs and favored more individually oriented actions both in solving their problem and in learning on the computer tutor. And Canadian pairs demonstrated a stronger preference for the employment of individually oriented self-regulatory strategies in the forethought and performance phases of self-regulated learning than did Chinese pairs.

(15) The SRL strategy of collective efficacy, or social assistance from peers,It considered to be the key factor in achieving academic success by all the subjects. The successful students employed forethought and goal-setting and strategic planning, and found particular intrinsic value in their academic tasks.

(16) Discriminate analysis indicated that Conditional Knowledge Instructional Practices was the variable that predicted teacher positions in the achievement rankings of these schools. And Teacher self-regulated learning behaviors and the Instructional practices they use to promote self-regulated learning in students influence academic achievement in English Language Arts.

(17) The teaching orientation of the CI and type of learning experience were not related to the learning aspects of the student's self-regulated learning profile. And There is significant relationship between the collaborative learning experiences and use of MSLQ learning strategies provides insights for clinical education practice.

(18) There was no significant effect of treatment on participation in career counselling or on any of the 15 career-counselling outcomes. It therefore seems appropriate to regard the two Interventions (i.e., goal-setting plus group career counselling, versus group career counselling alone), as about equally effective in motivating students to participate in, and thereby benefit from, the career-counselling process.

(19) Structured goal setting did have a positive impact on a goal achievement, And Co-relations between goal orientation (mastery or performance) and the dependent variable were not significant.

(20) Motivational states influenced the subject's goal orientations and their subsequent selection of processing strategies and processing of text.

(21) The moderating effect of mastery goal orientation was investigated to offer a clearer understanding of the academic resilience of students.

(22) The attention was a partial mediating variable between goals and learning; metacognition mediated goals and learning a mastery goal leads to better metacognition.

(23) Students displayed greater understanding of the mastery-approach, performance-approach,and performance- avoid once fcoal statements than the mastery avoidance goal statements. For one of the mastery-avoidance statements.And student's achieve-ment level did not affect the range of scores.

(24) No significant differences were found when comparing the type of counseling students received with their scores on the GAS in academics or behavior. Also, no significant differences were found when hours of treatment, combined

with the type of counseling were compared to students' scores on the GAS.

(25) Engineering students use self-regulated learning strategies and high achievers use more learning strategies than low achievers.And out Of the 653 strategies used overall high achievers used 429 strategies and low achiever used 224 strategies.

(26) Small co-relations were detected between mastery-goal motivation and skipping directly to or just before the critical musical sections of the etude; and between performance achievement and self-reports of percentage of time spent on formal and informal practice and use of metronome.Self-evaluations of practice efficiency were strongly related to performance achievement scores at day one, less so at day two, and not at all on day three Lastly.

(27) The attention was a partial mediating variable between goals and learning; metacognition mediated goals and learning a mastery goal leads to better metacognition.

(28) 8lh grade females demonstrated greater motivation, social control, and self-regulation than 8th grade males.And among female students, effects were positive for females with higher prior achievement and negative for females with lower prior achievement for both motivation and social control.

(29) There were statistically significant relationships between asyn-chronous interaction and academic achievement and between online technologies self-efficacy and academic achievement. And there were low co-relations between self- regulated learning and academic achievement.

(30) There was significant differences in the student achievement growth for students based on the number of years they received standards-based reports in middle school. And significantly greater classroom goal orientation for mastery rather than for performance for both their English and math classrooms.

(31) Self-regulated learning strategies are most predictive of achievement when the ultimate goal is mastering the content of verbal material in English classes.

(32) Teachers' perceptions of its influence on students' learning habits, motivation toward reading tasks, and self-efficacy.

Research Gaps identified in the proposed field of investigation :

Research work already done in this field are related to goal setting, goal achievement, motivation and academic performance of learner, and relation between self-regulated learning and motivation, anxiety, student factors.

There is no work on effect of self-regulated learning cycle on goal setting and achievement. There is no work done on SRL cycle's effect on student teachers's preparation.

General Conclusion:

Related Researches based on Self-regulated learning, its components, Goal Orientation, motivation, Educational Achievement help to make me to understand my research work better and clarify points about my thesis.

Related researches give support and help for my problem selection, hypothesis, framing, making tools, selecting sample, total research planning and to initiate the work in right direction.

Chapter : 3

Research Design and Techniques

3.1	Introduction
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Chapter : 3

Research Design and Techniques

Introduction

A research is the most powerful and important means to make science and technology richer and more progressive in any field. More researches are necessary to increase effectiveness of education. A research is objective oriented process to solve problems scientifically.

Before starting any work, the plan or design of process is prepared. Any research starts with its scientific plan at beginning. The success of any research depends on its good planning. According to Robert & Goldanson "Planning should never be and it should be means". Before preparing design and implementation, the researcher should think about research methods, needed tools, data collection, variable for her study, selection of the sample, steps and process to proceed her work, how and what she should do to achieve the objectives etc.

Origin of the problem

The present education needs should be consistent to our society and the nation. Now a day, we find that most of teachers use traditional lecture method of teaching. So some specific abilities and skills in students remain unused. Pupils become weak and inactive. They are stagnated due to their satisfaction with only reading, writing and memorization of information.

Individual differences are found among the students of class-room . Every pupil have differences from another's in physical strength, attitude, aptitude and interest. Beside this is a great

limitation exists on the teacher's side that the teacher can never know how many students are truly learning while she is teaching. Such limitation can be removed by the use of Self Regulated Learning (SRL) method.

In this study, the researcher has tried to know the trainees' awareness to achieve their aims. Means how they are clear about goal setting. The researcher intended to examine the effect of teaching by self regulated learning methods like work card, project and workshop on academic achievement of trainees.

Population

A sample must be selected to satisfy needs of any research. Representative characters are selected from the whole population and the process is tried out on this sample so that the results can claim to be related to whole population. Universe is quantity of whole units under the study but population is the characters included to study the particular problem. In this study, the trainees studying in training collages of Mehsana District affiliated to Hemchandracharya North Gujarat University, Patan in the academic year 2014 -15 are included in population.

Variables for the study

This research is aimed at examining the effect of self-regulated learning on goal setting and academic achievement of the trainees so the following variables are decided.

Table : 3.1

The Details of Variables

No	Variables	Types of Variables	Level	Detail
1	Self Regulated Learning	Independent	2	Experimental & Controlled
2	Sex	Moderator	2	Boys-Girls
3	SRL Material	Controlled	-	Experimental
4	Academic Level	Controlled	-	Graduate trainees
5	Goal Setting	Dependent	-	-
6	Academic Achievement	Dependent	-	-

As it is mentioned in the table main variable is selected. Among them, self regulated learning (SRL) is accepted as an independent variable and sex is decided as a moderator variable. The effect of SRL on dependent and moderator variables is examined.

The experimental method

The experimental research method is the most scientific and systematic of all the research methods. Its results are more reliable, valid and accurate. “Experimental research means description or analysis of becoming under careful controlled situation”

An experiment is the process in which a researcher keeps control with different academic components on students or a group of students or some groups and observes the consequences.

Why experimental method has been used

- It is a try to observe what happens in known situations.
- It is an observation under controlled situations.
- It is an invention of active relations between to different forces.
- It is a process of generalization of effect of particular forces by controlling other forces except that one.

Basis of the Experiment

(i) Variable

A variable is a characteristic which can be changed.

(1) Independent variable

Independent variable is such a variable that the researcher selects and applies to decide the relation under observation.

(2) Dependent variable

Dependent variable is created, removed or changed by the effect of application, removal or a change in independent variable.

(3) Controlled variable

Controlled variable can affect on a dependent variable like an independent variable but the researcher control it to make it neutral or ineffective. The researcher tries to examine the effect of independent variables on dependent variables. She is always careful to see that other variables do not effect on dependent variables during the whole research process. Such variables are called controlled variables.

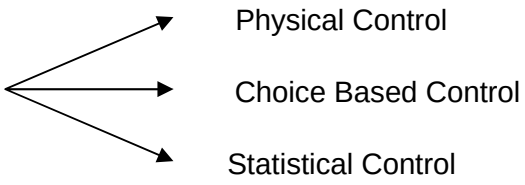
(4) Moderator variable

It is a kind of secondary dependent variable witch is examined to see the effect on relation between main independent variable and dependent variables.

(5) Intervening variables

Intervening variables effect on dependent variables but this effect can't be measured, applied or seen clearly. We can only guess such effects.

(ii) Interrelated matters of experiment



1. Control
2. Randomly
3. Repeated (transitivity)

Steps for Experimental Research

There are mainly three steps

1. Design for experiment

   Decision of field from education and the problem for study

   - Study of related literature
   - Decision of experiment forces and its limitation
   - Method of experiment
   - Place and time for experiment
   - Outline of process or method
   - Collection of materials needed for experiment
   - Primary tryout
   - Selection of sample and groups

2. Administration of experiment
   - Control on variables
   - Note down the steps of method carefully
   - Application of experimental forces
   - Measuring the results of experiment
   - Classification, analysis and interpretation of implications
   - Being sure about consequences
   - Forming of generalization based on implications
3. Report writing

   Whole detail should be presented in easy and clear language in this step. Charts, pictures, maps, graphs etc are used as and when they are necessary.

Research method :

In this study the researcher had studied the effect of teaching by SRL on goal setting and their academic achievement of trainees' with reference to sex. The study is completed using two equal group method research designs.

Field of Research

This research can be considered in the field of educational technology and educational psychology because the effect of SRL teaching on goal setting and academic achievement of trainees is examined. SRL is included in educational technology and goal setting and academic achievement are belonged to psychological fields.

Selection of sample

It is necessary to select the proper sample from population to collect needed information for the study of the problem

"A sample as the name applies is a smaller representation of large whole"

"The group of individual randomly selected from the population"

The researcher has taken the following care while selecting the sample.

- The sample should become representative of the whole universe.
- The sample should be free from prejudice and not bending to any one side.
- The sample should adequate and of proper size.

For this study, the researcher had prepared a list of training colleges affiliated to North Gujarat University and separated the colleges from Mehsana District for selection of sample. Then she had selected training colleges from Kadi taluka and selected two colleges from the list. The method of selecting sample was randomly sampling method. The selected colleges were Smt. BVPP College of Education, Vadu and Vrundavan Education College, Ganeshpura in Taluka kadi in District Mehsana to match the experimental and controlled group. Intelligence test and socio-economical status test by Dr. K.G. Desai were given to trainees of those selected colleges. Total 160 trainees were selected based on result in tests by pair method. 80 trainees were in experimental group and 80 were for controlled group. The detail is seen in Table 3.2.

Table – 3.2

The list of selected colleges for sample

No	Training Colleges	Place
1	Smt. BVPP College of Education	Vadu
2	Vrundavan Education College	Ganeshpura

Out of those 160 trainees from colleges selected by match group method, equal groups were made according to their sex. The detail is shown in Table 3.3, 3.4, 3.5

Table – 3.3

The sample according to sex of trainees

Group	**Experimental**		**Controlled**		**Total**
Sex	**Boys**	**Girls**	**Boys**	**Girls**	**Total**
Smt. BVPP College of Ecucation, Vadu	20	20	20	20	**80**
Vrundavan Education College , Ganeshpura	20	20	20	20	**80**
Total	**40**	**40**	**40**	**40**	**160**

In this way total 160 trainees were selected and divided into two groups in which 80 trainees were in experimental group and 80 were in controlled group in the sample. The study is based on experimental design so two groups experimental and controlled included in sample must be of equal level. They were made equal by using Intelligence test and socio-eco status rating scale by Dr K.G.Desai. The detail is shown in Table 3.4 and 3.5

Table – 3.4

The Detail of Intelligence score in trainees of experimental and controlled group

Group	Experimental		Controlled Group		T-score
	Mean	SD	Mean	SD	
Smt. BVPP College of Ecucation, Vadu	89.61	16.57	86.48	14.05	0.798
Vrundavan Education College , Ganeshpura	87.67	16.07	84.50	12.89	0.639
Total	88.64	15.32	85.89	13.47	0.178

Table – 3.5

The detail of socio-economic status of trainees in experimental group and controlled group

Group	Experimental		Control Group		T-score
	Mean	SD	Mean	SD	
Smt. BVPP College of Ecucation, Vadu	33.12	10.51	33.11	9.16	0.413
Vrundavan Education College , Ganeshpura	32.84	10.40	31.89	10.01	0.393
Total	33.03	9.69	32.50	9.53	0.121

The selection and construction of Tools

To solve the problem of any study, collection of data is necessary and to collect the data, various methods should be used. Tools are needed for collection of necessary data. Achievement of

any aim depends on the tool. To check hypothesis, to achieve objectives and to make planning meaningful, tools are needed.

Generally questionnaires, observation, checklists interviews, rating scales, attitude scale, inventories etc. are used to collect the data in most of educational research.

The following tools were used to examine effect of self regulated learning on goal setting and academies achievement of trainees in this study. The detail is mentioned in table - 3.6.

Table – 3.6

Tools for collection of data

No	Tools	Construction	Measurement tools
1	Self regulated learning Rating Scale	Self constructed	To know about knowledge of self regulated learning
2	Academic Achievement	Result sheets	Marks obtained in 1st and 2nd test
3	Goal setting Rating Scale	Self Constructed	Ability in goal setting
4	SRL study	-	Project Method, workshop, work card
5	Sex	-	Primary Information
6	Socio- economics Status	-	Primary Information
7	Intelligence test	-	Primary Information

➢ **Construction of Goal setting test and SRL Rating Scale**

For this study the use of goal setting test and SRL questionnaire was necessary, so the researcher had decided to construct the test herself. To construct any tool, some process or steps should be followed. The following procedure was followed to construct Goal setting test and SRL questionnaire.

➢ **Objective of Goal setting test**

- To know about awareness in self regulated learning and goal setting of trainees studying in training colleges in Mehsana District.
- To examine the effect of SRL on the goal setting and academic achievement of trainees

To achieve above stated objectives goal setting test and self regulated learning test were constructed.

➢ **Construction of temporary test**

The items Were prepared after study of components of SRL age groups and level of trainees, the researcher had also studied reference books, articles, pamphlets, newspapers related to goal setting. He also discussed with the lecturers and guides who were expert in construction of tests. It was decided to construct 60 questions for both the tests so 64 questions were constructed in temporary tests.

➢ **Preprimary Try out**

To get suggestions, about time limit, difficulty, value, facility value and sentence pattern, unfamiliar words, language of statement etc. The first draft of Rating scale was sent to the 14 experts. In first draft of goal setting and SRL Rating scale had 64

questions.4 questions was disliked so the final Rating scale having 60 questions in both SRL Rating scale and goal setting Rating scale. The test was given to 20 trainees of SV Edu. College, Kadi. More items were added in copy of that test for primary try out. During and after the test suggestions on problems, time limit etc. was asked for the necessary correction was made in the test.

- **Opinions of experts**

After such correction suggested by trainees a new test was prepared and computerized. In consisted 64 items. The test was then sent to experts for their opinions and more suggestions. The aim was to prepare proper statements and to remove defective items and meaningless words so that the test becomes more scientific and reliable with the help of experienced experts. The detail of experts is stated in Table – 3.7

Table – 3.7

The list of experts and their suggestions

Expert No	Suggestions		Correction
	Goal setting	SRL	
01	Correct Sentence No 13,15,24,25	- Spellings, Refer - Statements	Corrected
02	- Refer sentences Negative/Positive	- Prepare 5 point rating scale	Corrected
03	- Refer sentence pattern	- Prepare 5 point rating scale	Corrected

04	Correct sentence 1,2,3,4	- Refer statements	Corrected
05	Sentences make easy and lucid	- Reconstruct some statements	Corrected
06	- Clear Objectives, -Divide in parts	- What do you want to measure making points?	Corrected
07	- Write in sequence	- Mention objectives	Corrected
08	- Care for special desirability	- Mention objectives - Divide in parts	Corrected
09	- Add questions on SWOT analysis	- Add more question - Divide in parts	Corrected
10	- Clear objectives	- Divide in parts	Corrected
11	- Divide in parts	- Divide questions according to objective	Corrected

- **Primary try out of the test**

A new from of the test was prepared after necessary changes based on opinions and suggestions of experts. The 64 test items were arranged from easy to difficult. The objective of primary try out is to remove defects from the test and so this test was also

conducted for primary try out. That test was given to 148 trainees studying in Kalyanpura Education College and Svami Vivekananda Edu. College so that the status of representative of Mehsana District can be maintained which was population.

The researcher has tried out the test also to get experience of conducting such tests and to develop observation skill.

- **Validity analysis item of SRL test**

The figures of trainees giving correct response and incorrect response to each item was decided based on result of primary try out of test. The final score was noted according to response to each item in the test Total marks of each trainee were noted in a sheet.

The obtained marks were arranged in increasing order. The trainees of upper and lower 27% i.e. 40 trainees with higher score and 40 trainees with lower score were separated. Then difficulty value and discriminative value of each statement based on answer sheets were calculated by following technique.

$$\text{Difficulty Value FV} = \frac{Ru + RL}{2E} \times 100$$

$$\text{Discriminative Value Fi} = \frac{Ru + RL}{E} \times 100$$

The detail is stated in Table - 3.8

Table – 3.8

Difficulty value and Discriminative value of Items of SRL test

No	No of Statement	U	L	Diffi. Value FV	Discri. Valu Fi	Liked /Disliked
Received						
1	1	32	12	55.12	41.50	Liked
2	2	31	14	56.25	42.50	Liked
3	3	32	13	46.25	47.50	Liked
4	4	33	18	63.75	37.50	Liked
5	5	30	19	61.25	27.50	Liked
6	6	32	11	53.75	52.50	Liked
7	7	33	18	63.75	37.50	Liked
8	8	31	16	58.00	37.50	Liked
9	9	08	03	13.75	12.50	Disliked
10	10	26	13	48.75	32.50	Liked
11	11	33	13	57.50	50.00	Liked
12	12	32	13	46.25	47.50	Liked
13	13	31	16	58.75	37.50	Liked
14	14	33	18	63.75	37.50	Liked
15	15	33	13	57.50	50.00	Liked
16	16	31	18	61.25	32.00	Liked
17	17	26	13	48.75	32.50	Liked
Invention						
18	18	31	10	51.25	52.50	Liked
19	19	32	11	53.75	52.50	Liked
20	20	08	04	15.00	10.00	Disliked
21	21	24	13	46.25	27.50	Liked
22	22	30	12	52.50	45.00	Liked

23	23	33	11	55.00	55.00	Liked
24	24	31	13	55.00	45.00	Liked
25	25	33	15	60.00	45.00	Liked
Implementation						
26	26	33	14	58.75	47.50	Liked
27	27	33	11	55.00	55.00	Liked
28	28	30	12	52.05	45.00	Liked
29	29	33	14	58.75	47.50	Liked
30	30	33	15	60.00	45.00	Liked
31	31	31	14	45.00	42.50	Liked
32	32	26	11	46.25	37.50	Liked
33	33	30	10	50.00	50.00	Liked
34	34	33	13	57.05	50.00	Liked
35	35	29	11	50.00	45.00	Liked
36	36	30	10	50.00	50.00	Liked
37	37	31	12	53.75	47.50	Liked
38	38	33	13	57.05	50.00	Liked
39	39	06	03	11.25	07.50	Disliked
40	40	27	11	47.50	40.00	Liked
41	41	33	13	57.50	50.00	Liked
42	42	27	11	47.50	40.00	Liked
43	43	28	11	48.75	42.50	Liked
44	44	31	11	52.50	50.00	Liked
45	45	27	10	46.25	42.50	Liked
46	46	31	13	55.00	45.00	Liked
47	47	33	14	58.75	47.50	Liked
48	48	31	11	52.50	50.00	Liked
49	49	27	10	46.25	42.50	Liked
50	50	28	08	45.00	50.00	Liked

51	51	26	11	46.25	37.50	Liked
52	52	33	14	58.75	47.50	Liked
53	53	53	13	57.50	50.00	Liked
54	54	31	31	52.50	50.00	Liked
55	55	32	15	58.75	42.50	Liked
56	56	31	13	55.00	45.00	Liked
57	57	33	16	61.25	42.50	Liked
58	58	26	11	46.25	37.50	Liked
59	59	34	12	57.50	55.00	Liked
60	60	53	13	57.50	50.00	Liked
61	61	33	12	56.25	52.50	Liked
62	62	09	04	16.25	12.50	Disliked
63	63	33	16	61.25	42.50	Liked
64	64	34	12	57.50	55.00	Liked

Final Test

Forty items were selected which have difficulty value between 30% and 80% and Discriminative value was more than 0.25.

- **Validity analysis items for Goal Setting Rating scale**

The figures of trainees giving correct response and incorrect response to each item was decided based on result of primary try out of test. The final score was noted according to response to each item in the test Total marks of each trainee were noted in a sheet.

The obtained marks were arranged in increasing order. The trainees of upper and lower 27% mean 40 trainees with higher score and 40 trainees with lower score were separated. Then

difficulty value and discriminative value of each statement based on answer sheets were calculated by following technique.

$$\text{Difficulty Value FV} = \frac{Ru + RL}{2E} \times 100$$

$$\text{Discriminative Value Fi} = \frac{Ru + RL}{E} \times 100$$

- The detail is stated in Table - 3.8

Table – 3.9

Difficulty value and Discriminative value of Items of Goal Setting Rating scale

No	No of Statement	U	L	Diffi. Value FV	Discri. Valu Fi	Liked /Disliked
1	1	33	13	63.75	37.50	Liked
2	2	31	14	46.25	42.50	Liked
3	3	08	03	13.75	12.50	Disliked
4	4	33	18	63.75	37.50	Liked
5	5	32	14	55.79	42	Liked
6	6	32	11	53.75	52.50	Liked
7	7	31	16	58.80	37.53	Liked
8	8	32	16	58.80	37.53	Liked
9	9	32	11	53.75	52.50	Liked
10	10	28	14	48.90	33.01	Liked
11	11	33	13	57.50	50	Liked
12	12	33	13	46.98	47.52	Liked

13	13	32	17	58.90	37.78	Liked
14	14	33	18	63.75	37.50	Liked
15	15	34	14	57.80	51	Liked
16	16	32	17	60.80	31	Liked
17	17	27	14	49.00	32.60	Liked
18	18	08	04	15.00	10	Disliked
19	19	31	11	53.80	52.93	Liked
20	20	32	10	51.80	51.90	Liked
21	21	31	13	60.00	45	Liked
22	22	30	12	520.50	45	Liked
23	23	33	11	55	55	Liked
24	24	31	13	55	45	Liked
25	25	33	15	60	45	Liked
26	26	33	14	61	47.50	Liked
27	27	33	16	61	45.50	Liked
28	28	30	12	52.50	45	Liked
29	29	23	14	58.75	47.50	Liked
30	30	33	15	60	45	Liked
31	31	31	14	45	42.50	Liked
32	32	26	11	46.25	37.50	Liked
33	33	30	10	50	50	Liked
34	34	33	13	57.50	50	Liked
35	35	29	11	50	45	Liked
36	36	30	10	50	50	Liked
37	37	31	12	53.75	47.50	Liked
38	38	33	13	57.50	50	Liked

39	39	06	03	11.25	7.50	Disliked
40	40	27	11	47.50	40	Liked
41	41	33	13	57.50	50	Liked
42	42	27	11	47.50	40	Liked
43	43	28	11	48.75	42.50	Liked
44	44	31	11	52.50	50	Liked
45	45	27	10	46.25	42.50	Liked
46	46	31	13	55	45	Liked
47	47	33	14	58.75	47.50	Liked
48	48	31	11	52.50	50	Liked
49	49	27	10	46.25	42.50	Liked
50	50	28	08	45	50	Liked
51	51	26	11	46.25	37.50	Liked
52	52	33	14	58.75	47.50	Liked
53	53	33	13	57.50	50	Liked
54	54	31	31	52.50	50	Liked
55	55	32	15	58.75	42.50	Liked
56	56	31	13	55	45	Liked
57	57	33	16	61.25	42.50	Liked
58	58	26	11	46.25	37.50	Liked
59	59	34	13	57.50	55	Liked
60	60	33	12	57.50	50	Liked
61	61	33	12	56.25	52.50	Liked
62	62	09	04	16.25	12.50	Disliked
63	63	33	16	61.25	42.50	Liked
64	64	34	12	57.50	55	Liked

Final Test

Sixty items were selected which have difficulty value between 30% and 80% and Discriminative value was more than 0.25.

- **Validity**

The test which measure the some objectives for which they are constructed are called the valid tests.

To which extent do the tests examine the objectives is the validity of the test. The co-relation of the test is called the significant score of the test. The higher significant score, more significant the test is. The researcher has decided the validity of the test by the following procedure.

- **Face Validity**

The test which measures the same objective at first sight for which it is constructed is called the face validity.

Those tests intended to measure SRL and goal setting. Inappropriate items and statements were removed as suggested by experts so face validity is found at first sight in the test.

- **Conducting the tests**

The objective of any test is to measure the consequences and to provide opportunity to participants so that they can better prove their achievement. The researcher had taken the following care.

- Intrusions in the test were easy and clear to understand.
- The trainees were well prepared without any fear to test or exam.

- During the test, free atmosphere was created where disturbance was removed to very little.
- It was taken care that trainees who participated in the test did not ask questions to one another.
- No solution of any answer was given orally or by signs.
- The test was arranged under tight observation.

➢ **Scoring for the test**

The researcher had insisted on objective evaluation of Goal setting test. Total 60 items were evaluated by five point rating scale according to response to each item statement. The marks obtained by trainees were noted in the sheet as Goal setting score.

➢ **Reliability**

Reliability of the test is decided to know whether SRL test can measures equally when given at different times to the participants. This test was given twice to 20 trainees after period of some days and noted the obtained marks. The test is taken as reliable when there is no remarkable difference in marks between first and second time test results.

Table – 3.10

Scoring of SRL Test and Retest

No	Obtained marks out of 40	
	Test First Time	Retest Second Time
01	46	47
02	45	43
03	43	44
04	43	43
05	47	45
06	41	34
07	42	37
08	50	46
09	47	47
10	44	45
11	44	42
12	40	40
13	42	41
14	39	41
15	42	42
16	43	44
17	43	41
18	47	40
19	45	44
20	41	40

Reliability of that test and retest was found 0.8% (Co-relation) so the test was reliable and with continuity to measure goal setting.

- **Reliability**

Reliability of the test is decided to know whether Goal setting test can measures equally when given at different times to the participants. This test was given twice to 20 trainees after period of some days and noted the obtained marks. The test is taken as reliable when there is no remarkable difference in marks between first and second time test results.

Table – 3.11

Scoring of Goal Setting Test and Retest

No	Obtained marks out of 40	
	Test First Time	Retest Second Time
01	45	48
02	43	44
03	43	43
04	33	41
05	37	46
06	47	36
07	42	38
08	51	47
09	48	49
10	45	44
11	46	43
12	41	41
13	41	42
14	40	43
15	43	44
16	42	42
17	41	42
18	48	42
19	46	44
20	43	42

Reliability of that test and retest was found 0.83% (Co-relation) so the test was reliable and with continuity to measure goal setting

Experiment Design

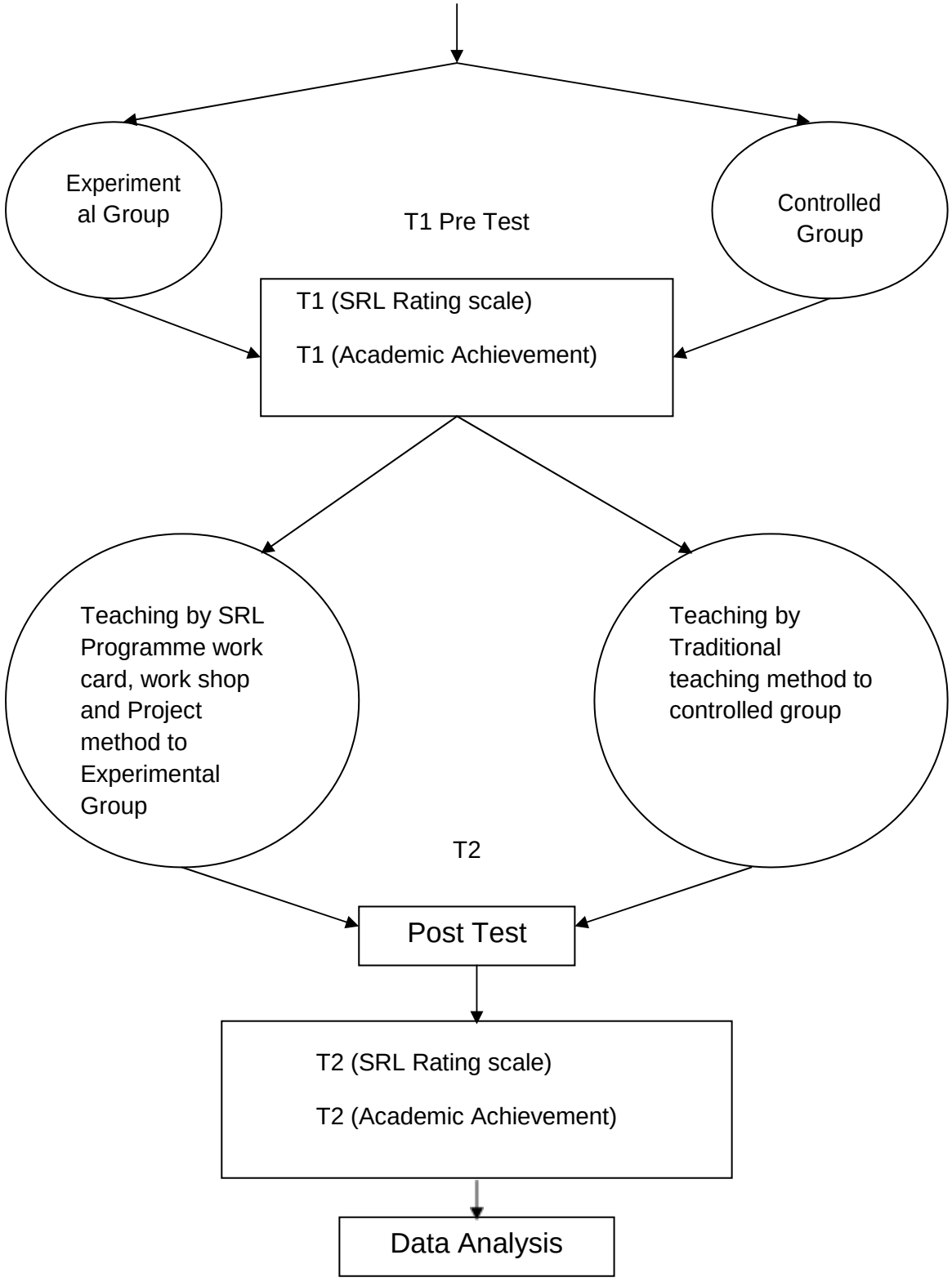
Preparation of outline or design for experiment is the most important step for any researcher in an experimental research. If the research design is proper, the true results can be produced and reliable interpretations and implications can be achieved. This research is type of an experimental research and so experimental method is selected out of the five types of an experimental research, the parallel/equal group plan is selected by the researcher.

According to intelligence level and socio-economical status of trainees two equal groups (1) experimental group and (2) controlled group were formed to make equivalent groups, intelligence test and socio-economical status test were used and controlled group was given goal setting and SRL Rating scale and noted their information of academic achievement.

Then teaching of defense mechanism, adjustment mal. adjustment and mental health was arranged by work card, workshop and project work as self regulation learning for the experimental group. This process was not practiced for controlled group. After completing the experiment, again the score of goal setting, SRL Rating scale and academic achievement were noted means T1 and T2 was compared. The data was analyzed and the effect of SRL on goal setting and academic achievement was examined. The flowchart of the whole process is drawn.

Research Design – Flow chart

Construction of equal group according to intelligence level and SES



Peculiarities of experiment design in this study.

Before and during the experiment the researcher had to keep in mind some matters related to experiments, like effect of independent variable, observation of to dependent variable, repetition of experiment, the control on the variables not included as independent variables, inter validity, face validity etc. In this study, internal and face validity ware considered important and attended carefully during the experiment

Internal Validity

"In any experiment under education or psychological field, internal validity is the most important matter."

Internal validity means to what extent is the real effect of independent variable found on the dependent variable the validity can be can be maintained by controlling contemporary incidents, maturity slow measuring tools and difference in selection of subjects, stability and John Hennery effect.

- Contemporary Incidents

Characteristics are increased due to contemporary incidents or development and the research take it as his mistake in experiment in this study, the effect of those both forces were balanced by make two groups experimental group and controlled group. No incident had taken place during the experiment.

- Maturity

Sometimes the same test is used as pretest and posttest so the pretest becomes an experience and the result of post test is found higher.

In this study the SRL Rating scale and Goal setting test were used for both the pretest and the post test. But the time period between the two tests was long so maturity had no any effect.

- Slow measuring of tools

The SRL Rating scale test was conducted under supervision of the researcher himself. The Goal setting test was constructed by the researcher so the effectiveness of other the tools is maintained.

- Choice of Groups

The experimental group and the controlled group were made similar and equal by careful to see that the entire participants were present during the whole experiment.

- Statistical Motion

The objects of both the groups were selected with the help of frequency distribution, Intelligence score,socio economic status and academic achievement. The tools used in experiment were reliable. The participants were mentally prepared before starting the experiment so Statistical Motion was avoided.

- Stability

The researcher himself was present in fourteen day programmer of self regulated learning so stability was found in SRL program.

- John Hennery Effect

The every object of the experiment group has given learning method like projectwork, workshop, workcard method in self regulated learning in observation of researcher in natural situation so this effect could be controlled.

In this way, the effect of forces harmful to internal validity was minimize in all possible ways.

Face validity

The face validity of experiment means to what extent the generalization of radiation between independent and dependent variable can be done for situations or population except the experiment.

- The mutual process between Pretest and Experiment

The pretest was used in this experiment, but the pretest and post test were decided as moderator variables and v the results of academic co-relation between SRL teaching and achievement and goal setting was examined. So the effect of mutual process between pretest and experiment was avoided.

- Interaction between choice differences and experiment

Differences between other characters of population and the attribute of selected subjects under experiment effect on comprehensiveness of experiment. The subjects have obviously different to increase its comprehensiveness; the SRL excrement was repeated on the groups having differences in academic achievement and goal setting. Both those groups were equal in IQ an socio-economical status according to initial information.

- Interaction in techniques of experiment

SRL experiment with academic achievement and goal setting was conducted isolated on variable of sex so interaction in techniques has not any effect.

- Horthon Effect

SRL experiment was conducted in regular teaching periods of colleges so any artificial situation was avoided. Though was tried to maintain face validity of experiment, extension in experiment has becomes limited due to differences in forces and techniques of experiment. Beside that the experiment was conducted in colleges where the principal had given permission so that limitation has also occurred.

SRL Material

- Workshop

The researcher had arranged three days workshop programme on 'Adjustment' for the experimental group. The theoretical discussion of content was arranged related to the selected topic. The detail is stated in appendix.

- Work Card

The researcher had prepared total 12 work card based on sub unit of the main unit 'Defense Mechanism'. Three cards were given to trainees in each period. It was observed that the trainees progress at their own pace using the cards. An objective type questions were constructed. The detail is stated in appendix.

- Project Work

The researcher had selected the content of 'Mental Health' for project work. The whole work was divided and distributed. Among the trainees based on their study, the project was prepared. The detail is stated in appendix…..

Conducting the Experiment

The following plan for experiment was put in practice to collect expected and reliable data by the researcher.

First two equal group the experimental group and controlled group was formed based on score of IQ test and socio-economical status by Dr K. G. Desai and sex of trainees. Then the permission of from the Principal of two colleges was got. The action plan was made to collect data which is stated in Table – 3.12

Table – 3.12

Plan and Time table for Experiment design

No	Allotted Time	Programme List
1	4 Days	Collection of information to from equal groups based on Intelligence and socio-eco. Status
2	6 Days	Formation of two equal groups (Experimental and Controlled) based on SRL, Intelligence, socio-economical status.
3	31 Days	SRL Teaching
4	6 Days	Collection of information on academic achievement goal setting, SRL Rating scale from both the groups.

Table – 3.13

The outline of SRL Programme

No.	SRL techniques	Allotted Time
1	Work card (Mal adjustment deference mechanism)	8 Days
2	Work shop (Adjustment)	8 Days
3	Project Method (Mental Health)	15 Days
	Total	31 Days

4	6 Days	Data of Post test of academic achievement and goal setting for both the groups and preparing results.

In this way planning was made for experiment as stated in Table – 3.13. The score was noted in separate sheets and the treatment was given to whole data and the data was analysis by statistical techniques.

- **Out line of SRL programme**

SRL was accepted as an independent variable in this study. The teaching for SRL had been provided with the help of prepared material, work card, workshop and project method for three weeks. The detail of programme is stated in Table – 3.14

Table – 3.14

SRL Programme

No.	Medium of teaching	Alloted Time
1	Work card	8 Days
2	Work shop	8 Days
3	Project Method	15 Days
	Total	31 Days

Statistical Methods

This study, self regulated learning was decided as an independent variable, academic achievement and goal setting as dependent variables and sex as a moderator variable.

After completing the experiment and collection of data the percentage of second test were noted as academic achievement and the score of goal setting test was also noted in sheets. After necessary treatment on data, average score, SD and analysis of co-relation were calculated. The hypothesis was checked using t-test.

Statistical analysis was calendared on a P4 Computer. A computer programme based on page maker, excel and word was developed and used for data analysis. The detailed discussion is noted in chapter 4.

Objectives, Tools and sample in the Related Researches:

(1) King,Mellissa DiGennaro, (2003):

Objective :

(1) To know how specific assessment strategies contribute to improved student's performance in science.

(2) To know the effect of formative assessment with reflection on students' motivational beliefs, self-regulatory skills, and achievement in elementary science.

Tools: Quasi Experimental study.

(2) Martens,Lynn R., (2004):

Objective :

(1) To investigated the development of student meta cognition and self-regulated learning through the use of self-monitoring study schedules.

Sample : High school students(n= 80) in an elective life science course, Anatomy and Physiology for Health Careers.

(3) Zealand,Ruth Adrienne, (2004):

Objective :

(1) This study examined relationships among reading and mathematics achievement, locus of control, learned helplessness, verbal and math self-efficacy, self-determination and self-regulation.

Sample :

(1) Two hundred forty two participants, in grade 6-12, attending urban schools divide in to 2 groups.

(2) Students having learning disabilities (LD),(N=121).

Tools:

(1) K-TEA reading and math Achievement tests.

(2) Intellectual Achievement Responsibility Scale.

(3) Zimmerman's Verbal and Math Self-Efficacy Scale (Zimmerman, 1990).

(4) AIR Self-Determination Scale.

(5) Self-Regulation Scale (Zimmerman, 1993).

(4) Missildine, Melanie, L. (2004):

Objective :

(1) To investigate the relations between self-regulated learning, motivation, mathematic anxiety, attributions, gender, ethnicity, SES and academic performance of fifth and sixth-grade students in mathematics.

Sample : Fifth and sixth - grade mathematics students in elementary and middle schools.

Tools:

(1) Motivation Strategies for Learning Questionnaire (MSLQ).

(2) Anxiety Inventory revised for mathematics (TAI-R-M).

(3) Mathematics attribution scale.

(4) Self-regulated Learner Interview Schedule(SRLIS).

(5) Muis, Krista Rence, (2004):

Objective :

(1) To examine relations between approaches to knowing, mathematics problem solving and regulation of cognition.

(2) To know whether their epistemic beliefs change through higher levels of education.

Sample : One hundred twenty seven students were sampled from undergraduate University mathematics and statistics courses.

Tools: Students completed self-report measures to reflect epistemic styles, epistemic beliefs and dispositions regarding elements of self-regulated learning.

(6) Hierholzer, Sandra, G. (2005):

Objective :

(1) The purpose of the study was to examine relations among strategy use, motivation and achievement ,those receiving modified instruction regular and gifted instruction.

Sample : 326 Participants of fourth and fifth grade of public elementary schools.

Tools:

(1) Standardized state achievement test.
(2) Motivated strategies for learning questionnaire.
(3) Adaptive Learning Survey.

(7) Trudel, Remi, (2009):

Objective :

(1) To know Self-regulation through information processing.

Tools:

(1) Model of self-regulation.
(2) Hoch and Loewenstein's (1991) desire-willpower model of self-control.

(8) Lewis, Tosha Michelle, (2010):

Objective :

(1) The relationship between self-monitoring and leadership effectiveness.

(2) The degree to which authenticity moderates the relationship between self-monitoring and leadership effectiveness.

(3) The degree to which trust mediates the relationship between authenticity and leadership effectiveness.

(4) The degree to which emotional intelligence moderates the relationship between self- monitoring and leadership effectiveness.

(5) The degree to which authenticity mediates the relationship between emotional intelligence and leadership effectiveness.

(6) The degree to which the leader-member exchange mediates the relationship between self-monitoring and leadership effectiveness.

Sample : 102 leaders.

Tools:

(1) Online survey.
(2) Self-report.

(9) Suveges Bitar, Mary Louise, (2010):

Objective :

(1) To know early childhood teachers' self-reported experiences and attitudes that have shaped their beliefs about guiding young children's behavior, as well as the strategies they use to promote children's self-regulation and their reflections on those practices.

Sample : 11 volunteered Participants.

Tools:

(1) semi-structured interviews.

(2) Behavioral Challenges in Early Childhood Education: Professional Survey.

(10) Song, Hyuksoon S. (2010):

Objective :

(1) To examined the direct and indirect effects of medical clerkship students' prior knowledge, self-regulation, and motivation on learning performance in multimedia learning environments using structural equation modeling.

Sample : 386 medical clerkship students.

Tools:

(1) Self-Regulation Measure in Computer-assisted learning (SPMC).

(2) Motivational questionnaires (self-efficacy, goal-orientation, task value).

(11) Platten, Peter, (2010):

Objective :

(1) The present study applied a self-regulatory framework to investigate IR, by examining the effects of performance-related feedback and strategy modification on vocabulary learning, motivational beliefs and self-regulation processes.

Sample : Sixty-five middle school students.

Tools: Quiz three times.

(12) Gramlich, Stephen Peter, (2010):

Objective :

(1) To study Self-regulatory concepts to predict Math achievement and Persistence.

Sample : Math Students from 8 classes.

Tools:

(1) Seventeen research questions to explore the relative influences of goal setting, time planning, and time usage on mathematics achievement mid persistence.

(13) Ragosta, Patrik, (2010):

Objective :

(1) To know the effectiveness of interventions designed to help college students acquire self-regulated learning strategies.

Sample : 6, 669 students were choose as a sample.

Tools:

(1) Ninety-three effect sizes were calculated and grouped into three outcome categories:

(1) Academic achievement.

(2) Strategy use.

(3) Self-efficacy.

(14) Shi, Yougchao, (2010):

Objective :

(1) To examined the role of context, especially cultural context it contemporary theoretical models of self-regulated learning.

Sample : 30 Canadian male students and 30 Chinese male students.

Tools:

(1) Model of Self-regulative Learning in a context of computer-supported learning in statistics.

(15) White, (2011):

Objective was:

(1) To investigate the use of self-regulated learning (SRL) strategies and beliefs in English.

Tools:

(1) LASSI testing.
(2) Triadic interviews.
(3) Student journaling.
(4) External observations.
(5) Artifacts (an assigned research paper).

(16) Mullin, Arlene, (2011):

Objective :

(1) The purpose of this study was to investigate the relationship between teachers' knowledge of cognition, self-regulated learning behaviors, instructional

efficacy, and the instructional practices employed by teachers to promote self- regulated learning in students.

(2) This study examined the influence of teacher self-regulated learning in students on academic achievement in moderate need elementary schools.

Sample : 218 teachers from 18 elementary schools.

Tools:

(1) Academic achievement was measured by the percent of students that scored at the mastery level on the grade 3 English Language Arts Assessment.

(17) Maxeiner, Amy Marie, (2011):

Objective :

(1) The purpose of the was to examine how specific environmental factors (teaching orientation of Clinical Instructor (CI), and satisfaction with the current clinical setting (in a setting of interest or required setting) relate to the graduate-level SPTs motivation, level of self-regulation and depth of learning in the clinical context.

Sample : Twenty-eight physical therapist (PT) to participate.

Tools:

(1) Motivated Strategies for Learning Questionnaire (MSLQ).

(2) Revised Study Processes Two Factor Questionnaire.

(3) CI the Conceptions of Teaching Questionnaire.

(18) Michna, George Albert, (2011):

Objective :

(1) Understanding of Metacognitive Self-regulation Strategy Use.

Sample : Two hundred and fourteen students.

Tools:

(1) Self-report questionnaire.
(2) Structured interview.

(19) Griffith Shirley, , (1994):

Objective :

(1) To carry out a controlled evaluation of the impact of a new goal-setting intervention on clients' participation in a benefits from the process of career counselling.

Sample : In control Group (n=31) and in experimental group (n = 32).

Tools:

(1) Goal-setting intervention.

(20) Barbara, j Gill (2001):

Objective:

(1) The purpose of this study was to define and describe student's conceptions of goals and how those conceptions affect their self-regulation and ultimately their achievement within the context of a classroom.

Tool:

(1) Observation.

(2) Formal and informal interviews.

(3) Document analysis.

(21) Payant, Sean Christopher, (2005):

Objective :

(1) To know a goal setting intervention to determine if structured goal setting prior to participating in a professional development program would have a significant impact on goal achievement beliefs about goal setting, beliefs about goal setting with a supervisor, overall expectations, overall program evaluations, and final examination scores.

Sample : Two banking schools students were participated.

(22) Chasteauneuf, Colin Arthur, (2005):

Objective :

(1) To examined in a direct and controlled manner, the role of motivational processes and goal in text-based learning.

Sample : One hundred thirty three university - age subjects participated in the experiment

(23) Sapio, Melissa, (2010):

Objective :

(1) To understand the relation between these constructs and achievement motivation, particularly within the academically vulnerable population of students with learning disabilities (LD).

(24) Edward, Ordene V., (2010):

Objective :

(1) To examine whether achievement goals affect attention, comprehension, and metacognition.

Sample : One hundred and twenty undergraduate students.

Tools:

(1) Reading test.
(2) Questionnaire to measure their prior knowledge and personal goals.
(3) Read the text on a computer.
(4) Interest questionnaire.
(5) An interview.

(25) Carrell, Jullia Louise, (2011):

Objective :

(1) To explored the extent to which eighth-grade students from low-, average-, and high-avoidance, math classes could understand mastery-approach, mastery-avoidance, performance - approach, and performance-avoidance goals in relation to their own experience.

Sample : 37 eighth-grade students from low- average-, and high-achieving math classes (27 female, 10 male).

Tools:

(1) Interview.

(26) Collins, Melissa Salana, (2011):

Objective :

(1) To examine the levels of support among minority and nonminority NBCL to determine which combination of support factors and incentives would best predict the successful completion of the NBCT process by minority vs. Nonminority candidates.

Sample : 246 National Board Cortified Teachers (NBCT).

Tools:

(1) Survey designed by Dr. Vonds Benham.

(27) Woolwine, Andrew J. (2011):

Objective :

(1) The purpose of this study was to utilize the Goal Attainment Scale (GAS) to determine the effectiveness of individual counseling, group counseling, and a combination of both, on student academic and behavioral goals.

(28) Hayman, Denise R, (2005):

Objective :

(1) This investigation examined if high and achieving minority engineering college students used self-regulated learning strategies while studying science, engineering, and mathematics.

Sample : Thirty students.

Tools:

(1) The research design was modeled after Zimmerman's and Martinez- Pons 1986 structured interview format.

(29) Miksza, Peter, (2007):

Objective :

(1) The primary purpose of this study was to investigate relationships among impulsivity, achievement goal motivation, and the performance achievement of high school.

(2) To observe what types of practice behaviors were exhibited across three practice sessions.

(3) To examine how the behaviors were related to the selected individual difference variables and performance achievement.

(4) To examine relationships among self-reported practice habits, selected individual variables, performance achievement, and observed practice behaviors.

Sample : 60 high school wind players.

Tools:

(1) Eysenck Impulsiveness7 Questionnaire (1985).

(2) Researcher-adaptation of the Elliot and McGregor (2001J 2x2 Achievement Goal Questionnaire.

(3) Researcher-designed practice habit questionnaire.

(30) Lindt, Suznne P. (2010):

Objective :

(1) To examine the influence of parental academic communication, living situation, perceived parental achievement goals, and ethnic identity on minority college students' adoption of personal achievement goal orientations.

(31) Kuo, Yi-Lung, (2010):

Objective :

(1) To investigated the roles of the psychosocial factors (PSFs) of motivation, social control, and self-regulation, in the prediction of 10th grade academic achievement.

Sample : 4,660 middle-school students and 1,384 8th grade students were included in the study.

Tools:

(1) The Student Readiness Inventory-Middle School (SRI-MS).

(2) PSFs based on ten scales.

(32) McGhee, Rosie M., (2010):

Objective :

(1) The purpose of this study was to examine the relationships between asynchronous interaction, online technologies self-efficacy, self-regulated learning and academic achievement in online classes.

Sample : Forty-five community college students.

Tools:

(1) The GVU 10^{lh} WWW User Survey Questionnaire.

(2) The Online Technologies Self-Efficacy Survey.

(3) Selected items from the Motivated Strategies for Learning Questionnaire.

(33) Ballard, Amy Copeland, (2010):

Objective :

(1) To analyze student achievement growth and motivational goal orientations in a standards-based reporting environment.

(2) To know the relationship between student achievement growth and their personal goal orientations, perceptions of classroom goal orientations, and understanding and use of standards-based reporting.

Sample : four cohorts of students.

Tools:

(1) Adaptive Looming Scales (PALS).

(34) Halloran, Roberta Kathryn, (2011):

Objective :

(1) The present study hypothesized that working memory performance would predict students' self-report of executive function and self-regulated learning strategies which would subsequently predict academic achievement.

Sample : 155 freshman and sophomore female high school students at a private school.

Tools:

(1) Questionnaires about their self-regulated learning strategies.

(2) Behavior Rating Inventory of Executive Function—Self Report).

(3) To know students' working memory abilities were assessed with the Automated Operation Span task (AOSPAN).

(35) McMasters, Angela B., (2011):

Objective:

(1) To examines the effect of FA and SG on the reading achievement of student of students at risk for reading failure, as well as evaluates teachers' perceptions of its influence on students' learning habits, motivation toward reading tasks, and self-efficacy.

General conclusion :

My research is based on Experimental method which is borrowed from many Related Researches. Many researches's aim were to use SRL Strategies for improvement of student's academic performance in different subjects. I have borrowed this concept for my research.

In my research I have taken 1 control group and 1 experimental group as a sample based on standardize socio-economic status and Intelligent test which is different from related researches. My total sample was 160 student teachers.

There were different types of tools were used in related researches like, Achievement tests, Self-regulated questionnaire, Motivation Strategies for learning questionnaire, Self-regulated learner's interview, Self-report, Model of Self-regulation, On-line survey, Goal setting intervention etc. I have made SRL model on some topics of psychology, Self-made Self-regulated learning Rating Scale and Goal setting Rating Scale which is different from related researches but the concept was borrowed from many researches.

There were so many Researches has done on Elementary Education, Secondary School Education, College level but I have done work on student teachers which is different from other Researches.

Chapter 4
Data Analysis and Interpretation

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Chapter 4

Data Analysis and Interpretation

Introduction:

According to Oscar Kempthome

"Whatever, contribution Statistic can make to the whole problem lies not so much in the provision of cook books by which problems are solved, but in providing a framework and a way of thinking about the problem."

After collecting adequate data it is very necessary to apply proper Statistical technique and its proper interpretation properly and carefully. Data analysis and process of interpretation becomes useful and meaningful for the information of the research.

Statement of the problem

"The Effect Of Self-regulated learning Cycle On Goal setting and Achievement of Student teachers''

Objectives of the problem

1) To find out the goal setting of student teachers male & female teachers, control & Experimental group.
2) To find out the effect of SRL Cycle on the goal setting of pre--service male & female teachers of Experimental group.
3) To find out the achievement of student teachers male & female teachers, control & Experimental group.
4) To find out the effect of SRL Cycle on the achievement of pre--service male & female teachers of Experimental group.
5) To find out the effect of different strategies on the performance of student teachers male & female teachers of Experimental group.
6) To find out the use of self-monitoring study schedule on the

performance of student teachers male & female teachers (Experimental group).

7) To study the co-relation Between score of Student teachers on Self Regulated Learning scale and Goal Setting.
8) To study the co-relation Between score of Student teachers on Self Regulated Learning scale and Educational Achievement Test.
9) To study the co-relation Between score of Student teachers on Goal Setting and Educatioal Achievement Test.

Population and Sampling of the research

According to David Fox: In the social sciences, it is not possible to collect data from every respondent selection to our study but not only from some functional part of the respondent. The process of selecting functional part of the respondent is calling sampling. A sample may be defined as a selected number from the population to represent it. Generally, this selection is done according to some rule or plan. By studying the sample, some inferences may be made about the population. In sampling studies conclusions derived from the population by just watching a few units or few individuals of the population. So it is necessary to examine the question of the degree of reliance which can be placed on the sample estimates. In this present study total 160 Student Teachers were selected by sampling of colleges.

Sample of the study								
	First College 80 Student Teachers				Second College 80 Student Teachers			
	40 Male		40 Female		40 Male		40 Female	
Type of group	20 Control Group	20 Experimental Group	20 Control Group	20 Experimental Group	20 Control Group	20 Experimental Group	20 Control Group	20 Experimental Group
Total Sample	160							

Objective : To study the Effect of Self Regulated Learning (Control Group, Experimental Group and Total Group

Effect of Self Regulated Learning (Control Group, Experimental Group and Total Group)

	Name of Group	N	MEAN	SD	SED	t
1	Male (Control)	40	217.400	19.099	4.202	0.048
	Female (Control)	40	217.600	18.476		
2	UHL (Control)	40	221.600	19.512	4.098	2.001
	MHL (Control)	40	213.400	17.058		
3	Highly Intelligent (Control)	30	221.800	22.149	4.629	1.486
	Lower Intelligent (Control)	50	214.920	15.924		
4	Male (Experimental)	40	235.800	32.922	6.869	0.258
	Female (Experimental)	40	237.575	28.346		
5	UHL (Experimental)	39	244.897	29.792	6.632	2.415
	MHL (Experimental)	41	228.878	29.501		

6	Highly Intelligent (Experimental)	28	236.25	35.765	7.774	0.087
	Lower Intelligent (Experimental)	52	236.923	27.697		
7	Control Group (Male)	39	217.436	19.347	6.058	3.032
	Exp. Group(Male)	40	235.800	32.922		
8	Control Group(Female)	41	217.561	18.246	5.311	3.768
	Exp. Group (Female)	40	237.575	28.346		
9	Control Group (UHL)	40	221.600	19.512	5.681	4.101
	Exp. Group (UHL)	39	244.897	29.792		
10	Control Group (MHL)	40	213.400	17.058	5.339	2.899
	Exp. Group (MHL)	41	228.878	29.501		
11	Control Group (Highly Intelligent)	30	221.800	22.149	7.876	1.835
	Exp. Group (Highly Intelligent)	28	236.250	35.765		
12	Control Group(Lower Intelligent)	50	214.920	15.924	4.452	4.942
	Exp. Group(Lower Intelligent)	52	236.923	27.697		
13	Control Group (Total)	80	217.500	18.671	4.002	4.795
	Exp. Group Total)	80	236.688	30.537		

H_O1 There will be no significant difference between mean score of Male and Female student teachers of control Group on Self Regulated Learning Rating Scale.

Table :4.4.1.1

	Name of Group	**N**	**MEAN**	**SD**	**SED**	**t**
1	Male (Control)	40	217.4	19.099	4.202	0.048
	Female (Control)	40	217.6	18.476		

Result: From the above Table, it is evident that the mean and S.D. of Male student teachers are 217.4 and 19.099 while the mean and S.D. of Female student teachers of control group are 217.6 and 18.476 on Self Regulated Learning Rating Scale. The obtained t-value is 0.048(0.048 < 2.58) with 4.202 standard error of mean which is not significant at 0.05 and 0.01level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: 1

Interpretation: Mean Score value are (217.6 > 217.4). Thus, mean score of Female student teachers of control group are not significantly higher than the mean score of Male student teachers of control group on Self Regulated Learning Rating Scale, So, **H_O1** is accepted.

H_O2 There will be no significant difference between mean score of UHL and MHL student teachers of control Group on Self Regulated Learning Rating Scale.

Table :4.4.1.2

	Name of Group	N	MEAN	SD	SED	t
2	UHL (Control)	40	221.6	19.512	4.098	2.001
	MHL (Control)	40	213.4	17.058		

Result: From the above Table, it is evident that the mean and S.D. of UHL student teachers are 221.6 and 19.512 while the mean and S.D. of MHL student teachers of control group are 213.4 and 17.058 on Self Regulated Learning Rating Scale. The obtained t-value is 2.001(2.001 > 1.96) with 4.098 standard error of mean which is significant at 0.05 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: 1

Interpretation: Mean Score value are (221.6 > 213.4). Thus, mean score of UHL student teachers of control group are significantly higher than the mean score of MHL student teachers of control group on Self Regulated Learning Rating Scale, So, **H_O2** is rejected.

H_O3 There will be no significant difference between mean score of Highly Intelligent and Lower Intelligent student teachers of control Group on Self Regulated Learning Rating Scale.

Table :4.4.1.3

	Name of Group	N	MEAN	SD	SED	t
3	Highly Intelligent (Control)	30	221.80	22.149	4.629	1.486
	Lower Intelligent (Control)	50	214.92	15.924		

Result: From the above Table, it is evident that the mean and S.D. of High Intelligent student teachers are 221.8 and 22.149 while the mean and S.D. of Low Intelligent student teachers of control group are 214.92 and 15.924 on Self Regulated Learning Rating Scale. The obtained t-value is 1.486(1.486 < 2.58) with 4.629 standard error of mean which is not significant at 0.05 and 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **1**

Interpretation: Mean Score value are (221.8 > 214.92). Thus, mean score of High Intelligent student teachers of control group are not significantly higher than the mean score of Low Intelligent student teachers of control group on Self Regulated Learning Rating Scale, So, **H_O3** is accepted.

H_O4 There will be no significant difference between mean score of Male and Female student teachers of experimental Group on Self Regulated Learning Rating Scale.

Table :4.4.1.4

	Name of Group	N	MEAN	SD	SED	t
4	Male (Experimental)	40	235.800	32.922	6.869	0.258
	Female (Experimental)	40	237.575	28.346		

Result: From the above Table, it is evident that the mean and S.D. of Male student teachers are 235.8 and 32.922 while the mean and S.D. of Female pre-service teacher of experimental group are 235.575 and 28.346 on Self Regulated Learning Rating Scale. The obtained t-value is 0.258(0.258 < 2.58) with 6.869 standard error of mean which is not significant at 0.05 and 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **2**

(237.575 > 235.8). Thus, mean score of Female pre-service teacher of experimental group are not significantly higher than the mean score of Male student teachers of experimental group on Self Regulated Learning Rating Scale, So, **H_O4** is accepted.

H_O5 There will be no significant difference between mean score of UHL and MHL student teachers of experimental Group on Self Regulated Learning Rating Scale.

Table :4.4.1.5

	Name of Group	N	MEAN	SD	SED	t
5	UHL (Experimental)	39	244.897	29.792	6.632	2.415
	MHL (Experimental)	41	228.878	29.501		

Result: From the above Table, it is evident that the mean and S.D. of UHL student teachers are 244.897 and 29.792 while the mean and S.D. of MHL student teachers of experimental group are 288.878 and

29.501 on Self Regulated Learning Rating Scale. The obtained t-value is 2.415(2.415 > 1.96) with 6.632 standard error of mean which is significant at 0.05 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **2**

(244.897 > 228.878). Thus, mean score of UHL student teachers of experimental group are significantly higher than the mean score of MHL student teachers of experimental group on Self Regulated Learning Rating Scale, So, **H_o5** is rejected.

H_o6 There will be no significant difference between mean score of Highly Intelligent and Lower Intelligent student teachers of experimental Group on Self Regulated Learning Rating Scale.

Table :4.4.1.6

	Name of Group	N	MEAN	SD	SED	t
6	Highly Intelligent (Experimental)	28	236.250	35.765	7.774	0.087
	Lower Intelligent (Experimental)	52	236.923	27.697		

Result: From the above Table, it is evident that the mean and S.D. of High Intelligent student teachers are 236.923 and 35.765 while the mean and S.D. of Low Intelligent student teachers of experimental group are 236.25 and 27.697 on Self Regulated Learning Rating Scale. The obtained t-value is 0.087(0.087 < 2.58) with 7.774 standard error of mean which is not significant at 0.05 and 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **2**

Interpretation: Mean Score value are (236.923 > 236.25). Thus, mean score of High Intelligent student teachers of experimental group are not significantly higher than the mean score of Low Intelligent

student teachers of experimental group on Self Regulated Learning Rating Scale, So, **H_O6** is accepted.

H_O7 There will be no significant difference between mean score of Control Group and Experimental Group Male student teachers on Self Regulated Learning Rating Scale.

Table :4.4.1.7

	Name of Group	N	MEAN	SD	SED	t
7	Control Group (Male)	40	217.436	19.347	6.058	3.032
	Exp. Group(Male)	40	235.800	32.922		

Result: From the above Table, it is evident that the mean and S.D. of Male student teachers of Control Group are 217.436 and 19.347 while the mean and S.D. of Male student teachers of Experimental Group are 235.8 and 32.922 on Self Regulated Learning Rating Scale. The obtained t-value is 3.032(3.032 > 2.58) with 6.058 standard error of mean which is significant at 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **3**

Interpretation: Mean Score value are (235.8 > 217.436). Thus, mean score of Male student teachers of Experimental Group are significantly higher than the mean score of Male student teachers of Control Group on Self Regulated Learning Rating Scale, So, **H_O7** is rejected.

H_O8 There will be no significant difference between mean score of Control Group and Experimental Group Female student teachers on Self Regulated Learning Rating Scale.

Table :4.4.1.8

	Name of Group	N	MEAN	SD	SED	t
8	Control Group(Female)	40	217.561	18.246	5.311	3.768
	Exp. Group (Female)	40	237.575	28.346		

Result: From the above Table, it is evident that the mean and S.D. of Female student teachers of Control Group are 217.561 and 18.246 while the mean and S.D. of Female student teachers of Experimental Group are 237.575 and 28.346 on Self Regulated Learning Rating Scale. The obtained t-value is 3.768(3.768 > 2.58) with 5.311 standard error of mean which is significant at 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **3**

Interpretation: Mean Score value are (235.575 > 217.561). Thus, mean score of Female student teachers of Experimental Group are significantly higher than the mean score of Female student teachers of Control Group on Self Regulated Learning Rating Scale, So, **H_O8** is rejected.

H_O9 There will be no significant difference between mean score of Control Group and Experimental Group UHL student teachers on Self Regulated Learning Rating Scale.

Table :4.4.1.9

	Name of Group	N	MEAN	SD	SED	t
9	Control Group (UHL)	40	221.600	19.512	5.681	4.101
	Exp. Group (UHL)	39	244.897	29.792		

Result: From the above Table, it is evident that the mean and S.D. of UHL student teachers of Control Group are 221.6 and 19.512 while the mean and S.D. of UHL student teachers of Experimental Group are 244.897 and 29.792 on Self Regulated Learning Rating Scale. The obtained t-value is 4.101(4.101 > 2.58) with 5.681 standard error of mean which is significant at 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **3**

Interpretation: Mean Score value are (244.897 > 221.6). Thus, mean score of UHL student teachers of Experimental Group are significantly higher than the mean score of UHL student teachers of Control Group on Self Regulated Learning Rating Scale, So, **H_O9** is rejected.

H_O10 There will be no significant difference between mean score of Control Group and Experimental Group MHL of student teachers on Self Regulated Learning Rating Scale.

Table :4.4.1.10

	Name of Group	N	MEAN	SD	SED	t
10	Control Group (MHL)	40	213.400	17.058	5.339	2.899
	Exp. Group (MHL)	41	228.878	29.501		

Result: From the above Table, it is evident that the mean and S.D. of MHL student teachers of Control Group are 213.4 and 17.058 while the mean and S.D. of MHL student teachers of Experimental Group are 228.878 and 29.501 on Self Regulated Learning Rating Scale. The obtained t-value is 2.899(2.889 > 2.58) with 5.339 standard error of mean which is significant at 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **4**

Interpretation: Mean Score value are (228.878 > 223.4). Thus, mean score of MHL student teachers of Experimental Group are significantly higher than the mean score of UHL student teachers of Control Group on Self Regulated Learning Rating Scale, So, **H_o10** is rejected.

H_o11 There will be no significant difference between mean score of Control Group and Experimental Group Highly Intelligent student teachers on Self Regulated Learning Rating Scale.

Table :4.4.1.11

	Name of Group	N	MEAN	SD	SED	t
11	Control Group (Highly Intelligent)	30	221.800	22.149	7.876	1.835
	Exp. Group (Highly Intelligent)	28	236.25	35.765		

Result: From the above Table, it is evident that the mean and S.D. of Highly student teachers of Control Group are 221.8 and 22.149 while the mean and S.D. of Highly Intelligent student teachers of Experimental Group are 236.25 and 35.765 on Self Regulated Learning Rating Scale. The obtained t-value is 1.835(1.835 < 1.96) with 7.876 standard error of mean which is not significant at 0.05 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **4**

Interpretation: Mean Score value are (236.25 > 221.8). Thus, mean score of Highly Intelligent student teachers of Experimental Group are not significantly higher than the mean score of Highly Intelligent student teachers of Control Group on Self Regulated Learning Rating Scale, So, **H_o11** is accepted.

H_o12 There will be no significant difference between mean score of Control Group and Experimental Group of Low Intelligent student teachers on Self Regulated Learning Rating Scale.

Table :4.4.1.12

	Name of Group	N	MEAN	SD	SED	t
12	Control Group(Lower Intelligent)	50	214.920	15.924	4.452	4.942
	Exp. Group(Lower Intelligent)	52	236.923	27.697		

Result: From the above Table, it is evident that the mean and S.D. of Low student teachers of Control Group are 214.92 and 15.924 while the mean and S.D. of Low Intelligent student teachers of Experimental Group are 236.923 and 27.697 on Self Regulated Learning Rating Scale. The obtained t-value is 4.942(4.492 > 2.58) with 4.452 standard error of mean which is significant at 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **4**

Interpretation: Mean Score value are (236.923 > 214.92). Thus, mean score of Low Intelligent student teachers of Experimental Group are significantly higher than the mean score of Low Intelligent student teachers of Control Group on Self Regulated Learning Rating Scale, So, **H_o12** is rejected.

H_o13 There will be no significant difference between mean score of Control Group and Experimental Group of Total student teachers on Self Regulated Learning Rating Scale.

Table :4.4.1.13

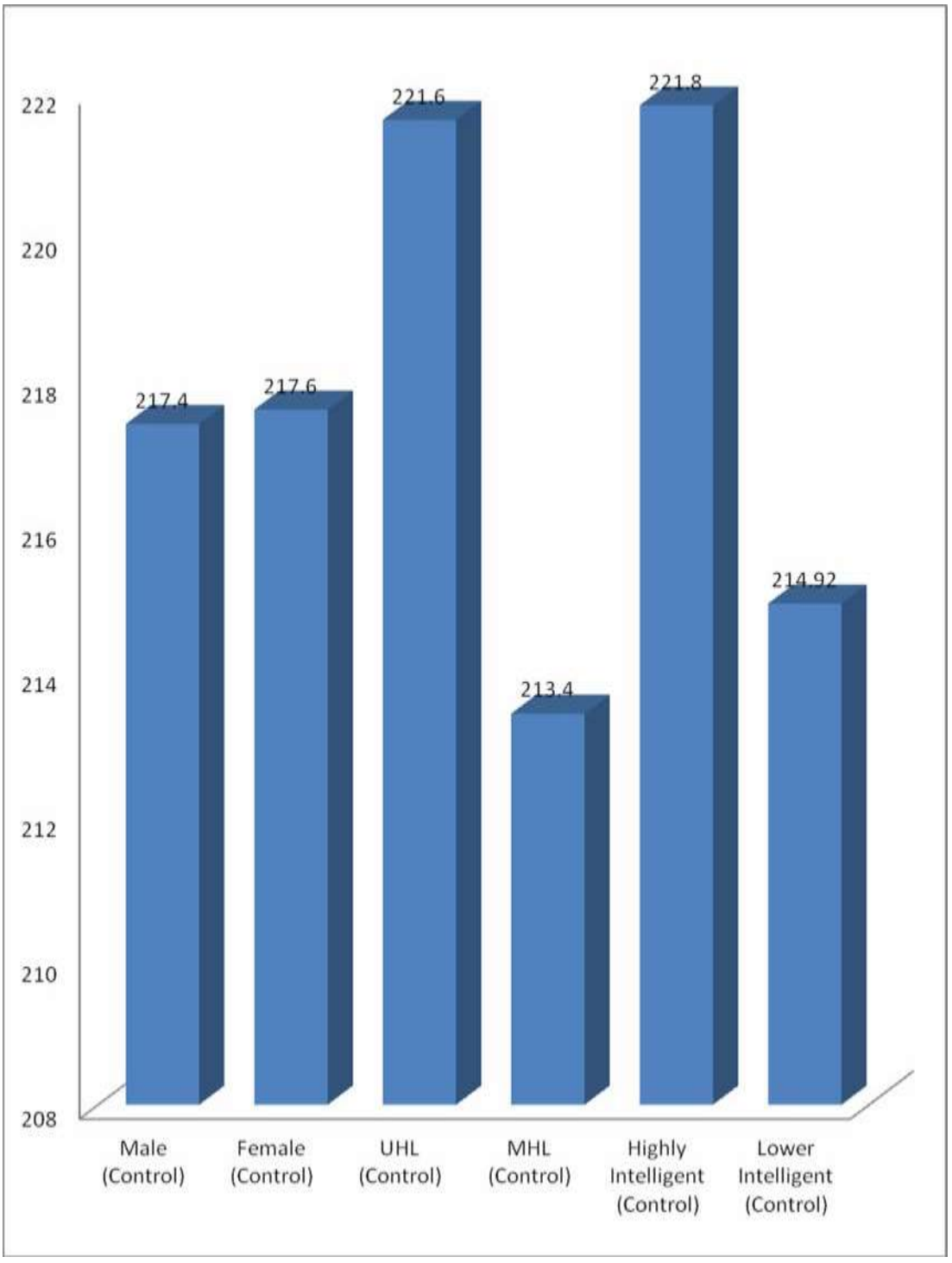
	Name of Group	N	MEAN	SD	SED	t
13	Control Group (Total)	80	217.500	18.671	4.002	4.795
	Exp. Group Total)	80	236.688	30.537		

Result: From the above Table, it is evident that the mean and S.D. of Total student teachers of Control Group are 217.5 and 18.671 while the mean and S.D. of Total Intelligent student teachers of Experimental Group are 236.688 and 30.537 on Self Regulated Learning Rating Scale. The obtained t-value is 4.795(4.795 > 2.58) with 4.002 standard error of mean which is significant at 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **4**

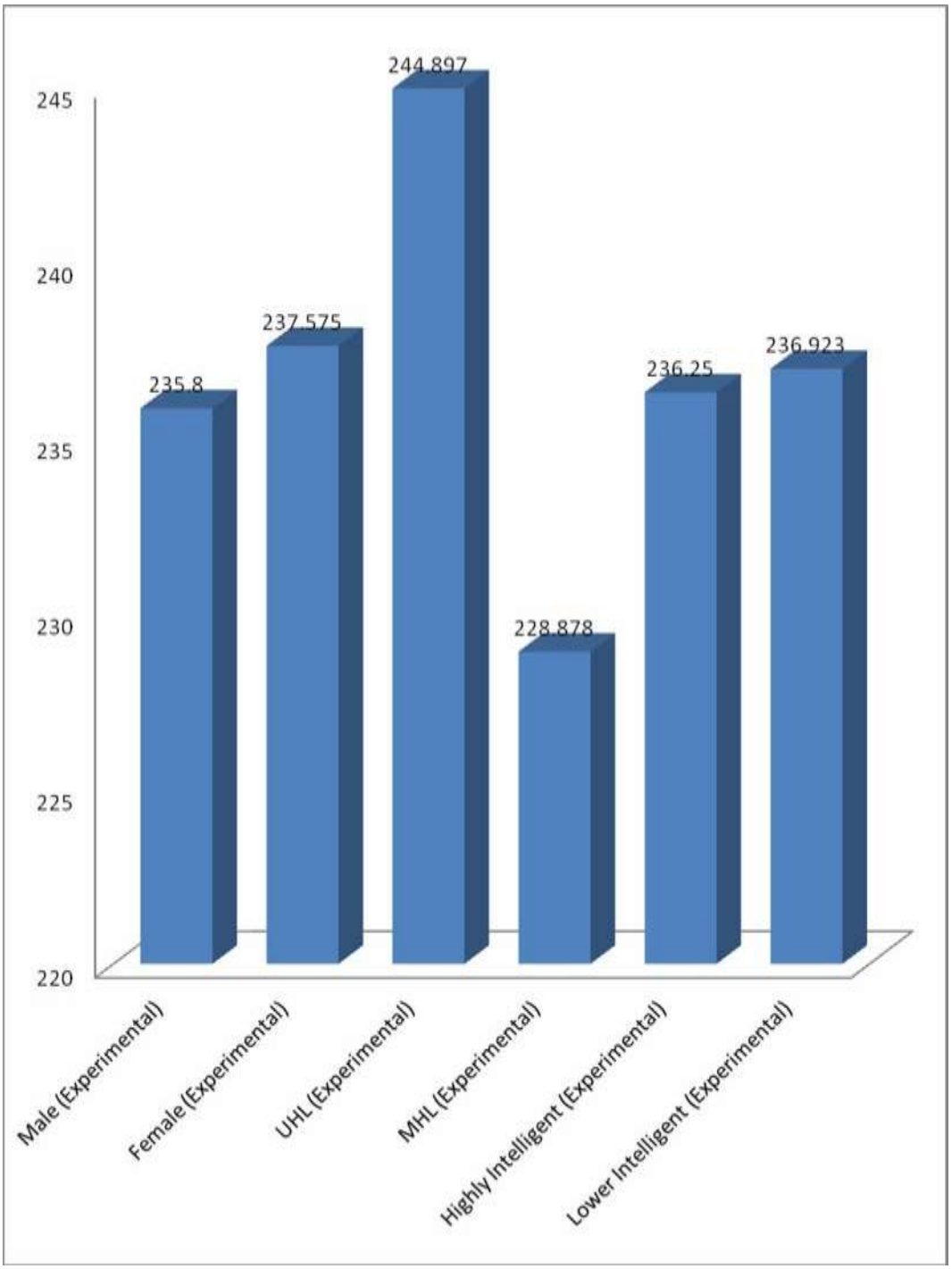
Interpretation: Mean Score value are (236.688 > 217.5). Thus, mean score of Total student teachers of Experimental Group are significantly higher than the mean score of Total student teachers of Control Group on Self Regulated Learning Rating Scale, So, $\mathbf{H_O13}$ is rejected.

GRAPH : 4.1



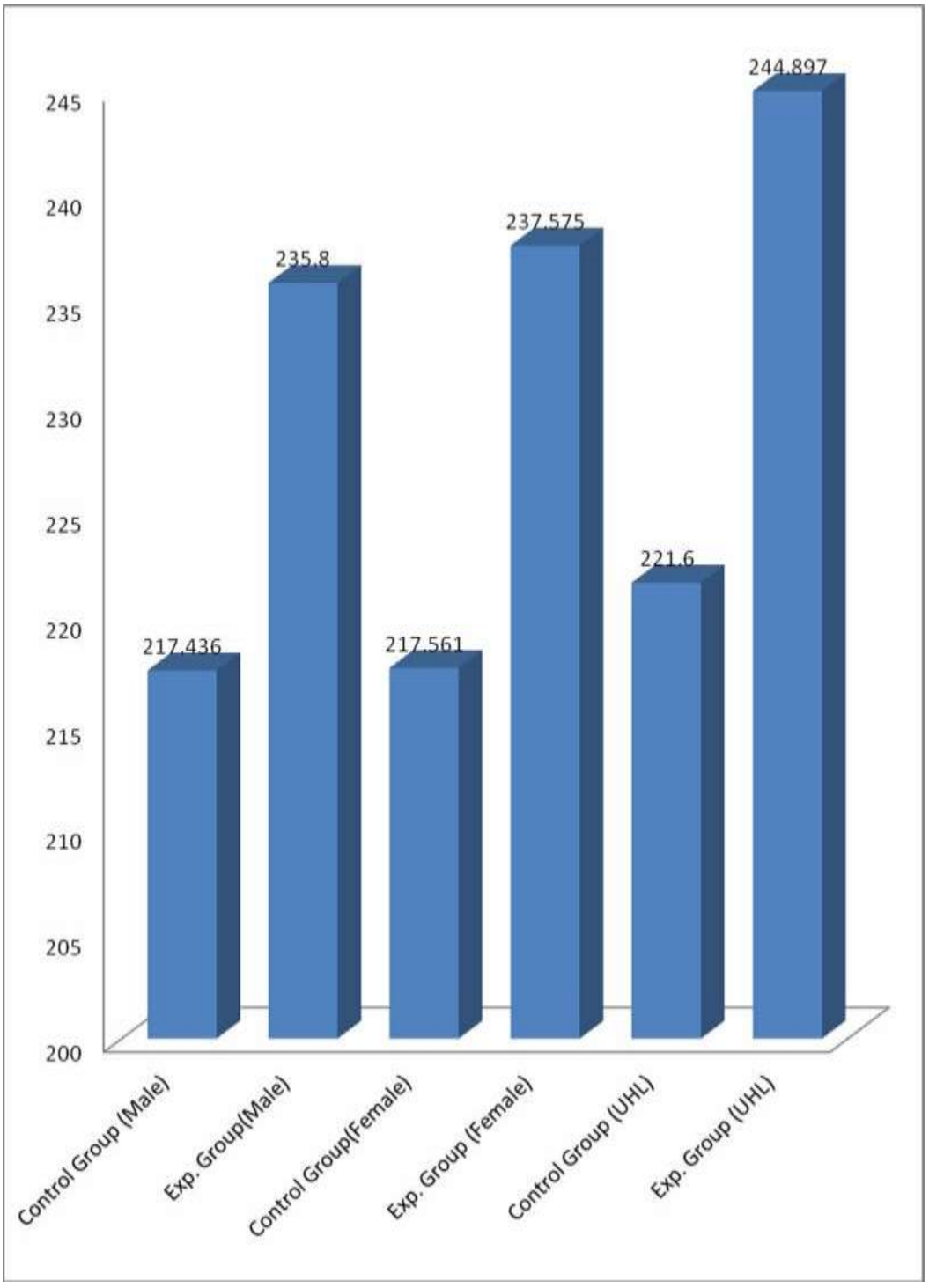
Comparison of Mean Score with Gender wise, Economic Status wise and Level of Intelligence wise of Control Group on Self Regulated Learning

GRAPH : 4.2



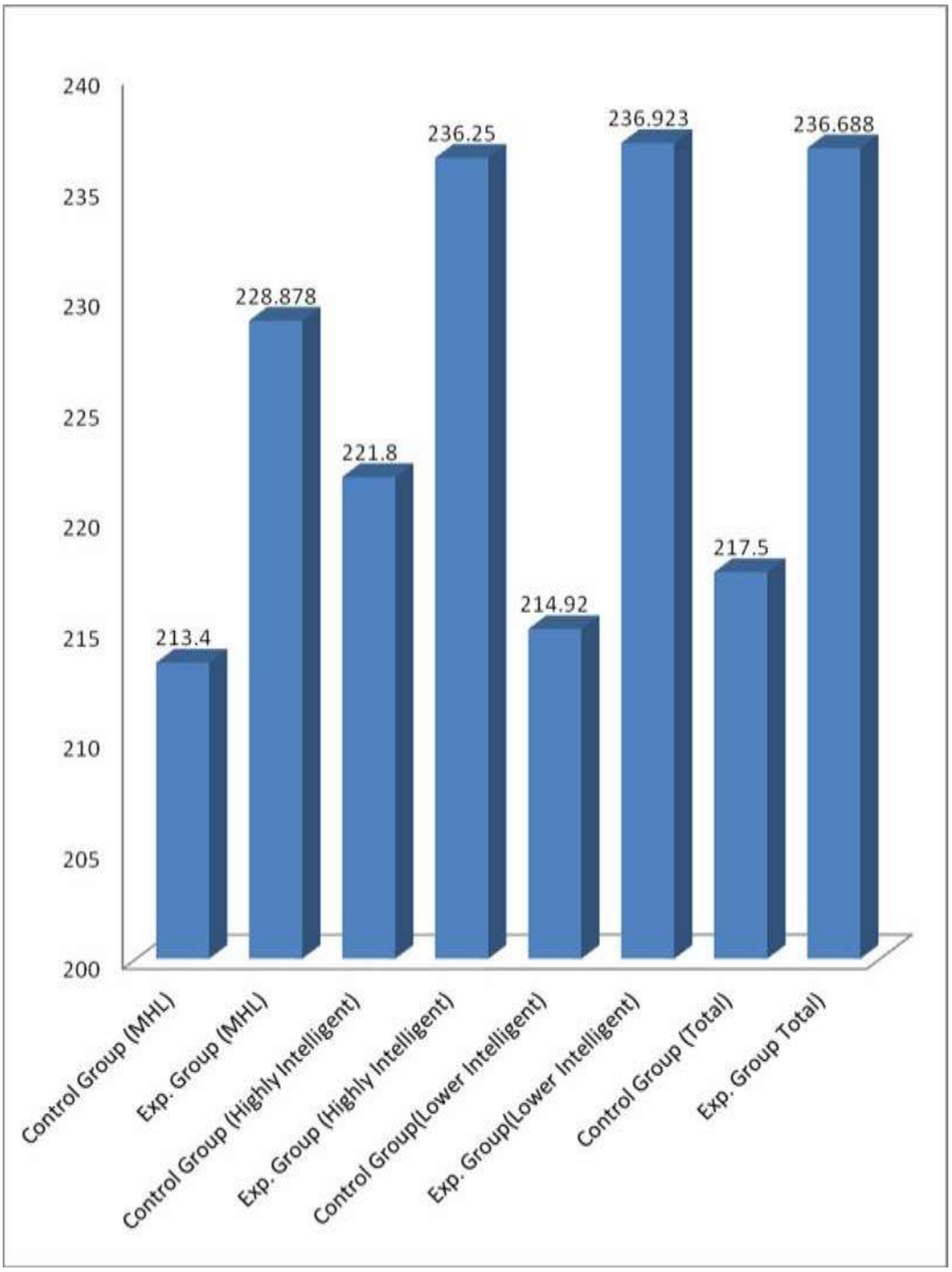
Comparison of Mean Score with Gender wise, Economic Status wise and Level of Intelligence wise of Experimental Group on Self Regulated Learning

GRAPH : 4.3



Comparison of Mean Score with Control Group wise and Experimental Group wise Mean Score of Control Group on Self Regulated Learning

GRAPH : 4.4



Comparison of Mean Score with Control Group wise and Experimental Group wise Mean Score of Control Group on Self Regulated Learning

Objective: To study effect of Goal Setting (Control Group, Experimental Group and Total Group)

Effect of Goal Setting (Control Group, Experimental Group and Total Group)

	Name of Group	N	MEAN	SD	SED	t
14	Male (Control)	40	227.025	15.678	3.391	0.951
	Female (Control)	40	223.803	14.629		
15	UHL (Control)	40	226.850	14.573	3.395	0.847
	MHL (Control)	40	223.975	15.765		
16	Highly Intelligent (Control)	30	225.302	13.709	3.383	0.053
	Lower Intelligent (Control)	50	225.481	16.093		
17	Male (Experimental)	40	237.501	24.846	4.869	0.2
	Female (Experimental)	40	238.475	18.191		
18	UHL (Experimental)	39	236.333	20.904	4.849	0.666
	MHL (Experimental)	41	239.561	22.464		
19	Highly Intelligent (Experimental)	28	236.357	21.173	5.035	0.498
	Lower Intelligent (Experimental)	52	238.865	22.043		
20	Control Group (Male)	39	225.225	13.409	4.676	3.828
	Exp. Group(Male)	40	243.125	26.273		
21	Control Group(Female)	41	223.800	14.629	3.673	3.995
	Exp. Group (Female)	40	238.475	18.191		
22	Control Group (UHL)	40	226.850	14.573	3.55	3.64
	Exp. Group (UHL)	39	239.769	16.862		
23	Control Group (MHL)	40	223.975	15.765	4.304	3.622
	Exp. Group (MHL)	41	239.561	22.464		
24	Control Group (Highly Intelligent)	30	225.300	13.709	4.209	3.891
	Exp. Group (Highly Intelligent)	28	241.678	17.907		
25	Control Group(Lower Intelligent)	50	225.480	16.093	3.811	3.512
	Exp. Group(Lower Intelligent)	52	238.865	22.043		
26	Control Group (Total)	80	225.412	15.153	2.954	4.257
	Exp. Group Total)	80	237.987	21.641		

H_O14 There will be no significant difference between mean score of Male and Female student teachers of control Group on Goal Setting Rating Scale.

Table :4.4.2.1

	Name of Group	N	MEAN	SD	SED	t
14	Male (Control)	40	227.025	15.678	3.391	0.951
	Female (Control)	40	223.803	14.629		

Result: From the above Table, it is evident that the mean and S.D. of Male student teachers are 227.025 and 15.678 while the mean and S.D. of Female student teachers of control group are 223.803 and 14.629 on Goal Setting Rating Scale. The obtained t- value is 0.951(0.951 < 2.58) with 3.391 standard error of mean which is not significant at 0.05 and 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **5**

Interpretation: Mean Score value are (227.025 > 223.803). Thus, mean score of Male student teachers of control group are not significantly higher than the mean score of Female student teachers of control group on Goal Setting Rating Scale, So, **H_O14** is accepted.

H_O15 There will be no significant difference between mean score of UHL and MHL student teachers of control Group on Goal Setting Rating Scale.

Table :4.4.2.2

	Name of Group	N	MEAN	SD	SED	t
15	UHL (Control)	40	226.850	14.573	3.395	0.847
	MHL (Control)	40	223.975	15.765		

Result: From the above Table, it is evident that the mean and S.D. of UHL student teachers are 226.850 and 14.573 while the mean and S.D. of MHL student teachers of control group are 223.975 and 15.765 on Goal Setting Rating Scale. The obtained t-value is 0.847 (0.847 < 2.58) with 3.395 standard error of mean which is not significant at 0.05 and 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **5**

Interpretation: Mean Score value are (226.850 > 223.975). Thus, mean score of UHL student teachers of control group are not significantly higher than the mean score of MHL student teachers of control group on Goal Setting Rating Scale, So, **H_O15** is accepted.

H_O16 There will be no significant difference between mean score of Highly Intelligent and Lower Intelligent student teachers of control Group on Goal Setting Rating Scale.

Table :4.4.2.3

	Name of Group	N	MEAN	SD	SED	t
16	Highly Intelligent (Control)	30	225.302	13.709	3.383	0.053
	Lower Intelligent (Control)	50	225.481	16.093		

Result: From the above Table, it is evident that the mean and S.D. of High Intelligent student teachers are 225.302 and 13.709 while the mean and S.D. of Low Intelligent student teachers of control group are 214.92 and 16.093 on Goal Setting Rating Scale. The obtained t-value is 0.053 (0.053 < 2.58) with 3.383 standard error of mean which is not significant at 0.05 and 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **5**

Interpretation: Mean Score value are (225.481 > 225.302). Thus, mean score of High Intelligent student teachers of control group are not significantly higher than the mean score of Low Intelligent student teachers of control group on Goal Setting Rating Scale, So, **H_O16** is accepted.

H_O17 There will be no significant difference between mean score of Male and Female student teachers of experimental Group on Goal Setting Rating Scale.

Table :4.4.2.4

	Name of Group	N	MEAN	SD	SED	t
17	Male (Experimental)	40	237.501	24.846	4.869	0.2
	Female (Experimental)	40	238.475	18.191		

Result: From the above Table, it is evident that the mean and S.D. of Male student teachers are 237.501 and 24.846 while the mean and S.D. of Female student teachers of experimental group are 238.475 and 18.191 on Goal Setting Rating Scale. The obtained t-value is 0.200(0.200 < 2.58) with 4.869 standard error of mean which is not significant at 0.05 and 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **6**

Interpretation: Mean Score value are (238.475 > 237.501). Thus, mean score of Female student teachers of experimental group are not significantly higher than the mean score of Male student teachers of experimental group on Goal Setting Rating Scale, So, **H_O17** is accepted.

H_O18 There will be no significant difference between mean score of UHL and MHL student teachers of experimental Group on Goal Setting Rating Scale.

Table :4.4.2.5

	Name of Group	N	MEAN	SD	SED	t
18	UHL (Experimental)	39	236.333	20.904	4.849	0.666
	MHL (Experimental)	41	239.561	22.464		

Result: From the above Table, it is evident that the mean and S.D. of UHL student teachers are 236.333 and 20.904 while the mean and S.D. of MHL student teachers of experimental group are 239.561 and 22.464 on Goal Setting Rating Scale. The obtained t-value is 0.666 (0.666 < 2.58) with 4.849 standard error of mean which is not significant at 0.05 and 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **6**

Interpretation: Mean Score value are (239.561 > 236.333). Thus, mean score of UHL student teachers of experimental group are not significantly higher than the mean score of MHL student teachers of experimental group on Goal Setting Rating Scale, So, **H_O18** is accepted.

H_O19 There will be no significant difference between mean score of Highly Intelligent and Lower Intelligent student teachers of experimental Group on Goal Setting Rating Scale.

Table :4.4.2.6

	Name of Group	N	MEAN	SD	SED	t
19	Highly Intelligent (Experimental)	28	236.357	21.173	5.035	0.498
	Lower Intelligent (Experimental)	52	238.865	22.043		

Result: From the above Table, it is evident that the mean and S.D. of High Intelligent student teachers are 238.865 and 21.173 while the mean and S.D. of Low Intelligent student teachers of experimental group are 236.357 and 22.043 on Goal Setting Rating Scale. The obtained t-value is 0.498 (0.498 < 2.58) with 5.035 standard error of mean which is not significant at 0.05 and 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **6**

Interpretation: Mean Score value are (238.865 > 236.357). Thus, mean score of High Intelligent student teachers of experimental group are not significantly higher than the mean score of Low Intelligent student teachers of experimental group on Goal Setting Rating Scale, So, **H_O19** is accepted.

H_O20 There will be no significant difference between mean score of Control Group and Experimental Group Male of student teachers on Goal Setting Rating Scale.

Table :4.4.2.7

	Name of Group	N	MEAN	SD	SED	t
20	Control Group (Male)	39	225.225	13.409	4.676	3.828
	Exp. Group(Male)	40	243.125	26.273		

Result: From the above Table, it is evident that the mean and S.D. of Male student teachers of Control Group are 225.226 and 13.409 while the mean and S.D. of Male student teachers of Experimental Group are 243.125 and 32.922 on Goal Setting Rating Scale. The obtained t-value is 3.828 (3.828 > 2.58) with 26.273 standard error of mean which is significant at 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **7**

Interpretation: Mean Score value are (243.125 > 225.226). Thus, mean score of Male student teachers of Experimental Group are significantly higher than the mean score of Male student teachers of Control Group on Goal Setting Rating Scale, So, **H_O20** is rejected.

H_O21 There will be no significant difference between mean score of Control Group and Experimental Group Female of student teachers on Goal Setting Rating Scale.

Table :4.4.2.8

	Name of Group	N	MEAN	SD	SED	t
21	Control Group(Female)	41	223.800	14.629	3.673	3.995
	Exp. Group (Female)	40	238.475	18.191		

Result: From the above Table, it is evident that the mean and S.D. of Female student teachers of Control Group are 223.800 and 14.629 while the mean and S.D. of Female student teachers of Experimental Group are 238.475 and 18.191 on Goal Setting Rating Scale. The obtained t-value is 3.995 (3.995 > 2.58) with 3.673 standard error of mean which is significant at 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **7**

Interpretation: Mean Score value are (238.475 > 223.800). Thus, mean score of Female student teachers of Experimental Group are significantly higher than the mean score of Female student teachers of Control Group on Goal Setting Rating Scale, So, **H_O21** is rejected.

H_O22 There will be no significant difference between mean score of Control Group and Experimental Group of UHL student teachers on Goal Setting Rating Scale.

Table :4.4.2.9

	Name of Group	N	MEAN	SD	SED	t
22	Control Group (UHL)	40	226.850	14.573	3.55	3.64
	Exp. Group (UHL)	39	239.769	16.862		

Result: From the above Table, it is evident that the mean and S.D. of UHL student teachers of Control Group are 226.850 and 14.573 while the mean and S.D. of UHL student teachers of Experimental Group are 239.769 and 16.862 on Goal Setting Rating Scale. The obtained t-value is 3.64 (3.64 > 2.58) with 3.55 standard error of mean which is significant at 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **7**

Interpretation: Mean Score value are (239.769 > 226.850). Thus, mean score of UHL student teachers of Experimental Group are significantly higher than the mean score of UHL student teachers of Control Group on Goal Setting Rating Scale, So, **H_O22** is rejected.

H_O23 There will be no significant difference between mean score of Control Group and Experimental Group of MHL student teachers on Goal Setting Rating Scale.

Table :4.4.2.10

	Name of Group	N	MEAN	SD	SED	t
23	Control Group (MHL)	40	223.975	15.765	4.304	3.622
	Exp. Group (MHL)	41	239.561	22.464		

Result: From the above Table, it is evident that the mean and S.D. of MHL student teachers of Control Group are 223.975 and 15.765 while the mean and S.D. of MHL student teachers of Experimental Group are 239.561 and 22.464 on Goal Setting Rating Scale. The

obtained t-value is 3.622 (3.622 > 2.58) with 4.304 standard error of mean which is significant at 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **8**

Interpretation: Mean Score value are (239.561 > 223.975). Thus, mean score of MHL student teachers of Experimental Group are significantly higher than the mean score of UHL student teachers of Control Group on Goal Setting Rating Scale, So, **H_O23** is rejected.

H_O24 There will be no significant difference between mean score of Control Group and Experimental Group of Highly Intelligent student teachers on Goal Setting Rating Scale.

Table :4.4.2.11

	Name of Group	N	MEAN	SD	SED	t
24	Control Group (Highly Intelligent)	30	225.300	13.709	4.209	3.891
	Exp. Group (Highly Intelligent)	28	241.678	17.907		

Result: From the above Table, it is evident that the mean and S.D. of Highly student teachers of Control Group are 225.300 and 13.709 while the mean and S.D. of Highly Intelligent student teachers of Experimental Group are 241.678 and 17.907 on Goal Setting Rating Scale. The obtained t-value is 3.891 (3.891 > 2.58) with 4.209 standard error of mean which is significant at 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **8**

Interpretation: Mean Score value are (241.678 > 225.300). Thus, mean score of Highly Intelligent student teachers of Experimental Group are significantly higher than the mean score of Highly Intelligent pre-

service teacher of Control Group on Goal Setting Rating Scale, So, **H_o24** is rejected.

H_o25 There will be no significant difference between mean score of Control Group and Experimental Group of Lower or Intelligent student teachers on Goal Setting Rating Scale.

Table :4.4.2.12

	Name of Group	N	MEAN	SD	SED	t
25	Control Group(Lower Intelligent)	50	225.480	16.093	3.811	3.512
	Exp. Group(Lower Intelligent)	52	238.865	22.043		

Result: From the above Table, it is evident that the mean and S.D. of Low student teachers of Control Group are 225.480 and 16.093 while the mean and S.D. of Low Intelligent student teachers of Experimental Group are 238.865 and 22.043 on Goal Setting Rating Scale. The obtained t-value is 3.512 (3.512 > 2.58) with 3.811 standard error of mean which is significant at 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **8**

Interpretation: Mean Score value are (238.865 > 225.480). Thus, mean score of Low Intelligent student teachers of Experimental Group are significantly higher than the mean score of Lower Intelligent student teachers of Control Group on Goal Setting Rating Scale, So, **H_o25** is rejected.

H_o26 There will be no significant difference between mean score of Control Group and Experimental Group of Total student teachers on Goal Setting Rating Scale.

Table :4.4.2.13

	Name of Group	N	MEAN	SD	SED	t
26	Control Group (Total)	80	225.412	15.153	2.954	4.257
	Exp. Group Total)	80	237.987	21.641		

Result: From the above Table, it is evident that the mean and S.D. of Total student teachers of Control Group are 225.412 and 15.153 while the mean and S.D. of Total Intelligent student teachers of Experimental Group are 237.987 and 21.641 on Goal Setting Rating Scale. The obtained t-value is 4.257 (4.257 > 2.58) with 2.954 standard error of mean which is significant at 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **8**

Interpretation: Mean Score value are (237.987 > 225.412). Thus, mean score of Total student teachers of Experimental Group are significantly higher than the mean score of Total student teachers of Control Group on Goal Setting Rating Scale, So, $\mathbf{H_O26}$ is rejected.

Objective: To study effect Effect of Achievement Test (Control Group, Experimental Group and Total Group

Effect of Achievement Test (Control Group, Experimental Group and Total Group)

	Name of Group	**N**	**MEAN**	**SD**	**SED**	**t**
27	Male (Control)	40	67.375	9.142	1.875	1.36
	Female (Control)	40	69.925	7.553		
28	UHL (Control)	40	68.275	8.086	1.895	0.396
	MHL (Control)	40	69.025	8.848		
29	Highly Intelligent (Control)	30	67.900	10.067	2.112	0.568
	Lower Intelligent (Control)	50	69.100	7.352		
30	Male (Experimental)	40	78.200	5.326	1.305	1.551
	Female (Experimental)	40	76.175	6.308		
31	UHL (Experimental)	39	77.615	5.622	1.319	0.633
	MHL (Experimental)	41	76.780	6.175		
32	Highly Intelligent (Experimental)	28	77.893	6.806	1.486	0.73
	Lower Intelligent (Experimental)	52	76.808	5.365		
33	Control Group (Male)	39	67.375	9.142	1.673	6.471
	Exp. Group(Male)	40	78.200	5.326		
34	Control Group(Female)	41	69.925	7.553	1.556	4.017
	Exp. Group (Female)	40	76.175	6.308		
35	Control Group (UHL)	40	68.275	8.086	1.564	5.973
	Exp. Group (UHL)	39	77.615	5.622		
36	Control Group (MHL)	40	69.025	8.848	1.699	4.564
	Exp. Group (MHL)	41	76.780	6.175		
37	Control Group (Highly Intelligent)	30	67.900	10.067	2.243	4.455
	Exp. Group (Highly Intelligent)	28	77.893	6.806		
38	Control Group(Lower Intelligent)	50	69.100	7.352	1.279	6.029
	Exp. Group(Lower Intelligent)	52	76.808	5.365		
39	Control Group (Total)	80	68.650	8.43	1.15	7.426
	Exp. Group Total)	80	77.188	5.889		

H_O27 There will be no significant difference between mean score of Male and Female student teachers of control Group on Educational Achievement Test.

Table :4.4.3.1

	Name of Group	**N**	**MEAN**	**SD**	**SED**	**t**
27	Male (Control)	40	67.375	9.142	1.875	1.36
	Female (Control)	40	69.925	7.553		

Result: From the above Table, it is evident that the mean and S.D. of Male student teachers are 67.375 and 9.142 while the mean and S.D. of Female student teachers of control group are 69.925 and 7.553 on Educational Achievement Test. The obtained t-value is 1.36(1.36 < 2.58) with 1.875 standard error of mean which is not significant at 0.05 and 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **9**

Interpretation: Mean Score value are (67.375 < 69.925). Thus, mean score of Female student teachers of control group are not significantly higher than the mean score of Male student teachers of control group on Educational Achievement Test, So, **H_O27** is accepted.

H_O28 There will be no significant difference between mean score of UHL and MHL student teachers of control Group on Educational Achievement Test.

Table :4.4.3.2

	Name of Group	**N**	**MEAN**	**SD**	**SED**	**t**
28	UHL (Control)	40	68.275	8.086	1.895	0.396
	MHL (Control)	40	69.025	8.848		

Result: From the above Table, it is evident that the mean and S.D. of UHL student teachers are 68.275 and 8.086 while the mean and S.D. of MHL student teachers of control group are 69.025 and 8.848 on Educational Achievement Test. The obtained t-value is 0.396 (0.396 < 1.96) with 1.895 standard error of mean which is significant at 0.05 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **9**

Interpretation: Mean Score value are (68.275 < 69.025). Thus, mean score of UHL student teachers of control group are not significantly higher than the mean score of MHL student teachers of control group on Educational Achievement Test, So, **H_O28** is accepted.

H_O29 There will be no significant difference between mean score of Highly Intelligent and Lower Intelligent student teachers of control Group on Educational Achievement Test.

Table :4.4.3.3

	Name of Group	N	MEAN	SD	SED	t
29	Highly Intelligent (Control)	30	67.9	10.067	2.112	0.568
	Lower Intelligent (Control)	50	69.1	7.352		

Result: From the above Table, it is evident that the mean and S.D. of High Intelligent student teachers are 67.9 and 10.067 while the mean and S.D. of Low Intelligent student teachers of control group are 69.1 and 7.352 on Educational Achievement Test. The obtained t-value is 0.568 (0.568 < 2.58) with 2.112 standard error of mean which is not significant at 0.05 and 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **9**

Interpretation: Mean Score value are (69.1 > 67.9). Thus, mean score of High Intelligent student teachers of control group are not significantly higher than the mean score of Low Intelligent student teachers of control group on Educational Achievement Test, So, **H_o29** is accepted.

H_o30 There will be no significant difference between mean score of Male and Female student teachers of experimental Group on Educational Achievement Test.

Table :4.4.3.4

	Name of Group	**N**	**MEAN**	**SD**	**SED**	**t**
30	Male (Experimental)	40	78.200	5.326	1.305	1.551
	Female (Experimental)	40	76.175	6.308		

Result: From the above Table, it is evident that the mean and S.D. of Male student teachers are 78.2 and 5.326 while the mean and S.D. of Female pre-service teacher of experimental group are 76.175 and 6.308 on Educational Achievement Test. The obtained t-value is 1.551 (1.551< 2.58) with 1.305 standard error of mean which is not significant at 0.05 and 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **10**

Interpretation: Mean Score value are (78.2 > 76.175). Thus, mean score of Female student teachers of experimental group are not significantly higher than the mean score of Male student teachers of experimental group on Educational Achievement Test, So, **H_o30** is accepted.

H_o31 There will be no significant difference between mean score of UHL and MHL student teachers of experimental Group on Educational Achievement Test.

Table :4.4.3.5

	Name of Group	N	MEAN	SD	SED	t
31	UHL (Experimental)	39	77.615	5.622	1.319	0.633
	MHL (Experimental)	41	76.78	6.175		

Result: From the above Table, it is evident that the mean and S.D. of UHL student teachers are 77.615 and 5.622 while the mean and S.D. of MHL student teachers of experimental group are 76.78 and 6.175 on Educational Achievement Test. The obtained t-value is 0.633 (0.633< 1.96) with 1.319 standard error of mean which is significant at 0.05 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **10**

Interpretation: Mean Score value are (77.615 > 76.78). Thus, mean score of UHL student teachers of experimental group are not significantly higher than the mean score of MHL student teachers of experimental group on Educational Achievement Test, So, **H_O31** is accepted.

H_O32 There will be no significant difference between mean score of Highly Intelligent and Lower Intelligent student teachers of experimental Group on Educational Achievement Test.

Table :4.4.3.6

	Name of Group	N	MEAN	SD	SED	t
32	Highly Intelligent (Experimental)	28	77.893	6.806	1.486	0.73
	Lower Intelligent (Experimental)	52	76.808	5.365		

Result: From the above Table, it is evident that the mean and S.D. of High Intelligent student teachers are 77.893 and 6.806 while the mean and S.D. of Low Intelligent student teachers of experimental group

are 76.808 and 5.365 on Educational Achievement Test. The obtained t-value is 0.73 (0.73 < 2.58) with 1.486 standard error of mean which is not significant at 0.05 and 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **10**

Interpretation: Mean Score value are (77.893 > 76.808). Thus, mean score of High Intelligent student teachers of experimental group are not significantly higher than the mean score of Low Intelligent student teachers of experimental group on Educational Achievement Test, So, **H_O32** is accepted.

H_O33 There will be no significant difference between mean score of Control Group and Experimental Group of Male student teachers on Educational Achievement Test.

Table :4.4.3.7

	Name of Group	**N**	**MEAN**	**SD**	**SED**	**t**
33	Control Group (Male)	39	67.375	9.142	1.673	6.471
	Exp. Group(Male)	40	78.2	5.326		

Result: From the above Table, it is evident that the mean and S.D. of Male student teachers of Control Group are 67.375 and 9.142 while the mean and S.D. of Male student teachers of Experimental Group are 78.2 and 5.326 on Educational Achievement Test. The obtained t-value is 6.471 (6.471> 2.58) with 1.673 standard error of mean which is significant at 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **11**

Interpretation: Mean Score value are (78.2 > 67.375). Thus, mean score of Male student teachers of Experimental Group are significantly

higher than the mean score of Male student teachers of Control Group on Educational Achievement Test, So, **H_O33** is rejected.

H_O34 There will be no significant difference between mean score of Control Group and Experimental Group of Female student teachers on Educational Achievement Test.

Table :4.4.3.8

	Name of Group	**N**	**MEAN**	**SD**	**SED**	**t**
34	Control Group(Female)	41	69.925	7.553	1.556	4.017
	Exp. Group (Female)	40	76.175	6.308		

Result: From the above Table, it is evident that the mean and S.D. of Female student teachers of Control Group are 69.925 and 7.553 while the mean and S.D. of Female student teachers of Experimental Group are 76.175 and 6.308 on Educational Achievement Test. The obtained t-value is 4.017 (4.017 > 2.58) with

1.556 standard error of mean which is significant at 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **11**

Interpretation: Mean Score value are (76.175 > 69.925). Thus, mean score of Female student teachers of Experimental Group are significantly higher than the mean score of Female student teachers of Control Group on Educational Achievement Test, So, **H_O34** is rejected.

H_O35 There will be no significant difference between mean score of Control Group and Experimental Group of UHL student teachers on Educational Achievement Test.

Table :4.4.3.9

	Name of Group	N	MEAN	SD	SED	t
35	Control Group (UHL)	40	68.275	8.086	1.564	5.973
	Exp. Group (UHL)	39	77.615	5.622		

Result: From the above Table, it is evident that the mean and S.D. of UHL student teachers of Control Group are 68.275 and 8.086 while the mean and S.D. of UHL student teachers of Experimental Group are 77.615 and 5.622 on Educational Achievement Test. The obtained t-value is 5.973 (5.973 > 2.58) with 1.564 standard error of mean which is significant at 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **11**

Interpretation: Mean Score value are (77.615 > 68.275). Thus, mean score of UHL student teachers of Experimental Group are significantly higher than the mean score of UHL student teachers of Control Group on Educational Achievement Test, So, **H_O35** is rejected.

H_O36 There will be no significant difference between mean score of Control Group and Experimental Group of MHL student teachers on Educational Achievement Test.

Table :4.4.3.10

	Name of Group	N	MEAN	SD	SED	t
36	Control Group (MHL)	40	69.025	8.848	1.699	4.564
	Exp. Group (MHL)	41	76.78	6.175		

Result: From the above Table, it is evident that the mean and S.D. of MHL student teachers of Control Group are 69.025 and 8.848 while the mean and S.D. of MHL student teachers of Experimental Group

are 76.78 and 6.175 on Educational Achievement Test. The obtained t-value is 4.564 (4.564 > 2.58) with 1.699 standard error of mean which is significant at 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **12**

Interpretation: Mean Score value are (76.78 > 69.025). Thus, mean score of MHL student teachers of Experimental Group are significantly higher than the mean score of UHL student teachers of Control Group on Educational Achievement Test, So, **H_O36** is rejected.

H_O37 There will be no significant difference between mean score of Control Group and Experimental Group of Highly Intelligent student teachers on Educational Achievement Test.

Table :4.4.3.11

	Name of Group	**N**	**MEAN**	**SD**	**SED**	**t**
37	Control Group (Highly Intelligent)	30	67.9	10.067	2.243	4.455
	Exp. Group (Highly Intelligent)	28	77.893	6.806		

Result: From the above Table, it is evident that the mean and S.D. of Highly student teachers of Control Group are 67.9 and 10.067 while the mean and S.D. of Highly Intelligent student teachers of Experimental Group are 77.893 and 6.806 on Educational Achievement Test. The obtained t-value is 4.455 (4.455 < 1.96) with 2.243 standard error of mean which is not significant at 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **12**

Interpretation: Mean Score value are (77.893 > 67.9). Thus, mean score of Highly Intelligent student teachers of Experimental Group are significantly higher than the mean score of Highly Intelligent pre-

service teacher of Control Group on Educational Achievement Test, So, **H_o37** is rejected.

H_o38 There will be no significant difference between mean score of Control Group and Experimental Group Low Intelligent student teachers on Educational Achievement Test.

Table :4.4.3.12

	Name of Group	**N**	**MEAN**	**SD**	**SED**	**t**
38	Control Group(Lower Intelligent)	50	69.100	7.352	1.279	6.029
	Exp. Group(Lower Intelligent)	52	76.808	5.365		

Result: From the above Table, it is evident that the mean and S.D. of Low student teachers of Control Group are 69.1 and 7.352 while the mean and S.D. of Low Intelligent student teachers of Experimental Group are 76.808 and 5.365 on Educational Achievement Test. The obtained t-value is 6.029 (6.029 > 2.58) with 1.279 standard error of mean which is significant at 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **12**

Interpretation: Mean Score value are (76.808 > 69.1). Thus, mean score of Low Intelligent student teachers of Experimental Group are significantly higher than the mean score of Low Intelligent student teachers of Control Group on Educational Achievement Test, So, **H_o38** is rejected.

H_o39 There will be no significant difference between mean score of Control Group and Experimental Group of Total student teachers on Educational Achievement Test.

Table :4.4.3.13

	Name of Group	N	MEAN	SD	SED	t
39	Control Group (Total)	80	68.65	8.43	1.15	7.426
	Exp. Group Total)	80	77.188	5.889		

Result: From the above Table, it is evident that the mean and S.D. of Total student teachers of Control Group are 68.65 and 8.43 while the mean and S.D. of Total Intelligent student teachers of Experimental Group are 77.188 and 5.889 on Educational Achievement Test. The obtained t-value is 7.426 (7.426 > 2.58) with

1.15 standard error of mean which is significant at 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **12**

Interpretation: Mean Score value are (77.188 > 68.65). Thus, mean score of Total student teachers of Experimental Group are significantly higher than the mean score of Total student teachers of Control Group on Educational Achievement Test, So, $\mathbf{H_O39}$ is rejected.

Hypothesis related to Gender wise and Socio-Economic status wise mean on Self Regulated Learning Rating Scale.

H_O40 There will be no significant difference between mean score control group of on Self Regulated Learning Rating Scale with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL"

Table :4.4.4.1

Gender wise and Socio-Economic status wise mean on Self Regulated Learning Rating Scale (Control Group)

Group	Male_UHL	Male-MHL	Female_UHL	Female_MHL
N	20	20	19	21
Mean	224.095	210.000	218.842	216.476

From the above table, it is noted that the mean score of Male-UHL, Male-MHL, Female-UHL and Female-MHL are 224.095, 210.000, 218.842 and 216.476 respectively.

Table :4.4.4.2

Gender wise and Socio-Economic status wise ANOVA on Self Regulated Learning Rating Scale(Control Group)

	Source	Df	Sum of Square	Mean Square	F	SIG. at 0.01
Self Regulated Learning	**SS Among**	3	2038.426	679.475	2.024	NS
	SS Within	76	25501.57	335.547		
	SS Total	79	27540			

The above Table, it is reveals the calculated F-value of comparison of means of student teachers with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL on Self Regulated Learning Rating Scale. The F-value of the above comparison of means of Male-UHL, Male-MHL, Female-UHL and Female-MHL sample is 2.024 with Mean Square

of SS-Among and SS-Within are 679.475 and 335.547, which is not significant at 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **13**

Interpretation: Therefore, it can be inferred that means of Male-UHL student teachers Male-MHL, Female-UHL and Female-MHL on Self Regulated Learning Rating Scale. So, **H_O40** is accepted, which stated as "There will be no significant difference between mean score of control group on Self Regulated Learning Rating Scale with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL"

H_O41 "There will be no significant difference between mean score of Experimental Group on Self Regulated Learning Rating Scale with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL"

Table :4.4.4.3

Comparison of Mean Score with Gender wise and Socio-Economic status wise mean on Self Regulated Learning Rating Scale (Experimental Group)

Group	Male_UHL	Male-MHL	Female_UHL	Female_MHL
N	20	20	20	20
Mean	246.052	226.523	231.35	231.382

From the above table, it is noted that the mean score of Experimental Group of Male-UHL, Male- MHL, Female-UHL and Female-MHL are 246.052, 226.523, 231.35 and 231.382 respectively.

Table :4.4.4.4

Gender wise and Socio-Economic status wise ANOVA on Self Regulated Learning Rating Scale (Experimental Group)

	Source	Df	Sum of Square	Mean Square	F	SIG. at 0.01
Self Regulated Learning	**SS Among**	3	4200.265	1400.088	1.561	NS
	SS Within	76	68163.29	896.885		
	SS Total	79	72363.55			

The above Table, it is reveals the calculated F-value of comparison of means of student teachers with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL on Self Regulated Learning Rating Scale. The F-value of the above comparison of means of Experimental Group of Male-UHL, Male-MHL, Female-UHL and Female-MHL sample is 1.561

with Mean Square of SS-Among and SS-Within are 1400.088 and 896.885, which is not significant at 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **14**

Interpretation: Therefore, it can be inferred that means of Male-UHL student teachers Male-MHL, Female-UHL and Female-MHL on Self Regulated Learning Rating Scale. So, **H_O41** is accepted, which stated as "There will be no significant difference between mean score of Experimental Group on Self Regulated Learning Rating Scale with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL"

H_O42 There will be no significant difference between mean score of Total Group on Self Regulated Learning Rating Scale with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL

Table:4.4.4.5

Comparison of Mean Score with Gender wise and Socio-Economic status wise mean on Goal Setting Learning Rating Scale (Total Group)

Group	Male_UHL	Male-MHL	Female_UHL	Female_MHL
N	40	40	40	40
Mean	234.525	218.675	231.641	223.731

From the above table, it is noted that the mean score of Total Group of Male-UHL, Male- MHL, Female-UHL and Female-MHL are 246.052, 226.523, 231.35 and 231.382 respectively.

Table :4.4.4.6

Gender wise and Socio-Economic status wise ANOVA on Self Regulated Learning Rating Scale (Total Group)

	Source	Df	Sum of Square	Mean Square	F	SIG. at 0.01
Self Regulated Learning	**SS Among**	3	6313.821	2104.607	2.995	NS
	SS Within	156	109621.8	702.703		
	SS Total	159	115935.6			

The above Table, it is reveals the calculated F-value of comparison of means of student teachers with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL on Self Regulated Learning Rating Scale. The F-value of the above comparison of means of Total Group of Male-UHL, Male-MHL, Female-UHL and Female-MHL sample is 1.561 with

Mean Square of SS-Among and SS-Within are 1400.088 and 896.885, which is not significant at 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **15**

Interpretation: Therefore, it can be inferred that means of Male-UHL student teachers Male-MHL, Female-UHL and Female-MHL on Self Regulated Learning Rating Scale. So, **H_O42** is accepted, which stated as "There will be no significant difference between mean score of Total Group on Self Regulated Learning Rating Scale with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL"

Hypothesis related to Comparison of Mean Score with Gender wise and Socio-Economic status wise mean on Goal Setting Rating Scale.

H_O43 There will be no significant difference between mean score control group of on Goal Setting Rating Scale with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL

Table :4.4.5.1

Comparison of Mean Score with Gender wise and Socio-Economic status wise mean on Goal Setting Learning Rating Scale (Control Group)

Group	Male_UHL	Male-MHL	Female_UHL	Female_MHL
N	20	20	20	20
Mean	225.809	223.36800	228.012	220.028

From the above table, it is noted that the mean score of Male-UHL, Male-MHL, Female-UHL and Female-MHL are 225.809, 223.368, 228.012 and 220.028 respectively.

Table :4.4.5.2

Gender wise and Socio-Economic status wise ANOVA on Goal Setting Rating Scale(Control Group)

	Source	Df	Sum of Square	Mean Square	F	SIG. at 0.01
Goal Setting	**SS Among**	3	911.7284	303.909	1.340	NS
	SS Within	76	17229.66	226.706		
	SS Total	79	18141.39			

The above Table, it is reveals the calculated F-value of comparison of means of student teachers with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL on Goal Setting Rating Scale. The F-value of the above comparison of means of Male-UHL, Male-MHL,

Female-UHL and Female-MHL sample is 1.340 with Mean Square of SS-Among and SS-Within are 303.909 and 226.706, which is not significant at 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **16**

Interpretation: Therefore, it can be inferred that means of Female-UHL student teachers Male-UHL, Male-MHL and Female-MHL on Goal Setting Rating Scale. So, **H_O43** is accepted, which stated as "There will be no significant difference between mean score of control group on Goal Setting Rating Scale with reference to Male- UHL, Male-MHL, Female-UHL and Female-MHL"

H_O44 There will be no significant difference between mean score of Experimental Group on Goal Setting Rating Scale with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL

Table :4.4.5.3

Comparison of Mean Score with Gender wise and Socio-Economic status wise mean on Goal Setting Rating Scale

(Experimental Group)

Group	**Male_UHL**	**Male-MHL**	**Female_UHL**	**Female_MHL**
N	20	20	20	20
Mean	238.263	236.809	241.450	242.451

From the above table, it is noted that the mean score of Experimental Group of Male-UHL, Male- MHL, Female-UHL and Female-MHL are 238.263, 236.809, 241.450 and 242.451 respectively.

Table:4.4.5.4

Gender wise and Socio-Economic status wise ANOVA on Goal Setting Rating Scale (Experimental Group)

	Source	**Df**	**Sum of Square**	**Mean Square**	**F**	**SIG. at 0.01**
Goal Setting	**SS Among**	3	511.127	170.375	0.330	NS
	SS Within	76	39152.82	515.168		
	SS Total	79	39663.95			

The above Table, it is reveals the calculated F-value of comparison of means of student teachers with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL on Goal Setting Rating Scale. The F-value of the above comparison of means of Experimental Group of Male-UHL, Male-MHL, Female-UHL and Female-MHL sample is 0.330 with

Mean Square of SS-Among and SS-Within are 170.375 and 515.168, which is not significant at 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **17**

Interpretation: Therefore, it can be inferred that means of Female-MHL student teachers Male-MHL, Male-UHL and Female-UHL on Goal Setting Rating Scale. So, **H_O44** is accepted, which stated as "There will be no significant difference between mean score of Experimental Group on Goal Setting Rating Scale with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL"

H_O45 There will be no significant difference between mean score of Total Group on Goal Setting Rating Scale with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL

Table :4.4.5.5

Comparison of Mean Score with Gender wise and Socio-Economic status wise mean on Goal Setting Rating Scale (Total Group)

Group	Male_UHL	Male-MHL	Female_UHL	Female_MHL
N	40	40	40	40
Mean	231.725	232.800	231.333	230.951

From the above table, it is noted that the mean score of Total Group of Male-UHL, Male- MHL, Female-UHL and Female-MHL are 231.725, 232.8, 231.333 and 230.951 respectively.

Table :4.4.5.6

Gender wise and Socio-Economic status wise ANOVA on Goal Setting Rating Scale (Total Group)

	Source	Df	Sum of Square	Mean Square	F	SIG. at 0.01
Goal Setting	**SS Among**	3	76.655	25.551	0.064	NS
	SS Within	156	61390.94	393.531		
	SS Total	159	61467.6			

The above Table, it is reveals the calculated F-value of comparison of means of student teachers with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL on Goal Setting Rating Scale. The F-value of the above comparison of means of Total Group of Male-UHL, Male-MHL, Female-UHL and Female-MHL sample is 0.064 with Mean Square of SS-Among and SS-Within are 25.551 and 393.531, which is not significant at 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **18**

Interpretation: Therefore, it can be inferred that means of Male-MHL student teachers Male-UHL, Female-UHL and Female-MHL on Goal Setting Rating Scale. So, **H_O45** is accepted, which stated as "There will be no significant difference between mean score of Total Group on Goal Setting Rating Scale with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL"

Hypothesis related to Comparison of Mean Score with Gender wise and Socio-Economic status wise mean on Educational Achievement Test.

H_O46 There will be no significant difference between mean score control group of on Educational Achievement Test with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL

Table :4.4.6.1

Comparison of Mean Score with Gender wise and Socio-Economic status wise mean on Educational Achievement Test

(Control Group)

Group	Male_UHL	Male-MHL	Female_UHL	Female_MHL
N	20	20	19	21
Mean	69.047	65.526	67.421	72.190

From the above table, it is noted that the mean score of Male-UHL, Male-MHL, Female-UHL and Female-MHL are 69.047, 65.526, 67.421 and 72.190 respectively.

Table :4.4.6.2

Gender wise and Socio-Economic status wise ANOVA on Educational Achievement Test (Control Group)

	Source	Df	Sum of Square	Mean Square	F	SIG. at 0.01
Self Regulated Learning	**SS Among**	3	480.641	160.213	2.371	NS
	SS Within	76	5133.559	67.546		
	SS Total	79	5614.2			

The above Table, it is reveals the calculated F-value of comparison of means of student teachers with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL on Educational Achievement Test. The F-value of the above comparison of means of Male-UHL, Male-MHL,

Female-UHL and Female-MHL sample is 2.371 with Mean Square of SS-Among and SS-Within are 160.213 and 67.546, which is not significant at 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **19**

Interpretation: Therefore, it can be inferred that means of Female-MHL student teachers Male-UHL,Male-MHL and Female-UHL on Educational Achievement Test. So, **H_O46** is accepted, which stated as "There will be no significant difference between mean score of control group on Educational Achievement Test with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL"

H_O47 There will be no significant difference between mean score of Experimental Group on Educational Achievement Test with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL

Table :4.4.6.3

Comparison of Mean Score with Gender wise and Socio-Economic status wise mean on Educational Achievement Test

(Experimental Group)

Group	**Male_UHL**	**Male-MHL**	**Female_UHL**	**Female_MHL**
N	20	20	20	20
Mean	78.894	77.571	75.95	75.96

From the above table, it is noted that the mean score of Experimental Group of Male-UHL, Male- MHL, Female-UHL and Female-MHL are 78.894,77.571, 75.95 and 75.96 respectively.

Table :4.4.6.4

Gender wise and Socio-Economic status wise ANOVA on Educational Achievement Test (Experimental Group)

	Source	**Df**	**Sum of Square**	**Mean Square**	**F**	**SIG. at 0.01**
Self Regulated Learning	**SS Among**	3	118.717	39.572	0.988	NS
	SS Within	76	3042.832	40.037		
	SS Total	79	3161.55			

The above Table, it is reveals the calculated F-value of comparison of means of student teachers with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL on Educational Achievement Test. The F-value of the above comparison of means of Experimental Group of Male-UHL, Male-MHL, Female-UHL and Female-MHL sample is 0.988

with Mean Square of SS-Among and SS-Within are 39.572 and 40.037, which is not significant at 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **20**

Interpretation: Therefore, it can be inferred that means of Male-UHL student teachers Male-MHL, Female-UHL and Female-MHL on Educational Achievement Test. So, **H_O47** is accepted, which stated as "There will be no significant difference between mean score of Experimental Group on Educational Achievement Test with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL"

H_O48 There will be no significant difference between mean score of Total Group on Educational Achievement Test with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL

Table:4.4.6.5

Comparison of Mean Score with Gender wise and Socio-Economic status wise mean on Educational Achievement Test

(Total Group)

Group	**Male_UHL**	**Male-MHL**	**Female_UHL**	**Female_MHL**
N	40	40	40	40
Mean	73.725	71.850	72.025	74.024

From the above table, it is noted that the mean score of Total Group of Male-UHL, Male- MHL, Female-UHL and Female-MHL are 73.725, 71.85, 72.025 and 74.024 respectively.

Table :4.4.6.6

Gender wise and Socio-Economic status wise ANOVA on Educational Achievement Test (Total Group)

	Source	**Df**	**Sum of Square**	**Mean Square**	**F**	**SIG. at 0.01**
Self Regulated Learning	**SS Among**	3	152.9188	50.972	0.715	NS
	SS Within	156	11117.02	71.262		
	SS Total	159	11269.94			

The above Table, it is reveals the calculated F-value of comparison of means of student teachers with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL on Educational Achievement Test. The F-value of the above comparison of means of Total Group of Male-UHL, Male-MHL, Female-UHL and Female-MHL sample is 0.715 with Mean

Square of SS-Among and SS-Within are 50.972 and 71.262, which is not significant at 0.01 level of significance.

Graph: Difference of Mean score between above two selected sample group presented by bar graph: **21**

Interpretation: Therefore, it can be inferred that means of Female-MHL student teachers Male-UHL,Male-MHL and Female-UHL on Educational Achievement Test. So, **H_O48** is accepted, which stated as "There will be no significant difference between mean score of Total Group on Educational Achievement Test with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL"

Effect of co-relation between score of post-test of Self Regulated Learning Rating Scale, Goal Setting Rating Scale and Educational Achievement (Sample of Male Group)

$H0_{49}$ There will be no significant co-relation between Post-test of Self-Regulated Rating Scale, Goal setting Rating Scale and Educational Achievement with reference to Male Control Group.

In this research effect of Co-relation Between Post-test of Self Regulated Learning Rating Scale, Goal Setting Rating Scale and Educational Achievement of Sample of Male Group are presented as follows.

Table:4.4.7.1

Co-relation Between Post-Test of Self Regulated Learning Rating Scale, Goal Setting Rating Scale and Educational Achievement (Sample of Male Control Group)

	Name Of Group	N	R	SE r
1	Self Regulated Learning	80	0.118	0.110
	Goal Setting	80		
2	Self Regulated Learning	80	0.341	0.098
	Educational Achievement	80		
3	Goal Setting	80	0.188	0.107
	Educational Achievement	80		

Co-relation: 01:

From the table, it is conclude that 0.118 co-relation with 0.110 standard error of co-relation found between score of student teachers on post-test of Total Sample Male Group on Self Regulated Learning and Goal Setting Test, which is positive value and vary far away from the value of 1.00 , So it is conclude that there is positive and low co-relation

between score of student teachers on post-test of Total Sample Male control Group on Self Regulated Learning and Goal Setting Test.

Co-relation: 02 :

From the table, it is conclude that 0.341 co-relation with 0.098 standard error of co-relation found between score of student teachers on post-test of Total Sample Male Group on Self Regulated Learning and Educational Achievement Test, which is positive value and vary far away from the value of 1.00 , So it is conclude that there is positive and low co-relation between score of student teachers on post-test of Total Sample Male Group on Self Regulated Learning and Educational Achievement Test.

Co-relation: 03:

From the table, it is conclude that 0.188 Co-relation with 0.107 standard error of Co-relation found between score of student teachers on post-test of Total Sample Male Group on Self Regulated Learning and Educational Achievement Test, which is positive value and vary far away from the value of 1.00 , So it is conclude that there is positive and low Co-relation between score of student teachers on post-test of Total Sample Male Group on Goal Setting Test and Educational Achievement Test.

Effect of Co-relation Between Score of Post-test of Self Regulated Learning Rating Scale, Goal Setting Rating Scale and Educational Achievement (Sample of Female Control Group)

H_O50 There will be no significant co-relation between Post-test of Self-Regulated Rating Scale, Goal setting Rating Scale and Educational Achievement with reference to Female Control Group.

In this research effect of Co-relation Between Post-test of Self Regulated Learning Rating Scale, Goal Setting Rating Scale and Educational Achievement of Sample of Female Group are presented as follows.

Table:4.4.8.1

Co-relation Between Post-Test of Self Regulated Learning Rating Scale, Goal Setting Rating Scale and Educational Achievement (Sample of Female Control Group)

	Name Of Group	**N**	**R**	**SE r**
4	Self Regulated Learning	80	0.134	0109
	Goal Setting	80		
5	Self Regulated Learning	80	0.245	0.105
	Educational Achievement	80		
6	Goal Setting	80	0.128	0.109
	Educational Achievement	80		

Co-relation: 04:

From the table, it is conclude that 0.134 Co-relation with 0.109 standard error of co-relation found between score of student teachers on post-test of Total Sample Female Group on Self Regulated Learning and Goal Setting Test, which is positive value and vary far away from the value of 1.00 , So it is conclude that there is positive and low co-relation between score of pre-service teacher on post-test of Total Sample Female Group on Self Regulated Learning and Goal Setting Test

Co-relation: 05: s

From the table, it is conclude that 0.245 co-relation with 0.105 standard error of co-relation found between score of student teachers on post-test of Total Sample Female Group on Self Regulated Learning and Educational Achievement Test, which is positive value and vary far away from the value of 1.00 , So it is conclude that there is positive and

low co-relation between score of student teachers on post-test of Total Sample Female Group on Self Regulated Learning and Educational Achievement Test.

Co-relation: 06 :

From the table, it is conclude that 0.128 co-relation with 0.109 standard error of co-relation found between score of student teachers on post-test of Total Sample Female Group on Self Regulated Learning and Educational Achievement Test, which is positive value and vary far away from the value of 1.00 , So it is conclude that there is positive and low co-relation between score of student teachers on post-test of Total Sample Female Group on Goal Setting Test and Educational Achievement Test.

Effect of Co-relation Between Score of Post-test of Self Regulated Learning Rating Scale, Goal Setting Rating Scale and Educational Achievement (Sample of Male Experimental Group)

H_O51 There will be no significant co-relation between Post-test of Self-Regulated Rating Scale, Goal setting Rating Scale and Educational Achievement with reference to Male Experimental Group.

In this research effect of Co-relation Between Post-test of Self Regulated Learning Rating Scale, Goal Setting Rating Scale and Educational Achievement of Sample of Male Experimental Group are presented as follows.

Table:4.4.9.1

Co-relation Between Post-Test of Self Regulated Learning Rating Scale, Goal Setting Rating Scale and Educational Achievement (Sample of Male Experimental Group)

	Name Of Group	N	R	SE r
7	Self Regulated Learning	40	0.192	0.152
	Goal Setting	40		
8	Self Regulated Learning	40	0.221	0.150
	Educational Achievement	40		
9	Goal Setting	40	0.008	0.158
	Educational Achievement	40		

Co-relation: 07:

From the table, it is conclude that 0.192 co-relation with 0.152 standard error of co-relation found between score of student teachers on post-test of Total Sample Male Experimental Group on Self Regulated Learning and Goal Setting Test, which is positive value and vary far away from the value of 1.00 , So it is conclude that there is positive and low co-relation between score of student teachers on post-test of Total Sample Male Experimental Group on Self Regulated Learning and Goal Setting Test

Co-relation: 08:

From the table, it is conclude that 0.221 co-relation with 0.150 standard error of co-relation found between score of student teachers on post-test of Total Sample Male Experimental Group on Self Regulated Learning and Educational Achievement Test, which is positive value and vary far away from the value of 1.00 , So it is conclude that there is positive and low co-relation between score of student teachers on post-test of Total Sample Male Experimental Group on Self Regulated Learning and Educational Achievement Test.

Co-relation: 09:

From the table, it is conclude that 0.008 co-relation with 0.158 standard error of co-relation found between score of student teachers on post-test of Total Sample Male Experimental Group on Self Regulated Learning and Educational Achievement Test, which is positive value and vary far away from the value of 1.00 , So it is conclude that there is positive and low co-relation between score of student teachers on post-test of Total Sample Male Experimental Group on Goal Setting Test and Educational Achievement Test.

Effect of Co-relation Between Score of Post-test of Self Regulated Learning Rating Scale, Goal Setting Rating Scale and Educational Achievement (Sample of Female Experimental Group)

H_O52 There will be no significant co-relation between Post-test of Self-Regulated Rating Scale, Goal setting Rating Scale and Educational Achievement with reference to Female Experimental Group.

In this research effect of Co-relation Between Post-test of Self Regulated Learning Rating Scale, Goal Setting Rating Scale and Educational Achievement of Sample of Female Experimental Group are presented as follows.

Table:4.4.10.1

Co-relation Between Post-Test of Self Regulated Learning Rating Scale, Goal Setting Rating Scale and Educational Achievement (Sample of Female Experimental Group)

	Name Of Group	N	R	SE r
10	Self Regulated Learning	40	0.217	0.150
	Goal Setting	40		
11	Self Regulated Learning	40	0.148	0.154
	Educational Achievement	40		
12	Goal Setting	40	0.007	0.158
	Educational Achievement	40		

Co-relation: 10:

From the table, it is conclude that 0.217 co-relation with 0.150 standard error of co-relation found between score of student teachers on post-test of Total Sample Female Experimental Group on Self Regulated Learning and Goal Setting Test, which is positive value and vary far away from the value of 1.00 , So it is conclude that there is positive and low co-relation between score of student teachers on post-test of Total Sample Female Experimental Group on Self Regulated Learning and Goal Setting Test

Co-relation: 11:

From the table, it is conclude that 0.148 co-relation with 0.154 standard error of co-relation found between score of student teachers on post-test of Total Sample Female Experimental Group on Self Regulated Learning and Educational Achievement Test, which is positive value and vary far away from the value of 1.00 , So it is conclude that there is positive and low co-relation between score of student teachers on post-test of Total Sample Female Experimental Group on Self Regulated Learning and Educational Achievement Test.

Co-relation: 12:

From the table, it is conclude that 0.007 co-relation with 0.158 standard error of co-relation found between score of student teachers on post-test of Total Sample Female Experimental Group on Self Regulated Learning and Educational Achievement Test, which is positive value and vary far away from the value of 1.00 , So it is conclude that there is positive and low co-relation between score of student teachers on post-test of Total Sample Female Experimental Group on Goal Setting Test and Educational Achievement Test.

Effect of Co-relation Between Control Group of Pre-test and Co-relation Between Control Group of Post-test of Self Regulated Learning Rating Scale, Goal Setting Rating Scale and Educational Achievement (Sample of Male Group)

H_O53 There will be no significant co-relation between Pre-test and Post-test of Self-Regulated Rating Scale, Goal setting Rating Scale and Educational Achievement with reference to Male Control Group.

In this research effect of Co-relation Between Control Group of Pre-test and Co-relation Between Control Group of Post-test of Self Regulated Learning Rating Scale, Goal Setting Rating Scale and Educational Achievement of Sample of Male Group are presented as follows.

Table:4.4.11

Co-relation Between Control Group of Pre-test and Post-Test (Sample of Male Group)

Co-relation Between Control Group of Pre-test				**Co-relation Between Control Group of Post-test**			
Male	SRL	GS	EDA		SRL	GS	EDA
SRL		0.156	0.05	SRL		0.118	0.341
GS			0.043	GS			0.188
EDA				EDA			

There is positive and very low co-relation between Self Regulated Learning and Goal Setting of Male on Pre-Test and Post-Test of Self Regulated Learning and Goal Setting.

There is positive and very low co-relation between Self Regulated Learning and Educational Achievement Test of Male on Pre-Test and Post-Test of Self Regulated Learning and Educational Achievement Test.

There is positive and very low co-relation between Goal Setting and Educational Achievement Test of Male on Pre-Test and Post-Test of Goal Setting and Educational Achievement Test.

Effect of Co-relation Between Control Group of Pre-test and Co-relation Between Control Group of Post-test of Self Regulated Learning Rating Scale, Goal Setting Rating Scale and Educational Achievement (Sample of Female Group)

H_O54 There will be no significant co-relation between Pre-test and Post-test of Self-Regulated Rating Scale, Goal setting Rating Scale and Educational Achievement with reference to Female Control Group.

In this research effect of Co-relation Between Control Group of Pre-test and Co-relation Between Control Group of Post-test of Self Regulated Learning Rating Scale, Goal Setting Rating Scale and Educational Achievement of Sample of Female Group are presented as follows.

Table:4.4.12
Co-relation Between Control Group of Pre-test and Post-Test (Sample of Female Group)

Co-relation Between Control Group of Pre-test				**Co-relation Between Control Group of Post-test**			
	SRL	GS	EDA		SRL	GS	EDA
SRL		0.151	0.139	SRL		0.107	0.048
GS			0.085	GS			0.156
EDA				EDA			

There is positive and very low co-relation between Self Regulated Learning and Goal Setting of Female on Pre-Test and Post-Test of Self Regulated Learning and Goal Setting.

There is positive and very low co-relation between Self Regulated Learning and Educational Achievement Test of Female on Pre-Test and Post-Test of Self Regulated Learning and Educational Achievement Test.

There is positive and very low co-relation between Goal Setting and Educational Achievement Test of Female on Pre-Test and Post-Test of Goal Setting and Educational Achievement Test.

Effect of Co-relation Between Control Group of Pre-test and Co-relation Between Control Group of Post-test of Self Regulated Learning Rating Scale, Goal Setting Rating Scale and Educational Achievement (Sample of UHL Group)

H_O55 There will be no significant co-relation between Pre-test and Post-test of Self-Regulated Rating Scale, Goal setting Rating Scale and Educational Achievement with reference to UHL Control Group.

In this research effect of Co-relation Between Control Group of Pre-test and Co-relation Between Control Group of Post-test of Self Regulated Learning Rating Scale, Goal Setting Rating Scale and Educational Achievement of Sample of UHL Group are presented as follows.

Table:4.4.13

Co-relation Between Control Group of Pre-test and Post-Test (Sample of UHL Group)

Co-relation Between Control Group of Pre-test				**Co-relation Between Control Group of Post-test**			
	SRL	GS	EDA		SRL	GS	EDA
SRL		0.106	-0.014	SRL		0.037	-0.017
GS			0.123	GS			0.169
EDA				EDA			

There is positive and very low co-relation between Self Regulated Learning and Goal Setting of UHL on Pre-Test and Post-Test of Self Regulated Learning and Goal Setting.

There is negative and very low co-relation between Self Regulated Learning and Educational Achievement Test of UHL on Pre-Test and Post-Test of Self Regulated Learning and Educational Achievement Test.

There is positive and very low co-relation between Goal Setting and Educational Achievement Test of UHL on Pre-Test and Post-Test of Goal Setting and Educational Achievement Test.

Effect of Co-relation Between Control Group of Pre-test and Co-relation Between Control Group of Post-test of Self Regulated Learning Rating Scale, Goal Setting Rating Scale and Educational Achievement (Sample of MHL Group)

H_O56 There will be no significant co-relation between Pre-test and Post-test of Self-Regulated Rating Scale, Goal setting Rating Scale and Educational Achievement with reference to MHL Control Group.

In this research effect of Co-relation Between Control Group of Pre-test and Co-relation Between Control Group of Post-test of Self Regulated Learning Rating Scale, Goal Setting Rating Scale and Educational Achievement of Sample of MHL Group are presented as follows.

Table:4.4.14
Co-relation Between Control Group of Pre-test and Post-Test (Sample of MHL Group)

Co-relation Between Control Group of Pre-test				**Co-relation Between Control Group of Post-test**			
	SRL	GS	EDA		SRL	GS	EDA
SRL		0.200	-0.125	SRL		0.195	0.268
GS			0.138	GS			0.18
EDA				EDA			

There is positive and very low co-relation between Self Regulated Learning and Goal Setting of MHL on Pre-Test and Post-Test of Self Regulated Learning and Goal Setting.

There is negative and very low co-relation between Self Regulated Learning and Educational Achievement Test of MHL on Pre-Test and positive and very low co-relation between Self Regulated Learning and Educational Achievement Test of MHL on Post-Test of Self Regulated Learning and Educational Achievement Test.

There is positive and very low co-relation between Goal Setting and Educational Achievement Test of MHL on Pre-Test and Post-Test of Goal Setting and Educational Achievement Test.

Effect of Co-relation Pre-test and Post-test of Self Regulated Learning Rating Scale, Goal Setting Rating Scale and Educational Achievement (Sample of Highly Intelligence Group)

H_O57 There will be no significant co-relation between Pre-test and Post-test of Self-Regulated Rating Scale, Goal setting Rating Scale and Educational Achievement with reference to Highly Intelligence Control Group.

In this research effect of Co-relation Between Control Group of Pre-test and Co-relation Between Control Group of Post-test of Self Regulated Learning Rating Scale, Goal Setting Rating Scale and Educational Achievement of Sample of Hihgly Intelligence Group are presented as follows.

Table:4.4.15
Co-relation Between Control Group of Pre-test and Post-Test (Sample of Highly Intelligence Group)

Co-relation Between Control Group of Pre-test				**Co-relation Between Control Group of Post-test**			
HI	SRL	GS	EDA		SRL	GS	EDA
SRL		0.121	-0.203	SRL		0.016	0.283
GS			0.068	GS			0.23
EDA				EDA			

There is positive and very low co-relation between Self Regulated Learning and Goal Setting of Highly Intelligence on Pre-Test and Post-Test of Self Regulated Learning and Goal Setting.

There is negative and very low co-relation between Self Regulated Learning and Educational Achievement Test of Highly Intelligence on Pre-Test and positive and very low co-relation between Self Regulated Learning and Educational Achievement Test of Highly Intelligence on Post-Test of Self Regulated Learning and Educational Achievement Test.

There is positive and very low co-relation between Goal Setting and Educational Achievement Test of Highly Intelligence on Pre-Test and Post-Test of Goal Setting and Educational Achievement Test.

Effect of Co-relation Between Control Group of Pre-test and Co-relation Between Control Group of Post-test of Self Regulated Learning Rating Scale, Goal Setting Rating Scale and Educational Achievement (Sample of Lower Intelligence Group)

H_O58 There will be no significant co-relation between Pre-test and Post-test of Self-Regulated Rating Scale, Goal setting Rating Scale and Educational Achievement with reference to Lower Intelligence Control Group.

In this research effect of Co-relation Between Control Group of Pre-test and Co-relation Between Control Group of Post-test of Self Regulated Learning Rating Scale, Goal Setting Rating Scale and Educational Achievement of Sample of Lower Intelligence Group are presented as follows.

Table:4.4.16

Co-relation Between Control Group of Pre-test and Post-Test (Sample of Lower Intelligence Group)

Co-relation Between Control Group of Pre-test				**Co-relation Between Control Group of Post-test**			
LI	SRL	GS	EDA		SRL	GS	EDA
SRL		0.198	0.017	SRL		0.177	0.156
GS			0.056	GS			0.141
EDA				EDA			

There is positive and very low co-relation between Self Regulated Learning and Goal Setting of Lower Intelligence on Pre-Test and Post-Test of Self Regulated Learning and Goal Setting.

There is positive and very low co-relation between Self Regulated Learning and Educational Achievement Test of Lower Intelligence on

Pre-Test and positive and very low co-relation between Self Regulated Learning and Educational Achievement Test of Lower Intelligence on Post-Test of Self Regulated Learning and Educational Achievement Test.

There is positive and very low co-relation between Goal Setting and Educational Achievement Test of Lower Intelligence on Pre-Test and Post-Test of Goal Setting and Educational Achievement Test.

Techniques and Findings in the related Researches:

(1) Digennaro King, Milissa(2003):

Findings:

(1) Fifth Grade student had Positive attitudes towards Science and high levels of self-efficacy for science.

(2) Elementary students employed a wide variety of cognitive and met cognitive strategies to support science learning.

(3) High Achieving students reported higher levels of Self-regulatory learning behavior than other fifth grade students.

(2) Lynn, R Martens (2004):

Findings:

(1) Students in the control group used a greater variety of strategies, but achieved lower means of test scores than experimental group; indicating that the experimental group was more selective with strategy types and more effective in those methods applied.

(3) Zealand Ruth, Adrienue (2004):

Findings:

(1) Students with LD earned significantly lower reading and math achievement test scores than the students with NLD.

(2) Students with NLD gave more strategies for academic work than did students with LD.

(3) Overall minimal differences between the groups on measures suggest that these collective variable did not greatly impact on achievement; and secondarily, that there may be problems

in the classification process of students with and without learning disabilities.

(4) Melanie, L Missildine (2004):

Statistic Used:

(1) Multiple regression co-relations.

(2) Factorial MANOVA.

(3) Two-way path analysis.

Findings:

(1) Significant relations were noted between motivation, anxiety and test score for both Fifth and sixth - grade learners in mathematics. With respect to motivation, relations existed for gender and ethnicity and free-reduced lunch (SES).

(2) When combined gender, ethnicity, and free reduced lunch affect motivation.

(3) Differences were observed for the two grade levels in relations between strategies used across the six different learning context.

(5) Krista Rence, Muis(2004):

Findings:

(1) Problem-solving students profiled as predominantly rational had the highest frequency of planning, monitoring and control.

(2) Differences were found in their beliefs about the structure of knowledge and the source of knowledge.

(3) Differences were found in the quality of rational arguments between lower and upper year University students when solving problems.

(6) Sandra,G Hierholzer (2005):

Technique :

(1) MANOVA.

(2) Multiple regressions.

Findings:

(1) Analyses indicated slight variations in the way strategy use was related to different achievement measures.

(7) Remi, Trudel, (2009):

Findings:

(1) The result shows do acriptive model demonstrating how the processing of information can aid or impede attempts to self-regulated.

(8) Tosha Michelle, Lewis, (2010):

Technique :

(1) Factor analysis.

Findings:

(1) Self-monitoring was not significantly correlated with leadership effectiveness.

(2) Self-monitoring was found to be significantly correlated with trust, leader-member exchange, and emotional intelligence.

(3) Authenticity was strongly related to leadership effectiveness and mediated the relationship between trust and leadership effectiveness. In addition, the leader-member exchange mediated the relationship between authenticity and leadership effectiveness.

(4) Leader's ability to be genuine, transparent, trustworthy, and authentic allows him or her to create a successful exchange with their direct reports.

(9) Mary Louise, Suveges Bitar, (2010):

Technique :

(1) Hatch's description of typological analysis was used to analyze the interview transcripts.

Findings:

(1) The interview data suggested that whether the 11 participants in this study primarily cited positive or negative experiences with their first teachers, those early experiences influenced their child guidance approaches in the classroom and the ways they incorporated these experiences into their teaching.

(2) Participants also cited self-regulation skills as important behaviors critical for young children's transition into kindergarten.

(10) Hyuksoon S. Song, (2010):

Findings:

(1) The Medical clerkship students' prior knowledge directly positively affected their learning outcome, self-efficacy and performance approach goal orientation.

(2) The learners' self-regulation showed a significant positive direct effect on learning outcome.

(3) In terms of motivational constructs, learners' mastery goal orientation directly affected their learning outcome.

(4) Learners' performance approach goal orientation showed a significant negative direct effect on learning outcome.

(11) Peter, Plattel (2010):

Findings:

(1) Participants prompted to modify their use of IR learned significantly more words than those not prompted.

(2) Endorsing significantly greater levels of self-efficacy and higher self-evaluative standards, irrespective of the type of quiz feedback they received.

(3) Those Participants who received outcome plus corrective feedback but were not allowed to modify IK displayed significantly lower task interest and perceived.

(12) Stephen Peter, Gramlich, (2010):

Technique :

(1) Descriptive statistics.

(2) Frequency distributions.

(3) Co-relation matrices.

(4) t-tests.

(5) Multiple regressions.

(6) Logistic regressions.

Findings:

(1) Goal setting and time management were significant contributors in the model for predicting non-remedial students' final average.

(2) Non-remedial students may have been more realistic about their course goals.

(3) Non-remedial students were overly optimistic about allocating their time.

(13) Patrik, Ragosta, (2010)

Findings:

(1) Analyses showed differences effect sizes for some variables, although moderators accounted for little of the between-studies variation.

(14) Yougchao, Shi, (2010)

Findings:

(1) Compared with Chinese pairs, Canadian pairs engaged more with tasks of their own choice as revealed in the computer logs and favored more individually oriented actions both in solving their problem and in learning on the computer tutor.

(2) Canadian pairs demonstrated a stronger preference for the employment of individually oriented self-regulatory strategies in the forethought and performance phases of self-regulated learning than did Chinese pairs.

(3) There were significant differences between Canadian pairs and Chinese pairs in monitoring, motivation, elaboration, clarification, and enrolment structuring with stronger individual orientation for the Canadian pairs.

(15) White, (2011):

Findings:

(1) The SRL strategy of collective efficacy, or social assistance from peers, It considered to be the key factor in achieving academic success by all the subjects.

(2) The successful students employed forethought and goal-setting and strategic planning, and found particular intrinsic value in their academic tasks.

(16) Arlene, Mullin, (2011):

Technique :

(1) t-test.

(2) ANOVA.

(3) Co-relation.

Findings:

(1) Discriminate analysis indicated that Conditional Knowledge Instructional Practices was the variable that predicted teacher positions in the achievement rankings of these schools.

(2) Teacher self-regulated learning behaviors and the Instructional practices they use to promote self-regulated learning in students influence academic achievement in English Language Arts.

(17) Amy Marie, Maxeiner, (2011):

Technique :

(1) Profile analysis was used to analyze the data.

Findings:

(1) The teaching orientation of the CI and type of learning experience were not related to the learning aspects of the student's self-regulated learning profile.

(2) There was significant relationship between the collaborative learning experiences and use of MSLQ learning strategies provides insights for clinical education practice.

(18) George Albert, Michna, (2011):

Technique :

(1) MANOVA.

Findings:

(1) Results from MANOVAs failed to find any differences in the measures of cognitive validity by ethnicity.

(2) Results from cognitive pre-testing surest that no statistically significant differences were noted among ethnic groups. When the metacognitive self-regulation items were examined for the total sample, two items were found to have relatively lower levels of cognitive validity.

(19) Shirley, Griffith, (1994):

Technique :

(1) t-tests.

(2) ANOVAS.

Findings:

(1) There was no significant effect (at the $p < .05$) of treatment on participation in career counselling or on any of the 15 career-counselling outcomes.

(2) The goal-setting intervention produced greater benefits than the control condition.

(3) Subjects in both groups were generally satisfied with their respective programs and experienced many important benefits: a decline in the number of problems that were interfering with career decision-making; an increase in their level of career decided-ness; a sharp rise in their levels of comfort about making a career decision, self-clarity about their interests and abilities, and knowledge of pertinent occupations end training; and a modest increase in level of decisiveness.

(21) Sean Christopher, Payant (2005):

Technique :

(1) t-tests.

(2) ANOVAS.

Findings:

(1) Structured goal setting did have a positive impact on a goal achievement.

(2) Co-relations between goal orientation (mastery or performance) and the dependent variable were not significant.

(21) Colin Arthur, Chasteauneuf (2005):

Findings:

(1) Motivational states influenced the subject's goal orientations and their subsequent selection of processing strategies and processing of text.

(22) Melissa, Sapio, (2010):

Findings:

(1) Goal orientation was investigated to offer a clearer understanding of the academic resilience of students.

(23) Ordene V. Edward, (2010):

Technique :

(1) ANOVA.

(2) Standard regression.

(3) Path analysis.

Findings:

1. The attention was a partial mediating variable between goals and learning; metacognition mediated goals and learning a mastery goal leads to better metacognition.

(24) Jullia Louise, Carrell, (2011):

Technique :

(1) t-test.

(2) MANOVA.

Findings:

(1) Students displayed greater understanding of the mastery-approach, performance-approach, and performance- avoid once fcoal statements than the mastery avoidance goal statements.

(2) Student's achievement level did not affect the range of scores.

(3) Students identified the mastery-approach statements as the most important goal statements.

(25) Melissa Salana, Collins, (2011):

Findings:

There was no statistical different in the levels of support, goals, and incentives received among minority and nonminority NBCTs during their candidacy.

(26) Andrew J. Woolwine, (2011):

Findings:

(1) There was no significant differences were found when comparing the type of counseling students received with their scores on the GAS in academics or behavior.

(2) There was no significant differences were found when hours of treatment, combined with the type of counseling were compared to students' scores on the GAS.

(27) Denise R, Hayman(2005):

Findings:

(1) Engineering students use self-regulated learning strategies and high achievers use more learning strategies than low achievers.

(2) Out Of the 653 strategies used overall high achievers used 429 (66%) and low achiever used 224 (34%). Of the nine strategies used, seeking assistance, utilizing notes, and reviewing text were the most frequent approaches used for high achievers.

(28) Peter, Miksza, (2007):

Technique :

(1) Multi-level model analyses.

Findings:

Moderate co-relations were found:

(a) Among the behaviors repeat section, whole-part-whole, and slowing;and

(b) Between performance achievement and the behaviors repeat section, whole-part-whole, slowing, and skipping directly-to or just before critical musical sections of the etude.

(29) Suznne P. Lindt, (2010):

Technique :

(1) Factor analysis.

Findings:

(1) To increased parent academic communication may influence students' personal goals for improving their skills and their grades in college.

(2) The period of emerging adulthood. parents may continue to have an influence on ethnically diverge students' adoption of achievement goals in college.

(3) These students from their indentities a greater belief of the importance of achievement to their ethnic groups may also play an influential role in their adoption of achievement goals in college.

(30) Yi-Lung, Kuo, (2010):

Technique :

(1) Multiple regression.

Technique: Post hoc probing techniques were used.

Findings:

(1) 8^{lh} grade females demonstrated greater motivation, social control, and self-regulation than 8^{th} grade males.

(2) Among female students, effects were positive for females with higher prior achievement and negative for females with lower prior achievement for both motivation and social control.

(31) Rosie M. Hector, McGhee, (2010):

Technique :

(1) co-relation.

Findings:

(1) There were statistically significant relationships between asynchronous interaction and academic achievement and between online technologies self-efficacy and academic achievement.

(2) There were low co-relations between self- regulated learning and academic achievement.

(32) Amy Copeland, Ballard, (2010):

Findings:

(1) There was significant differences in the student achievement growth for students based on the number of years they received standards-based reports in middle school.

(2) Students had a significantly greater personal goal orientation for mastery rather than for performance in both English and math In addition, students perceived H significantly greater classroom goal orientation for mastery rather than for performance for both their English and math classrooms.

(3) There was no relationship between student achievement growth and students' personal goal orientations, perceptions of classroom goal orientations, and understanding and use of standards-based reports.

(33) Roberta Kathryn, Halloran (2011):

Technique :

(1) Multiple regression.

Findings:

(1) Self-regulated learning strategies are most predictive of achievement when the ultimate goal is mastering the content of verbal material in English classes.

(2) Teachers can begin to facilitate a change in cognitive strategies, which could subsequently lead to increased retention of mathematical information in the classroom.

(3) These results are promising for students who demonstrate weaker working memory skills.

(34) Angela B. McMasters, (2011):

Findings:

(1) Teachers reported observing positive effects on students' achievement, learning habits, motivation toward reading tasks, and reading self- efficacy.

General conclusion:

There were so many Techniques used in related Researches like, Multiple regression co-relation , Factorial MANOVA, Two-way path Analysis, Frequency Distribution , t-test, Logistic regression, ANOVAs, Standard regression etc. I have borrowed

1. Product moment co-relation(r)
2. t-test.
3. ANOVA.
4. F-ratios for my Research work.

- Major findings of these Related Researches were High Achieving students reported higher levels of self regulatory learning behavior.
- Experimental group was more selective with strategy type than control group students.
- Students with learning disability (LD) earned significantly lower reading and math achievement test scores than the students with NLD.
- The learner's self-regulation showed a significant positive direct effect on learning outcome.
- The SRL strategy of collective efficacy from peers it considered to be the key factor in achieving academic success by all the subjects.

- Structured goal setting did have a positive impact on a goal achievement.

1. My research findings are Mean score of UHL student teachers of experimental group are significantly higher than the mean score of MHL student teachers of experimental group on Self Regulated Learning Rating Scale.
2. Mean score of Male student teachers of Experimental Group are significantly higher than the mean score of Male student teachers of Control Group on Self Regulated Learning Rating Scale.
3. Mean score of Low Intelligent student teachers of Experimental Group are significantly higher than the mean score of Low Intelligent student teachers of Control Group on Self Regulated Learning Rating Scale.
4. There is significant difference between mean score of Control Group and Experimental Group Male of student teachers on Goal Setting Rating Scale. It means the mean score of Male student teachers of Experimental Group are significantly higher than the mean score of Male student teachers of Control Group on Goal Setting Rating Scale.
5. There is no significant difference between mean score of Highly Intelligent and Lower Intelligent student teachers of experimental Group on Educational Achievement Test.
6. There is significant difference between mean score of Control Group and Experimental Group of Total student teachers on Educational Achievement Test. It means the mean score of Total student teachers of Experimental Group are significantly higher than the mean score of Total student teachers of Control Group on Educational Achievement Test.

7. There is positive and low co-relation between score of student teachers on post-test of Total Sample Male Group on Self Regulated Learning and Goal Setting Test, Self Regulated Learning and Educational Achievement Test and Goal Setting Test and Educational Achievement Test.

Chapter-5

SUMMARY, CONCLUSION AND SUGGESTION FOR FURTHER RESEARCH

5.1	Introduction
5.2	Statement of the problem
5.3	Objectives of the problem
5.4	Operational definition of the study
5.5	Delimitation of the study
5.6	Population and Sample
5.7	Tools Used for the study
5.8	Rationale of the study
5.9	Findings
5.10	Recommendation for further study
5.11	Suggestion
5.12	Conclusion

CHAPTER 5

SUMMARY, CONCLUSION AND SUGGESTION FOR FURTHER RESEARCH.

Introduction:

This chapter deals with the summary of the study. The main objective of the present Research was to study "The Effect Of Self-regulated learning Cycle On Goal setting and Achievement of Student teachers Preparation''.

The following recommendation are made for the further studies keeping in mind the views and achievement of the previous studies, results from the self efforts and summary drawn from the study.

The root/base of the problems are specified by the results drawn from the present study and further research probabilities related suggestions recommend the problems of future.

In the present chapter the researcher has tried to focus on the whole research work and wanted to know whether the pre determined aims and objectives are achieved or not or at what extend it is achieved means what are the achievements of the present study and what are the probabilities in this particular direction.

Statement of the problem:

"The Effect Of Self-regulated learning Cycle On Goal setting and Achievement of Student Teacher ''

Objectives of the problem:

(1) To find out the goal setting of student teachers male & female teachers, control & Experimental group.

(2) To find out the effect of SRL Cycle on the goal setting of student teachers male & female teachers of Experimental group.

(3) To find out the achievement of student teachers male & female teachers, control & Experimental group.

(4) To find out the effect of SRL Cycle on the achievement of student teachers male & female teachers of Experimental group.

(5) To find out the effect of different strategies on the performance of student teachers male & female teachers of Experimental group.

(6) To find out the use of self-monitoring study schedule on the performance of student teachers male & female teachers (Experimental group).

(7) To study the co-relation between score of Student teachers on Self Regulated Learning scale and Goal Setting.

(8) To study the co-relation between score of Student teachers on Self Regulated Learning scale and Educational Achievement Test.

(9) To study the co-relation between score of Student teachers on Goal Setting and Educational Achievement Test.

Operational definition of the study:

(1) Self-regulated learning:

" self-regulated learning is active, constructive process hereby learners set goals for their learning and then attempt monitor regulate and control their cognition, motivation and behavior, guided and constrained by their goals and the contextual features of the environment. Those self-regulated activities can mediate the relationship between individuals and context and their overall achievement. -Pintrich(2000) p.453

“Self-regulated learning is a form of learning in which individuals, depending on the type of their motivation to learn autonomously, deploy one or more. Self-regulatory measures(of a cognitive, meta cognitive, behavioral nature) and monitor the progress of their learning”

-Shiefele and Perkrum(1996) p.258

“ Self-regulated learners have motivational advantage of high level of self efficacy and intrinsic motivation in which the learner actively select structure and create social and material environment which optimize their learning processes.”

-Zimmerman.B. Bonners & Kovach,R 1996

Self-regulated is perhaps the issue that integrates most completely with a framework of lifelong learning in post-compulsory education.

SRL Means:

That a person is met cognitively, socially, motivationally and behaviorally active in his or her own problem-solving processes using self observation, self-judgment and self-reaction to attend to information plan and manage time process integrate and organize knowledge maintain a positive sense of self efficacy establish a productive work environment ;Use social resources effectively; and experience a positive anticipation about the potential outcomes of learning new information.

Therefore SRL Means:

1. Setting Goals
2. Monitor
3. Regulate
4. Control Cognitions
5. Motivation

6. Self-efficacy

7. Create Social environment

8. Select Structure

9. Material environment

10. Problem-solving process

11. Self-observation

12. Self-judgment

13. Using Social resources effectively

(2) Goal setting:

"Goal setting has been widely used to enhance work motivation."

"The end result or objective, which may be specified or required in advance."

http://www.About-goal-setting.com

Operational definition:

Therefore Goal setting means: Goal can be influenced at various stages of progression from goal setting to goal attainment.

(3) Achievement:

"In every case the achievement test calls for a demonstration of learning in some form that can be observed and assessed."

-Chauncy Henry p.448

"Achievement is the attainment of pupils in terms of marks obtained at the examination"

"Accomplishment or proficiency of performance in a given skill or body of knowledge"

Operational definition:

Achievement means scholarship achievement in subject.

Judge on the basis of scores obtained by the students.

Students scores on a test to be constructed and validated by the investigator.

(4) Student teachers:

People who are studying in the professional course of teacher preparedness (B.Ed.) for the purpose of attaining a job as a teacher.

Delimitation of the study:

Delimitation is the boundaries of a study and they help the researcher in conducting the study. The findings of the study also confine to these limitation. The present study is delimited to the following. (1) Only B.Ed Colleges of Mehsana District in Gujarat will be selected for the study.(2) Only some Components of Self-regulated Learning will be selected for the study.(3) Only two topics of Educational Psychology will be deal with in the content schedule.

Population and Sample:

It is not possible to collect data from every respondent selection to our study but not only from some functional part of the respondent. The process of selecting functional part of the respondent is calling sampling. A sample may be defined as a selected number from the population to represent it. Generally, this selection is done according to some rule or plan. By studying the sample, some inferences may be made about the population. In sampling studies conclusions derived from the population by just watching a few units or few individuals of the population. So it is necessary to examine the question of the degree of reliance which can be placed on the sample estimates. In this present study total 160 Student Teachers were selected by sampling of colleges.

Sample of the study								
	First College 80 Student Teachers				Second College 80 Student Teachers			
	40 Male		40 Female		40 Male		40 Female	
Type of group	20 Control Group	20 Experimental Group	20 Control Group	20 Experimental Group	20 Control Group	20 Experimental Group	20 Control Group	20 Experimental Group
Total Sample	160							

Tools Used for the study:

(1) Self-made questionnaire for self regulated learning:

Principles of planning Tool constructions.

6) Learning activities were prepared.

7) Learning related actions were executed (e.g. The cognitive strategies and processes necessary for understanding, retentions and transfer activated.)

8) The learning process were regulated by means of control and intervention strategies.

9) Outcomes were assessed. (e.g. by self-regulation.)

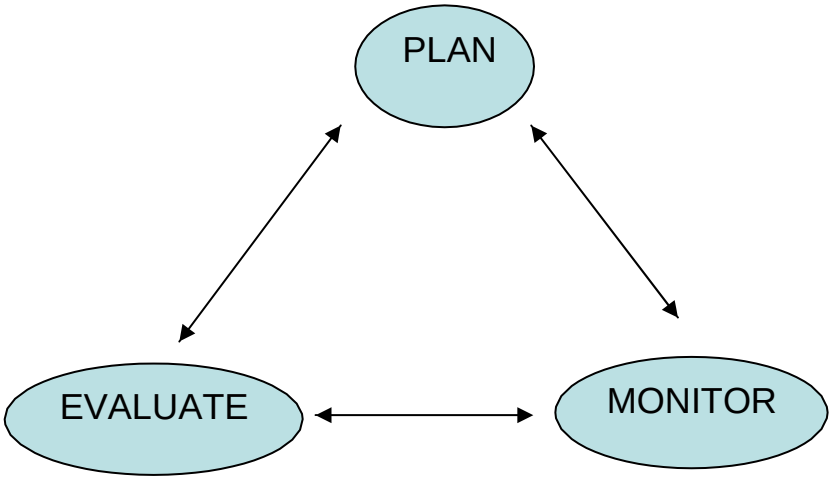
10) Motivation and concentration were maintained.

(2) Self-made model of SRL cycle for regulated learning:

There was three major phases in the SRL cycle: Planning one's learning, Monitoring progress while implementing the plan and evaluating the outcomes of the plan it's completed.

Below SRL cycle shows with the central importance of reflection throughout the process.

CYCLE OF SELF-REGULATED LEARNING



4) Planning phase:

The planning phase of SRL "sets the stage" for learning. During this phase. Investigator has done the following:

1) Analyzed the learning task.
2) Set learning goals (make sure these goals are very clear).
3) Planned learning strategies(consider a variety of ways to approach the learning task).

5) Monitoring phase:

During the monitoring phase, implement plan from phase one. While monitoring make sure that they are making progress forwards their learning goal.

6) Evaluating phase:

During the evaluating phase investigator determined how well chosen strategy worked.

(3) Self-made questionnaire for goal setting:

In this tool investigator has measured following points of goal setting:

1) Mastery-development goals.
2) Performance approach goals.
3) Work related goals.
4) Self-assertive goals.
5) Efficacy Beliefs.
6) Control Beliefs.
7) Surface strategies.
8) Deep strategies.
9) Achieving strategies.
10) Self-regulatory strategies.
11) Time management.
12) Effort management.
13) Help seeking.
14) Attitudes towards the course.

4) Survey for Achievement:

Techniques:

In this study following statistics was used.

1) Product moment co-relation(r).
2) t-test.
3) ANOVA.
4) F-ratios.

Rationale of the study:

Self-regulated learning is an unavoidable issue in learning especially in advanced education. In most of learning, learners required to be self-regulated learner, for instance, selecting goals to pursue, how to use the resources available to them, how to plan allocate resources, seek-help, evaluate their own performance revise and correct their own work by acquiring this

ability or by leading learners to this way as self-regulated students will take pride in their effort and meaning for teachers and student.

Findings:

(1) There was no significant difference between mean score of Male and Female student teachers of control Group on Self Regulated Learning Rating Scale.

(2) There was significant difference between mean score of UHL and MHL student teachers of control Group on Self Regulated Learning Rating Scale. It means the mean score of UHL student teachers of control group are significantly higher than the mean score of MHL student teachers of control group on Self Regulated Learning Rating Scale.

(3) There was no significant difference between mean score of Highly Intelligent and Lower Intelligent student teachers of control Group on Self Regulated Learning Rating Scale. There was no significant difference between mean score of Male and Female student teachers of experimental Group on Self Regulated Learning Rating Scale.

(4) There was no significant difference between mean score of Male and Female student teachers of experimental Group on Self Regulated Learning Rating Scale.

(5) There was significant difference between mean score of UHL and MHL student teachers of experimental Group on Self Regulated Learning Rating Scale. It was indicated that the mean score of UHL student teachers of experimental group are significantly higher than the mean score of MHL student teachers of experimental group on Self Regulated Learning Rating Scale.

(6) There was no significant difference between mean score of Highly Intelligent and Lower Intelligent student teachers of experimental Group on Self Regulated Learning Rating Scale.

(7) There was significant difference between mean score of Control Group and Experimental Group Male student teachers on Self Regulated Learning Rating Scale. It was indicated that the mean score of Male student teachers of Experimental Group are significantly higher than the mean score of Male student teachers of Control Group on Self Regulated Learning Rating Scale.

(8) There was significant difference between mean score of Control Group and Experimental Group Female student teachers on Self Regulated Learning Rating Scale. It means the mean score of Female student teachers of Experimental Group are significantly higher than the mean score of Female student teachers of Control Group on Self Regulated Learning Rating Scale.

(9) There was significant difference between mean score of Control Group and Experimental Group UHL student teachers on Self Regulated Learning Rating Scale. It was indicated that the mean score of UHL student teachers of Experimental Group are significantly higher than the mean score of UHL student teachers of Control Group on Self Regulated Learning Rating Scale.

(10) There was significant difference between mean score of Control Group and Experimental Group MHL of student teachers on Self Regulated Learning Rating Scale. It was indicated that the mean score of MHL student teachers of Experimental Group are significantly higher than the mean score of UHL student teachers of Control Group on Self Regulated Learning Rating Scale.

(11) There was no significant difference between mean score of Control Group and Experimental Group Highly Intelligent student teachers on Self Regulated Learning Rating Scale.

(12) There was significant difference between mean score of Control Group and Experimental Group of Lower Intelligent student teachers on Self Regulated Learning Rating Scale. It means the mean score of Low Intelligent student teachers of Experimental Group are significantly higher than the mean score of Lower Intelligent student teachers of Control Group on Self Regulated Learning Rating Scale.

(13) There was significant difference between mean score of Control Group and Experimental Group of Total student teachers on Self Regulated Learning Rating Scale. It was indicated that the mean score of Total student teachers of Experimental Group are significantly higher than the mean score of Total student teachers of Control Group on Self Regulated Learning Rating Scale.

(14) There was no significant difference between mean score of Male and Female student teachers of control Group on Goal Setting Rating Scale.

(15) There was no significant difference between mean score of UHL and MHL student teachers of control Group on Goal Setting Rating Scale.

(16) There was no significant difference between mean score of Highly Intelligent and Lower Intelligent student teachers of control Group on Goal Setting Rating Scale.

(17) There was no significant difference between mean score of Male and Female student teachers of experimental Group on Goal Setting Rating Scale.

(18) There was no significant difference between mean score of UHL and MHL student teachers of experimental Group on Goal Setting Rating Scale.

(19) There was no significant difference between mean score of Highly Intelligent and Lower Intelligent student teachers of experimental Group on Goal Setting Rating Scale.

(20) There was significant difference between mean score of Control Group and Experimental Group Male of student teachers on Goal Setting Rating Scale. It means the mean score of Male student teachers of Experimental Group are significantly higher than the mean score of Male student teachers of Control Group on Goal Setting Rating Scale.

(21) There was significant difference between mean score of Control Group and Experimental Group Female of student teachers on Goal Setting Rating Scale. It was indicated that the mean score of Female student teachers of Experimental Group are significantly higher than the mean score of Female student teachers of Control Group on Goal Setting Rating Scale.

(22) There was significant difference between mean score of Control Group and Experimental Group of UHL student teachers on Goal Setting Rating Scale. It was indicated that the mean score of UHL student teachers of Experimental Group are significantly higher than the mean score of UHL student teachers of Control Group on Goal Setting Rating Scale.

(23) There was significant difference between mean score of Control Group and Experimental Group of MHL student teachers on Goal Setting Rating Scale. It was indicated that the mean score of MHL student teachers of Experimental Group are significantly

higher than the mean score of UHL student teachers of Control Group on Goal Setting Rating Scale.

(24) There was significant difference between mean score of Control Group and Experimental Group of Highly Intelligent student teachers on Goal Setting Rating Scale. It was indicated that the mean score of Highly Intelligent student teachers of Experimental Group are significantly higher than the mean score of Highly Intelligent student teachers of Control Group on Goal Setting Rating Scale.

(25) There was significant difference between mean score of Control Group and Experimental Group of Low Intelligent student teachers on Goal Setting Rating Scale. It was indicated that the mean score of Lower Intelligent student teachers of Experimental Group are significantly higher than the mean score of Lower Intelligent student teachers of Control Group on Goal Setting Rating Scale.

(26) There was significant difference between mean score of Control Group and Experimental Group of Total student teachers on Goal Setting Rating Scale. It was indicated that the mean score of Total student teachers of Experimental Group are significantly higher than the mean score of Total student teachers of Control Group on Goal Setting Rating Scale.

(27) There was no significant difference between mean score of Male and Female student teachers of control Group on Educational Achievement Test.

(28) There was no significant difference between mean score of UHL and MHL student teachers of control Group on Educational Achievement Test.

(29) There was no significant difference between mean score of Highly Intelligent and Lower Intelligent student teachers of control Group on Educational Achievement Test.

(30) There was no significant difference between mean score of Male and Female student teachers of experimental Group on Educational Achievement Test.

(31) There was no significant difference between mean score of UHL and MHL student teachers of experimental Group on Educational Achievement Test.

(32) There was no significant difference between mean score of Highly Intelligent and Lower Intelligent student teachers of experimental Group on Educational Achievement Test.

(33) There was significant difference between mean score of Control Group and Experimental Group of Male student teachers on Educational Achievement Test. It was indicated that the mean score of Male student teachers of Experimental Group are significantly higher than the mean score of Male student teachers of Control Group on Educational Achievement Test.

(34) There was significant difference between mean score of Control Group and Experimental Group of Female student teachers on Educational Achievement Test. It was indicated that the mean score of Female student teachers of Experimental Group are significantly higher than the mean score of Female student teachers of Control Group on Educational Achievement Test.

(35) There was significant difference between mean score of Control Group and Experimental Group of UHL student teachers on Educational Achievement Test. It was indicated that the mean score of UHL student teachers of Experimental Group are significantly

higher than the mean score of UHL student teachers of Control Group on Educational Achievement Test.

(36) There was significant difference between mean score of Control Group and Experimental Group of MHL student teachers on Educational Achievement Test. It was indicated that the mean score of MHL student teachers of Experimental Group are significantly higher than the mean score of UHL student teachers of Control Group on Educational Achievement Test.

(37) There was significant difference between mean score of Control Group and Experimental Group of Highly Intelligent student teachers on Educational Achievement Test. It was indicated that the mean score of Highly Intelligent student teachers of Experimental Group are significantly higher than the mean score of Highly Intelligent student teachers of Control Group on Educational Achievement Test.

(38) There was significant difference between mean score of Control Group and Experimental Group Lower Intelligent student teachers on Educational Achievement Test. It was indicated that the mean score of Low Intelligent student teachers of Experimental Group are significantly higher than the mean score of Lower Intelligent student teachers of Control Group on Educational Achievement Test.

(39) There was significant difference between mean score of Control Group and Experimental Group of Total student teachers on Educational Achievement Test. It was indicated that the mean score of Total student teachers of Experimental Group are significantly higher than the mean score of Total student teachers of Control Group on Educational Achievement Test.

(40) There was no significant difference between mean score of control group on Self Regulated Learning Rating Scale with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL.

(41) There was no significant difference between mean score of Experimental Group on Self Regulated Learning Rating Scale with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL.

(42) There was no significant difference between mean score of Total Group on Self Regulated Learning Rating Scale with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL.

(43) There was no significant difference between mean score of control group on Goal Setting Rating Scale with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL.

(44) There was no significant difference between mean score of Experimental Group on Goal Setting Rating Scale with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL.

(45) There was no significant difference between mean score of Total Group on Goal Setting Rating Scale with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL.

(46) There was no significant difference between mean score of control group on Educational Achievement Test with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL.

(47) There was no significant difference between mean score of Experimental Group on Educational Achievement Test with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL.

(48) There was no significant difference between mean score of Total Group on Educational Achievement Test with reference to Male-UHL, Male-MHL, Female-UHL and Female-MHL.

(49) There was positive and low co-relation between score of student teachers on post-test of Total Sample Male Group on Self Regulated Learning and Goal Setting Test, Self Regulated Learning and Educational Achievement Test and Goal Setting Test and Educational Achievement Test.

(50) There was positive and low co-relation between score of student teachers on post-test of Total Sample Female Group on Self Regulated Learning and Goal Setting Test, Self Regulated Learning and Educational Achievement Test and Goal Setting Test and Educational Achievement Test.

(51) There was positive and low co-relation between score of student teachers on post-test of Total Sample Male Experimental Group on Self Regulated Learning and Goal Setting Test, Self Regulated Learning and Educational Achievement Test and Goal Setting Test and Educational Achievement Test.

(52) There was positive and low co-relation between score of student teachers on post-test of Total Sample Female Experimental Group on Self Regulated Learning and Goal Setting Test, Self Regulated Learning and Educational Achievement Test and Goal Setting Test and Educational Achievement Test.

(53) There was positive and very low co-relation between Self Regulated Learning and Educational Achievement Test of Male of control group on Pre-Test and Post-Test of Self Regulated Learning and Educational Achievement Test.

(54) There was positive and very low co-relation between Goal Setting and Educational Achievement Test of Female of control group on Pre-Test and Post-Test of Goal Setting and Educational Achievement Test.

(55) There was negative and very low co-relation between Self Regulated Learning and Educational Achievement Test of UHL of control group on Pre-Test and Post-Test of Self Regulated Learning and Educational Achievement Test.

(56) There was negative and very low co-relation between Self Regulated Learning and Educational Achievement Test of MHL of control group on Pre-Test and positive and very low co-relation between Self Regulated Learning and Educational Achievement Test of MHL on Post-Test of Self Regulated Learning and Educational Achievement Test.

(57) There was negative and very low co-relation between Self Regulated Learning and Educational Achievement Test of Highly Intelligence of control group on Pre-Test and positive and very low co-relation between Self Regulated Learning and Educational Achievement Test of Highly Intelligence on Post-Test of Self Regulated Learning and Educational Achievement Test.

(58) There was positive and very low co-relation between Self Regulated Learning and Goal Setting of Lower Intelligence of control group on Pre-Test and Post-Test of Self Regulated Learning and Goal Setting.

Recommendation for further study:

1) To prepare subject related self-regulated learning material for primary school students.
2) To check the effect of self-regulated learning on memory.
3) To handle comparative study self-regulated learning and self-concept.
4) To study the co-relation relation between creativity and self-regulated learning.

5) To check the effect of goal achievement and values on goal achievement.
6) To study the goal achievement with/in reference to various variables.
7) To construct and standardize the goal achievement test for the primary, secondary and higher secondary school's students.
8) To check the effect of values on goal achievement and educational achievement.
9) To study the behavioral changes among/in adolescent through/by SRL material.
10) To check the effect of SRL material on special children.
11) Implementation/Piloting of SRL material on Dyslexia child.
12) To check the effectiveness of SRL material on students speed and appropriateness.
13) To check the effect of SRL material on student's reasoning.

Suggestion:

The trainees having MHL are at the bottom on SRL rating scale. So for increasing the score of students having MHL economic status, it is necessary to prepare such material which are appropriate, simple and economically affordable. It is better to use various methods and techniques in this material for example-To prepare slogans, exhibition.

Conclusion:

From the above research it is conclude that-

There is Effect of Self Regulated Learning, Goal Setting Rating Scale and Educational Achievement Test are found significant with reference to variable of Gender, Level of Status and level of intelligence of Control Group, Experimental Group and Total Group).

There is Effect Comparison of Self Regulated Learning, Goal Setting Learning Rating Scale and Educational Achievement Test are found significant with reference to variable of Gender, Level of Status and level of intelligence of Control Group, Experimental Group and Total Group).Mean score of Post-test are found significantly higher than the mean score of Pre-Test.

Gender wise and Socio-Economic status wise there is no any significant difference found between mean score of different variable on Self Regulated Rating Scale, Goal Setting Rating Scale and Educational Achievement Test

There is positive and High Co-relation found between mean score of pre-test and post-test on different group on Self Regulated Learning Rating Scale, Goal Setting Rating Scale and Educational Achievement Test

It is also conclude that there is Effect of Co-relation Between Control Group of Pre-test and Co-relation Between Control Group of Post-test of Self Regulated Learning Rating Scale, Goal Setting Rating Scale are found high to very high but there is no any significant co-relation found to high to very high with Educational Achievement and Self Regulated Learning Rating Scale, Goal Setting Rating Scale. There is no any relation significant co-relation found to high to very high with Educational Achievement with Self Regulated Learning and Goal Setting.

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