INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Self-regulation of cognition and behavior is an important aspect of girl student learning and academic performance in the classroom context (Corno & Mandinach, 1983; Corno & Rohrkemper, 1985). There are a variety of definitions of self-regulated learning, but three components seem especially important for classroom performance. First, self-regulated learning includes students’ metacognitive strategies for planning, monitoring and modifying their cognition (e.g., Brown, Bransford, Compione & Ferrara 1983; Corno, 1986; Zimmerman & Pons, 1986, 1988). Student’s management and control of their effort on classroom academic tasks has been proposed as another important component.

Creativity is undoubtedly, an image of the Creative man. The unique contribution of man more or less is governed by her creativity. It must be defined in the way that makes possible objective measurement and is compatible with common and historical usage. Creativity is a natural human process and strong human needs are involved at each stage. Creativity is an essential for the human being to enhance their academic achievement. The goal of education can no longer be the transmission of the larger chunk of knowledge as such that to equip the Girl students with intellectual tools and resource which would enable him to
involve in the process of gaining the existing knowledge and creating new knowledge. Psychologists have suggested instruction or teaching be regarded and as “temporary arrangement”, intended to “enhance the learner’s capacity to learn for himself”.

The context of educational psychology has been profound changes over the last 35 years; due to these self regulated learning has become a current focus for research and one of the essential axes of educational practice, currently, learning is conceived of as an active, cognitive, significant, mediated and self-regulated process. Achievement of significant, self regulated learning requires both ‘will’ and ‘skill’. For this reason, education should help girl students to be aware of their own thinking, to be strategic and to direct their motivation toward valuable goals. This goal is for girl students to learn to be their own teachers; in this sense we speak of the need to move from teaching to self-reflective practice (Schunk 1981). In the last fifteen years, numerous theories and models have tried to identify process intervening in the self regulation of learning and to establish relation and interaction between these and academic performance. Pintrich 1988 proposed a theoretical based on a socio-cognitive perspective; its objective is to classify and analyze the different processes which play a part in self regulated learning, as asserted by scientific literature. In this model, regulatory processes are organizing according to four
phases: a) planning; b) self-monitoring; c) control d) evaluation. Within each of these phases, self-regulation activities are in turn structured into four areas; cognitive, motivational affective, behavioral and contextual.

Self-regulated learning is described as a process of active knowledge construction whereby, according to Zimmerman (2002), an individual utilises cognitive, motivational, emotional, social and volitional resources. Self-regulation skills also support lifelong learning by making learners independent and self-managing.

1.2 RATIONALE OF THE STUDY

Why is it that some girl students study and others do not? Why is it that some want to learn and try to learn while others apparently have little or no interest in doing so? Why for that matter, does anyone do anything? Most human behavior, in the classroom or elsewhere, has as its purpose the satisfaction of one or another or some. Anything that contributes to the satisfaction of needs is said to be reinforcing. Strictly speaking, there is no such thing as an unmotivated girl student or a person in any walk of life that lacks motivation. All human beings always motivated in that we all have needs, we all have goals, we all have essentially the same kinds of needs and the same kinds of goals. But we differ in the ways we choose to satisfy them and in our perceptions of what constitutes satisfaction.
Thus, every girl student is motivated but not necessarily to learn to do what her teachers would like him to do. The goals she wishes to pursue in the classroom.

At the junior high school level, when careers are becoming a matter of some concern, the practical value of subjects are likely to be called in question. It is then that girl students are more likely to ask “what good” certain subjects are. If they see the use of subject in relationship to their vocational goals, chances are they will work at it. Ordinarily when girl students perceive this value, they are motivated to learn the subject; when they do not, they are not. Most teachers would love to have room full of intrinsically motivated girl students, eager to learn simply for the love of learning. But many teachers, particularly in upper elementary grades and beyond, encounter few such individuals in their classes. Many teachers, therefore, find out one of their most challenging problem is that of arousing their interest, gaining and holding their attention, and some how prevailing upon them to set forth at least to a little effort in learning the material they are not exactly overjoyed at the prospect of learning it. The two basic strategies that teachers employ in attacking the motivation problem centre around the concepts of interest and incentives. In teaching, the teacher is faced with wide variations in their preferred modes of thinking, process, and acting, as well as with the range of their interests, motives, values and aptitudes. The problem has been further
compounded by the fact that she, too has her preferred modes of thought and probably gives unwitting stress to them in her teaching, thus, appealing more to some girl students than to others.

In a particular learning situation, the individual is surrounded by a host of potential stimuli, she however, cannot attend to all of them and responds to them selectively and her particular Self-Regulated Learning determine those environmental stimuli to which attends. A student’s style determines her utilization of her intellectual abilities. Thus, individual is peculiar in the choice of her pattern of learning, therefore, each individual demonstrates a set new unique Self-Regulated Learning.

There are major difference in self regulated learning from one girl student to another and these difference can have a significant bearing on classroom learning. Individual’s Self-Regulated Learning and high creative ability, besides other factors, affects almost all spheres of student’s development. Investigators have found that learning environment of an institution and self regulated learning of girl student greatly affect the quality of girl student achievement. Information from various resources indicate that high creative talent must be identified, developed and utilized by the society.
Many researches have been conducted on creativity which have potential to improve the educational system in various ways. It provides instruments for measuring high creative potentialities, interests and motivations; thus enabling the schools to adopt their program to the understanding that emerge from this measurement. In education, where high creative qualities have been neglected too much in both teaching and testing, it is desirable, to assess each individual’s high creative potential and self regulatory learning skill in order to determine how these learning skill can be used in development this potential. Each individual acquires various characteristics and qualities of an environment to which she is exposed. However, these learning environments do influence the respective ways of student’s learning and result in developing different leaning skill among student. Education environments affect human differences in learning, thinking and high creative expression to seek better means of individualizing instructions for more effective learning.

Messick (1976) says, “--- that difference in style of learning and thinking also require the attention of educators an researchers. Concern about difference in prior learning and achievement and in level of learning to more suitable difference in the process of cognition and high creative thinking to find effective basis for individualized education.”
Toth (1987) found that the assessment of creativity, laterality, and Self-Regulated Learning preferences, together with traditional mental measures, can provide educators with a more holistic approach to the identification of individual girl student learning patterns for the purpose of enhancing girl student academic achievement.

It is evident from above descriptions that girl students may be effectively characterized in terms of learning skills, creativity, and academic. Self regulatory Learning skill encompass the perceptual as well as intellectual functioning of a girl student comprehensively. A study of learning placement and teaching methods in the teaching learning process. It will also help in determining the methods of teaching that are more effective for children with specific cognitive characteristics.

“High Creative activities and ways of learning seem to have a built-in motivation power. Positive reinforcement and external rewards seem necessary, though not inimical, to high creative learning. In fact, motivation to learn in high creative ways sometimes continues in spite of discouragement of negative reinforcement.” (Torrance and Myers,1970).

Learning is a complex process, one which many girl students, despite years of schooling, still find mysterious. While many girl students barring those who are totally tuned out, are, to varying degrees, active in the manners just described self regulated learners appears to be both more keenly aware of the
relation between specific behaviours and academic success and more likely to systematically and appropriately employ such behaviours (Zimmerman & Pons 1986).

1.3 **NEED AND IMPORTANCE OF THE STUDY**

Though a lot of work has been done in the area of self regulated learning abroad, such has been conducted in India except a few. The researchers found, this area very challenging one. Now a days, knowledge is multiplying day by day; when new methodologies, strategies and techniques are being explored; where new approaches and systems are being invented; where new models are being initiated to redesign and reshape the prevailing academic environment in institutions to keep pace with the increasing knowledge in each sphere; where educational literature is being enriched by new making learning more promising and maximally effective to the learner by making instruction individualized. Nevertheless, the girl students, their needs, capabilities, special interests and motivation, and their styles of learning; which together are the bases to all decisions about individualizing learning activities.

Investigations may be seen in the area of student-interest, student-attitude, student-mental ability and in other related aspects, but no research work has been evidenced in the area of self regulated learning of high and low high creative junior high school girl students. Thus the research in this area to be the most
important and indispensable because it does effect to a greater extent to the academic achievement of student. So the researcher is curious to find out the self regulated learning of high and low creative junior high school girl students.

1.4 STATEMENT OF THE PROBLEM

Specifically stated the problem of the study is “A study of Self -Regulated learning of high and Low creative Junior High School girls students”.

1.5 OBJECTIVES OF THE STUDY

Based on above premises, the following objectives of the present study have been delineated:

1.5.1 Main Objectives-

1. To find out the high creative junior high school girls students.
2. To find out the low creative junior high school girls students.
3. To find out the self regulated learning of high creative junior high school girl students.
4. To find out the self regulated learning of low creative junior high school girl students.
5. To compare the academic achievement of high and low creative junior high school girl students.
1.6 HYPOTHESES:

Keeping in view the objectives of the study the following null hypotheses have been framed for statistical verification.

\( \text{HO}_1 \). There is no significant difference of self regulated learning of high and low creative junior high school girl students.

\( \text{HO}_2 \). There is no significant difference between academic achievement of high and low creative junior high school girl students.

1.7 KEY CONCEPTS AND TERMS USED-

The concepts and terms used in this study are self regulated learning creativity and academic achievement. Which need a relevant and lucid explanation and interpretation.

1.7.1 Self – Regulated Learning -

Describing a self-regulated learner and how they learn is a complex task as most definitions simply describe the processes involved. Researchers such as Zimmerman (1989), Boekaerts (1999) and Corno (1992) emphasise the importance of cognitive, motivational/volitional and metacognitive processes. Girl students who naturally self-regulate know about themselves as learners and have knowledge about learning tasks and environments. They have an understanding about various learning strategies, and they know how, when, and why to use
the strategies in a specific context. They monitor their own thinking and problem-solving, allocating their time and assessing their progress effectively. They actively find a way to succeed and are motivated to learn. They continually reflect, making changes in order to complete tasks and succeed. Heo (2000) claims that self-regulated learners take personal learning responsibility and expect success.

These characteristics together describe a learner teachers are continually striving to develop. A student who is motivated to learn and knows himself /herself as a learner, can utilise strategies and skills to reflect on their learning, and most importantly, is a learner who takes responsibility for their own learning. In order to develop this responsibility and learner autonomy, the learning environment should encourage active, authentic learning, collaboration, and problem-solving. As described above, the inquiry classroom utilises specific strategies and skills to enable the learner to become motivated and responsible for their own learning.

Zimmerman (1990) relates that Benjamin Franklin wrote extensively about techniques she used to improve her learning, erudition and self-control. Franklin detailed how she set learning goals for himself, and she consciously selected exemplary written models to improve her writing. As Zimmerman states, Franklin’s use of these procedures is an
indication that self-regulation has been deemed important for a very long time.

Zimmerman was a key theorist in shaping my initial thinking. I have used Zimmerman’s theory as opposed to other self-regulated learning theorists, as it is grounded in social constructivist principles, encompasses a broader perspective of the learner and distinguishes three phases of learning which provided the classroom intervention framework for this study.

Self-regulated learning is viewed as an important aspect of girl student academic performance and achievement in classroom settings. Zimmerman (1990) provides an overview of research related to the distinctive features of self-regulated learning for acquiring knowledge and skill. He argues that students’ use of self-regulated learning strategies makes a distinctive contribution to their academic achievement apart from their general ability; self-regulation training not only improves students’ learning, but it also improves their perceptions of efficacy, a widely studied measure of students’ motivation to self-regulate; students who display initiative, intrinsic motivation and personal responsibility achieve particular academic success.

Sturomski (1997) advises teachers to introduce the strategies and demonstrate how and when the strategies are used, and allow time for students to discuss, reflect upon, and
practice the strategies with authentic tasks. Then as students begin to assume responsibility for strategic learning, teachers can gradually decrease the reminders and guidance.

Zimmerman (1989) broadly distinguishes self-regulated learning strategies according to three phases of learning: the forethought phase, where the student utilises goal-setting and planning strategies; the performance phase, where the student deploys the previous phase strategies and utilises attention-focusing and specific task strategies; the self-reflection phase, where the student reflects on their progress and achievement attributing success or failure to specific strategies employed. Pajares (2002) states that teachers should make self-regulatory strategies a focus of professional practice and that students who develop strategies early persevere and self-perpetuate.

1.7.2 **Creativity**

Creativity is one the most valued human qualities and is an important area of interest in education to be searched. The concept of creativity has been understood differently by the total personality, although it seems that cognition may be the means of expression of creativity. While the emotional factors might appear to be the impelling forces. In any case, creativity could be understood as the urge or capacity for producing something new in the realm of ideas, concept, things or art creations.
Guilford (1956) called it divergent thinking as opposed to convergent thinking, since in divergent thinking, there was the factor of logical possibility and in convergent thinking, there was the factor of logical necessity. The primary traits involved in divergent thinking and so in creativity were sensitivity to problems, fluency of thinking, flexibility of thinking, originality of response which means new, redefinition and elaboration.

Explorations in high creative thinking are essential in the application of knowledge and in the achievement of vocational success in almost every field of human achievement. Creativity is usually the distinguishing characteristic of the truly eminent. The possession of high intelligence, special aptitude and high technical skill is not enough to produce outstanding achievement. It is tremendously important to society and nation for our high creative talents to be identified, developed and utilized. The future of human civilization depends upon the quality of the high creative imagination of our next generation.

Stein (1984) remarked that creativity is a novel work which must be accepted by a group at some point in time, while Fliegler (1961) emphasizes more on creativity as a mental process in which man actualizes himself manipulates external and internal symbols as illustrative of ideas, people and object to produce a novel event uncommon to himself and / or her environment that contributes socially useful event to society.
According to Whiting (1961), “Creativity is that mental process in which past experience is combined and recombined frequently with some distortions in such a fashion that one comes up with new patterns, new configurations, new arrangements, that solve some need of mankind”.

Rhodes (1961) from her analysis of the definitions found that they were not mutually exclusive but overlapped and intertwined. She isolated four strands: person, product, process and press. She has remarked that each strand has only academic identity, but in the reality they exist in unity and operate functionally in individuals.

Fliegler (1961) has very emphatically put in the importance of motivation and of past and present experience in the High Creative development. She has proposed (i) development preparatory stage, (ii) development of need stage, (iii) selection of the problem, (iv) incubation, (v) illumination, (vi) evaluation, (vii) reformation, and (viii) re-evaluation. Her efforts to describe the levels of creativity stand as major contribution in providing an ‘understanding of the high creative act’. Here one sees novel attempt in drawing a parallel between the evolutionary development of creativity and the growth of a man.

Simpson (1922) thought of creativity as the initiative which one manifests by her power to break away from the usual
sequence of thought. The creativity mind, according to him, was a searching, combining and the synthesis mind.

Bartlett (1958) conceptualizes creativity as adventurous thinking or as getting away from the main track, breaking out of the mould, being open to experience and permitting one thing to need another. Where as Mac Kinnon (1965) studied creativity in architects, writers, mathematicians and many other high creative people as pictorial artists, musical composers, romantic creators like writers, philosophers and mechanical inventors as also the high creative people in dealing with other material in art, dramatics etc.

Ausubel (1963) described creativity as “a generalized constellation of intellectual abilities are identified as that of fluency, flexibility, originality, elaboration and ability to sense deficiency”

Yamamoto (1965) wrote that creativity was really like an elephant described by different blind men in their own different ways by touching the trunk, the legs or the body of the elephant which meant that there was no way of describing creativity as such individual has its own approach.

Psycho-analysts like Freud thought that creativity was like an emotional purgative. Freud though that art creation largely, was the expression of repressed desires mostly sexual in nature. Repression of such desires lead to neurosis and many novelists, poets, writers, sculptors, painters and other such are creators
produced these artistic new things as the expression of their repressed desires.

Creativity to Guilford (1956) as already pointed out, is divergent thinking which is characterized by fluency, newness or originality, flexibility and foresight and in which there are the possibilities of many responses, and the more the responses possible more could be the level of creativity.

**Creative Persons**

According to Torrance (1962) a high creative person is independent, self-confident, courageous, intuitive, optimistic, able to take risk and not credulous to accept and ideas, view or opinion without proper judgment or scrutiny. She may be a person occupied with her own ideas or things and may be quite self-willed and rather difficult person to handle, as compared to the more obedient, studious or a high achiever.

Gopal (1976) made by comparing the high creative and low Creative university students brought out that high creative person were found to be reserved, emotionally stable, assertive with more ego-strength. They were more self-opinionated, self-caring for others views of criticism. They are generally careless about themselves and their bodily needs, because they are mostly occupied by something, thinking, imagining or creating. Some of them are happy-go-lucky, outgoing, extro-verted but these are also other creative people who are of a retiring nature, or introverted or though minded. They are often sad and
thoughtful about the happenings around them with some degree of helplessness in improving the nature of the things.

Generally speaking creativity may be defined in terms of personality product, process or environmental conditions. Torrance (1971) has defined creativity as “the process of becoming sensitive to problems, deficiencies, gaps in knowledge, missing elements, disharmonies and so forth: identifying the difficulty searching for solution, making guesses or formulating hypotheses about the deficiencies, testing and retesting these hypotheses and finally communicating the result”.

Mac kinnon (1965) has suggested that a creative act is one which (i) involves the production of something new and rare, (ii) helps to reach some recognizable goal and (iii) is carried through to completion. Thus, we talk about a creative person, we are generally referring to some-one who generates not only many good ideas but also many unusual, unexpected or unique ideas that are good with respect to some quality criterion.

Taylor and Williams (1966) emphasize on product aspect. For them “creativity is that human activity which produces a self-generated solution to a new and pressing problem. Creative problem solving must consists of behavior which is new to the learner. A solution must not be derived from a teacher, or a book or model, rather it must be a product of one’s own learning process.
Lawther (1977) writes… “Some of the writing on creativity seems to imply that the more bizarre and unusual the act is, the more likely it is to be called a creative expression, however, odd, eccentric and extraverted acts are not usually highly desirable types of creativity… the degree to which the creativity unit is a copy or imitation of model, or is an action under supervised guidance to attempt to reproduce a pre-established form and pattern of action, it is not considered original or Creative”.

Creativity, thus has been defined either in terms of process or product. These two aspects, however, are not mutually exclusive. It is because process always leads to product and product is always a consequence of a process.

Creativity in the present investigation will be considered as a multidimensional attribute. It will be deemed as consisting of fluency, flexibility and originality and expressed accordingly by subject’s scores or these abilities as measured by the Torrance Tests of Creative Thinking (Verbal Form) (1966), the tool for measuring creativity employed in this study. The weighted score of these dimensions of creativity has been considered as composite creativity score.

The above workable concept of creativity has been formulated here in according with the line of action accepted by Getzel and Jackson (1962); Yamamoto (1963) and Torrance (1966).
Fluency-

Fluency is represented by the number of relevant and unrepeated ideas which the testee produces. Relevancy is judged on the basis of the appropriateness of the response when considered in relation to the test problem. An unrepeated idea is one which has been expressed only once under a given problem.

Flexibility-

Flexibility is represented by a person’s ability to produce ideas which differ in approach or thought trend. All ideas which fall under one category of approach or thought trend are treated as one for purposes of flexibility scoring. Thus, if five ideas are produced and all belong to only one category of approach or thought trend; the scores for flexibility will be one, but if all the five ideas are on five different approaches or thought trends, the flexibility score will be five. There may be intermediate scores for flexibility depending on the number of categories of thought trends to which the responses belong.

Originality-

Originality is represented by uncommonness of given response. Responses given by less than 5% of the group are treated as original. It is to be remembered that the responses which are at 5% level are given weight 1, responses at 4% level are weight 2. Likewise responses belonging 3, 2 and 1% are given the weight 3, 4 and 5 respectively. Responses given by
5% or more of the testees will get on originality weight of zero.

1.7.3 Academic Achievement -

Since independence the government has been trying to revitalize and reconstruct the existing education system in order to improve the level of performance using a powerful tool in national reconstruction. But irrespective of the new developments, like the idea of work experience, new vocationalized course, integrated curriculum and etc., these problems and the substandard performance of junior high school girl students continue to exit leading to depreciation of self-worth in girl students, accompanied by unhappiness and frustration. Why is this so? What is the possible reason behind it? Could this be due to the lack of basic conditions necessary for educational reconstruction? Mere structural changes are not enough. In order to make such changes effective simultaneous programmers are needed to strengthen the urge and commitment for improvement in the concerned individuals (Indian Education Commission, 1964-1966). For this, objectives in the affective domain need to be emphasized.

Recent literature attempting to conceive new education and solve the above problems has emphasized on providing for psychological self-assurance to the girl student lost in the mass society its worth as conscious concerned, and creative human being. Toffler (1970) stated that education reforms should be
such as to enable the girl student to understand reforms should be such as to enable the girl student to understand the global consequences of individual behavior, of conceiving priorities and shouldering her share of responsibility. It must take them conscious of their aspirations and strengthens in order to improve the level of achievement.

If the courses are planned and geared according to the needs based on psychological appraisal of girl students and training provided through specifically designed psychological inputs tapping the tackled insightfully. It may also help in avoiding the atmosphere of despair and uncertainty in the minds of the Girl students. Hence, in the interest of the girl students welfare and country’s optimum progress, careful identification and proper utilization of girl students needs and desires becomes the chief concern for academic in the very psychological aspect of the process of academic achievement becomes a necessary pre-requisite to understanding the differences in achievement.

The dictionary meanings of academic achievement are (I) Knowledge attained or skills developed in the school subjected usually designated by test scores or by marks assigned by teachers or both,(II) The achievement of pupils in the so called ‘academic’ subject as reading arithmetic and history, as contrasted with skills developed in such areas as industrial, arts and physical education (Carter, 1945).
In this research project total marks obtained in class VII has been considered as the academic achievement.

1.7 DELIMITATIONS OF THE STUDY

On the basis of the procedure followed the study has been delimited as follows:

1. Only seven dimensions of self – regulated learning have been studied in this study.
2. Only girls schools have been taken in this study.
3. Study has been conducted on VIII class girl students only.
4. The present study is restricted to the high Creative and low high creative group of girl students. Average girl students on the test of creativity have not been considered in the study.
5. The study is restricted only to Hindi medium schools situated in proper city of Varanasi.
6. Arts and Science girls have not been differentiated in the present study.
7. Hindi version of Torrance test of creative thinking (Jaiswal 1977) has been used.