

**Classroom Academic Performance of Secondary School
Students: Role of Self-regulated Learning, Motivational
Beliefs and Attitude towards School.**

**A Thesis Submitted to the Department of Psychology, University of
Dhaka in Partial Fulfillment of the Requirements for the Degree of
Master of Philosophy in Psychology**

Submitted By
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Session: 1999-2000

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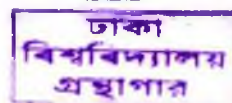
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Certificate

This is to certify that the thesis entitled **“Classroom Academic Performance of the Secondary School Students: Role of Self-regulated Learning, Motivational Beliefs and Attitude Towards School”** has been completed by Md. Aminul Islam as part of fulfillment of degree of Master of Philosophy (M.Phil) in Psychology at the University of Dhaka. It is record of bonafide research carried out by him under my supervision and guidance.

I now recommend for the examination of the thesis.

Dr. Mehtab Khanam

Professor

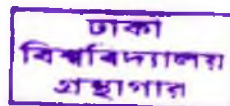
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Declaration

This thesis entitled, **“Classroom Academic Performance of the Secondary School Students: Role of Self-regulated Learning, Motivational Beliefs and Attitude Towards School”** contains no material which has been accepted for the award of any other degree or diploma in any university and contains no material previously published or written by another person, except where due reference is made in the text of the thesis.



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Session: 1999-2000

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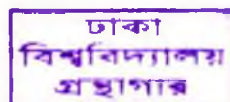
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ABSTRACT

The study has attempted to examine the role of motivational beliefs such as self-efficacy, intrinsic value and test anxiety; self-regulated learning viz. cognitive strategy use and self-regulation and attitude towards school on classroom academic performance of the secondary school students. For this purpose, samples of 512 students of class nine and ten and 12 teachers were randomly selected from the government and non-government secondary schools in Dhaka City. The stratified random sampling technique was used in the present study. The data was collected through both quantitative and qualitative method. Motivated Strategies for Learning Questionnaire (MSLQ) developed by Groot (1990) and Rao Attitude School Inventory (1970) were applied for quantitative part and Teacher's Observation Questionnaire, Researcher's Observation Checklist. Focus Group Discussion (FGD) guideline were used as qualitative method. To assess the academic classroom performance, academic results in combining last three examination scores taken from selected schools and MCQ (Multiple choice questions) test developed by researcher focused on four subjects i.e. Bengali, English, Mathematics and General Science in the concerning class teachers were also applied.

Results show existence of role of motivational beliefs, self-regulated learning and attitude towards school on classroom academic performance of the secondary school students. The results of ANOVA showed that there is no significance sex difference in motivational beliefs, self-regulated learning and attitude towards school. Group (Science, Arts, and Commerce) differences were found in self-regulated learning, motivational beliefs, attitude towards school and classroom academic performance. Self-regulated learning of the students of class nine and ten was found significantly different. The correlation analysis showed that all the components (motivational beliefs, self-regulated learning and attitude towards school) were significantly related to classroom academic performance. Only test anxiety component of motivational beliefs was negatively related to classroom academic performance. The regression analyses revealed that motivational beliefs and attitude towards school were predictors to the classroom academic performance. It was also found that self-efficacy component of motivational beliefs was an important factor which predicts the classroom academic performance.

The qualitative part of the present study have revealed that self regulated learning strategies such as organizing capacities, memorizing skills, goal setting about studying , planning for further lesson, seeking assistance form teachers and parents, learning problem solving strategies, practicing memorized information etc. have regulated the classroom academic performance. In the motivational beliefs concern, some factors i.e. general belief related to motivation, course materials, and other important things, interest to learn new thing, external academic interest have also facilitated to the classroom academic performance. Parental positive attitude towards in education, expectation better performance from parents and teacher, school activities, curriculum, home work, have also influenced the classroom academic performance of the secondary school students.

It has also found that two factors i.e. test anxiety and distracting behaviors act as prohibitory role for the academic performance of the secondary school students.

The study suggests that high motivational beliefs, positive attitude towards school and use self-regulated learning strategies of the students are related to higher academic performance in the classroom context in Bangladesh. Findings of the present study would be helped to the policy makers, academic professionals, teachers, and parents to design and implement the whole educational system for the secondary students in Bangladesh.

Keywords: *Motivational beliefs, Self-efficacy, Intrinsic value, Test anxiety, Self-regulated learning, Cognitive strategy use, Self-regulation, Attitude towards school, Classroom academic performance, Secondary school student.*

PREFACE

This report presented in five chapters endeavors to explore contributions of some self-regulated learning variables, motivational variables and attitude towards school on classroom academic performance of secondary school students. The study has been designed to explore the variables in quantitative and qualitative ways. The outcomes of the study are to be supposed to be of much significance on both theoretical and practical levels.

The chapter-I contains the problem related literature, relevant research studies and rationale of the study. The chapter-II of this report presents to methodology and adoption of some tools used in the study. Results are presented in the chapter-III. Discussion is presented in the chapter-IV on the contributing factors and prediction of classroom academic performance of secondary school students. Finally, chapter-V deals with conclusion and recommendations based on the study.

It is my firm belief that this work must gives some light for the educators, social planners and policy makers in designing future course, curriculum, and teaching methodologies for promoting school attainment through the proper development of appropriate factors of classroom academic performance of secondary school students in Bangladesh.

Md. Aminul Islam

Dhaka
December 2006

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**Dhaka
December 2006**

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CHAPTER ONE

INTRODUCTION

INTRODUCTION

Education is the key to future development of a nation and an important hammer to create the skill manpower. It develops and reflects our national expectations and future social life. Education sector as one of the most priority sector of government plays important role in overall development of Bangladesh. Education has been considered as one of the strategies effective for human resource development, poverty alleviation and socioeconomic development culminating into national development. The national development depends on educational achievement. Educational achievement is a complex phenomenon involving interaction of social, instructional learner's factors (Printich et al. 1986). Motivation is one of the most important components of learning and one of the most difficult to measure. The willingness to put effort into learning is a product of many factors, ranging from the student's personality and abilities to characteristics of particular learning tasks, incentives for learning, settings, and teacher behaviors.

Psychologists define motivation as an internal process that activates, guides, and maintains behavior over time. Motivation is the attribute that "moves" us to do or not do something. In plain language, it's what gets the student going, keeps the student going, and determines where the students are trying to go.

Motivation may vary in both intensity and direction. For example, two students may be motivated to play video games, but one of them may be more strongly motivated to do so than other. Or one student may be strongly motivated to play video games and the other equally strongly motivated to play football. Motivation can be liken to the engine (intensity) and steering wheel (direction) of a car. Actually, though, the intensity and direction of motivations are often difficult to separate. The intensity of a motivation to engage in one activity may depend in large part on the intensity and direction of motivations to engage in alternative activities. If someone has only enough time and money to go to the movies or to play video games, motivation to engage in one of these activities is strongly influenced by the intensity of motivation to engage in the other. Motivation is not only important in getting students to engage in academic activities but also important in determining how much students will learn from the activities they perform or the information to which they are exposed. Students who are motivated to learn something use higher cognitive processes in learning about it and absorb and retain

more from it. An important task for teachers is planning how they will support student motivation.

Motivation to do something can come about in many ways. Motivation can be a personality characteristic; individuals may have lasting, stable interests in participating in such broad categories of activities as academics, sports, or social activities. Motivation may come from intrinsic characteristics of a task. Motivation may also come from extrinsic sources to the task.

Motivation is an internal state of the learners, which refers to the process whereby goal-directed behavior is instigated and sustained. Motivation has important theoretical and practical implications. It is an integral component of achievement. Research on motivation suggests that students who have high expectancies for success and value the task are more likely to perform well (Eccles, 1983). This approach however does not consider whether motivated students' increased achievement is due to their use of learning strategies.

A student who is motivated will work better than a student who is apathetic towards the information presented to him/her. When presented with a difficult task a motivated learner will continue to try while an unmotivated learner might only try one solution and give up, or even not try at all. Once students have reached high school, many of them have decided which kind of student they want to be. It is the high school teacher's job to continue to foster high motivation with the student who has decided to learn and help create motivation with those students who have decided to fail. There are several methods for getting good student motivation at the high school level and it is crucial that teachers exhaust all possibilities before giving up on the learner or consequences can be extremely detrimental to the student.

Classroom is an environment where the students learn. Classroom learning is ordinarily thought of as a cognitive process. It involves information seeking, concentration, thinking-all cognitive activities. Students invest their potentialities in these activities and they feel about their goals and conditions of learning. Whenever a student is studying a subject in the class, he/she do not choose the subject matters for him/herself. The students are bound to present in the classroom and provide their lesson to the class teachers.

Upon examination of the motivation and achievement literature, there does not appear to be one specific or universal definition of academic achievement. For the purpose of this study, it will be defined as that which accomplished by the actual execution of classroom work in the school setting. It is typically assessed by the use of teacher ratings, tests and examinations. Academic achievement and academic performance can be used interchangeably, as there is no real difference of distinction between the two concepts in the literature. Stipek (1984) provides an early example of this interchangeably in the following:

I once interviewed 96 children at the beginning of the first grade; they all claimed to be among the smartest in their class. But the actual performance of many of these children fell significantly short of their expectations. Some of them, by any objective standard an adult would use, failed miserably. Many papers came back with more answers marked wrong than right. At the end of the year, these children were reading stories out of primary texts. Interview of these relatively low achieving children at the end of the school year revealed a remarkable ignorance of their poor academic performance.

Academic achievement is related to academic competence. Academic competence is defined in terms of the students' expectancy and ability beliefs (Wigfield and Eccles, 2000). Research often shows those students' perceptions of academic competency decline as they advance in school (Eccles and Wigfield, 1998).

Gottfried (1985) demonstrates the significance of academic motivation for students' education in the results of three studies. The participants of study 1 were 141 white, middle-class children attending fourth and seventh grades in a suburban public school district. Participants of study 2 were 206 black and white middle-class students in grades 4 through 7 of an integrated public school and 166 white middle-class students comprise the sample of study 3. They attended grades 5 through 8 at a private school. Gottfried hypothesized that academic motivation is positively related to school achievement. She measured motivation in the subject areas of reading, social studies, mathematics, science and general orientation toward school learning. Achievement measures were administered concurrently within the same period of time as motivation. In study 1, the SAT's scores in mathematics, reading and auditory comprehension skills were used. In study 2, a

standardized achievement test was administered to all students which yielded scores in reading, language and mathematics. The same standardized achievement test was also administered to all students in study 3, yielding scores in reading, language, mathematics, social studies and science. Final report card grades were also available in studies 2 and 3 utilizing a letter-grade system (A+ to F). According to Gottfried (1985), the results supported the hypothesis that academic motivation is positively and significantly related to students' school achievement as measured by both standardized achievement tests and teacher grades.

Fannema, E. (1995) found that perceived academic competence was positively related to motivation. Her study was comprised of a sample of 263 French-Canadian students in ninth grade from two Montreal high schools. To measure academic motivation, students completed the French from the Academic Motivation Scale. Final mathematics, French, geography and biology grades were used to determine school performance. It seems that student who feel competent and self-determined in the school context develop an autonomous motivational profile toward education, which in turn leads them to obtain higher school grades. More specifically, she found that perceived academic competence and perceived academic self-determination positively influenced autonomous academic motivation which in turn had a positive impact on school performance.

Motivation does not directly influence subsequent achievement. Study instruments were used early in the school year and again near the conclusion of the school year. The average time between testing was 25 weeks. Harter's (1981) self-report measure of intrinsic versus extrinsic orientation in the classroom. The four subscales were administered: Independent Mastery, Independent Judgment, Internal Criteria for Success and Failure and Preference for Challenge. He found that correlations between variables measured at Time 1 and Time 2 revealed a series of statistically significant correlations among motivation and academic achievement, although the correlations were generally low in magnitude.

1.1. Theoretical Framework

Early motivational theorists in psychology attempted to explain motivation in many different settings and for many kinds of behaviors (Weiner, 1984). As previously

mentioned, most of these early explanation were based on drive and instinct. The theoretical framework for this research is related to Tukman's Tripartite Model of Motivation for Achievement, Pentrich's General Expectancy-value Model of Motivation and Harter's Effectance Motivation Theory.

Tripartite Model of Motivation for Achievement: Tukman (1999) proposed a model of motivation for achievement in the educational setting. The model focuses on three generic variables: (1) attitude or beliefs that people hold about themselves, their capabilities and the factors that account for their outcomes; (2) drive or the desire to attain an outcome based on the value people place on it; (3) strategy or the techniques that people employ to gain the outcomes they desire.

Achievement outcomes have been regarded as a function of two characteristics: skill and will (McCombs and Marzano, 1990) and these must be considered separately because possessing the will alone may not ensure success if the skill is lacking. The focus in this model is on will, or the motivation to achieve the outcome, and it will be considered separately from the level of skill.

Attitude: The attitude that is often used in conjunction with motivation to achieve is self-efficacy or how capable people judge themselves to be to perform a task successfully (Bandura, 1977). Bandura provides extensive evidence and documentation for the conclusion that self-efficacy is a key factor in the context to which people can bring about significant outcomes in their lives. Tukman (1999) found that there is clear relationship between self-efficacy beliefs and academic productivity.

Efficacy beliefs have also been shown to play a mediational role in academic attainment, especially between instructional or induced-strategy treatments and academic outcomes. Children with strategy instruction and training in self-monitoring and self-correcting increase performance both directly and through the enhancement of self-efficacy. Tukman (1999) found that when performance was held constant, encouragement was seen to affect self-efficacy, but when self-efficacy was held constant, encouragement had no effect on performance. Hence self-efficacy functioned as a mediator of performance.

The relationship between self-efficacy and performance is best summed up by Bandura (1997):

The evidence is relatively consistent in showing that efficacy beliefs contribute significantly to level of motivation and performance. They predict not only the behavioral changes accompanying different environmental influences but also differences in behavior between individual receiving the same environmental influence, and even variation within the same individual in the tasks performed and those shunned or attempted but failed.

Drive: The distinction between intrinsic and extrinsic motivation is an acknowledgement of the role of the value of a behavior in the determination of whether or not the behavior is performed (Deci and Ryan, 1985). One potential source of the drive to perform is the incentive value of the performance. Incentive theories of motivation suggest that people will perform an act when its performance is likely to result in some outcome they desire, or that is important to them. Tukman (1999) found that incentive motivation clearly effect on academic performance and act as a mediator.

Wigfield and Eccles (1992) stated that incentive value of a task is an important determinant of task choice and that individual will tend to do task that they positively value and avoid those that they negatively value. Tukman (1999) also stated that enhancing the incentive value of a task, thereby a person's drive to engage in that task, increases level of achievement as a result, and shows drive or desire to be an important component of motivation.

Strategy: Tukman (1999) stated that there is a strong relationship between strategy and success in school and in a variety of other areas as well. Strategies that have been shown to have a particular impact on achievement (Zimmerman, 1989) are self-observing, self-judging, and self-reacting (e.g. goal setting, planning), and more recently, self-evaluation and monitoring, goal setting and strategic planning, strategy implementation and monitoring and strategic outcome monitoring (Zimmerman, 1998). Tukman (1990) found that the unique combination of strategy condition and self-efficacy level determined the amount of performance. The goal setting strategy yielded the best performance from low self-efficacy students, the group outcome strategy yielded the best performance from

middle self-efficacy students, and the no induced strategy control yielded the best from high self-efficacy students. Tukman (1999) showed that in a competitive performance situation, a feedback strategy worked better than a no feedback strategy for low and intermediate self-efficacy students while the reserve held true for high self-efficacy students. In the last decade, the evidence compiled for the role of strategies in the motivation for achievement has been considerable, especially within the framework of self-regulated learning.

General Expectancy-value Model of Motivation: Pintrich (1989) proposed a model for conceptualizing student motivation of a general expectancy-value of motivation. The model proposes that there are three components that may be linked to the three different components of self-regulated learning: (1) an expectancy component, which includes students' beliefs about their ability to perform a task, (2) a value component, which includes students' goals and beliefs about the importance and interest of the task, and (3) an affective component, which includes emotional reactions to the task.

The expectancy component of student motivation has been conceptualized in a variety of ways in the motivational literature but the basic construct involves students' beliefs that they are able to perform the task and they are responsible for their own performance. In this sense, the expectancy component involves students' answer to the question. Different aspects of the expectancy component have been linked to students' metacognition, their use of cognitive strategies and their effort management. In general, the research suggest that students who believe they are engaged in more metacognition, use more strategies, and more likely to persist at a task than students who do not believe they can perform the task (Schunk, 1985). The value component of student motivation involves students' goals for the task. Although this component has been conceptualized in a variety of ways, this motivational component essentially concerns students' reasons for doing a task. The research suggests that students with a motivational orientation involving goals of beliefs that the task is interesting and important will engage in more metacognitive activity, more cognitive strategy use and more effective effort management (Eccles, 1983). The third motivational component concerns students' affective or emotional reactions to the task. The important issue for student involves with the question. There are a variety of affective reactions that may be relevant, but institutional learning context one of the most important seems to be test anxiety (Wigfield and Eccles, 1989).

Effectance Motivation Theory: Harter (1983) proposed a model of mastery (or effectance) motivation, describing the effects of both success and failure experiences on mastery motivation. The goals of effectance motivation are acquiring competence and influencing one's environment ((Eccles, Wigfield and Schiefele, 2000). Mastery motivation is defined as a general tendency to interact with and to express influence over the environment. Specifically, Eccles, Wigfield and Schiefele, (2000) state that:

Successful mastery attempts the (initially) are positively reinforced lead to internalization of the reward system. They also enhance perceptions of competence and perceived internal control over outcomes, give the individual pleasure and ultimately increase mastery motivation. In contrast, when mastery attempts fail, the need for approval by others persists, with a corresponding increase in external control beliefs, lower competence beliefs, higher anxiety in mastery situations and ultimately lowers mastery motivation.

One of the central postulates of Harter's framework is that children with intrinsic motivation in academics would have higher self-perceptions of competence in academics and that students who are extrinsically motivated would have lower perceived academic competence. She further hypothesized that the intrinsically motivated student should manifest higher actual academic achievement.

Harter's effectance motivation theory is important because it includes the effects of both success and failure on subsequent motivation (Eccles et al, 1998). Moreover, this model has been empirically supported (Harter, 1983) and she has developed an assessment to measure different aspects of intrinsic and extrinsic motivation based on this model (Eccles et al, 1998).

From the discussion of the theoretical framework of this study, it can be noted that various aspects of motivation may contribute to classroom academic performance of the students. The review of literature will focus on motivational beliefs, self-regulated learning and attitude towards school and relationship among the variables which impact on classroom academic performance of the secondary school students. The present study focuses on motivational beliefs which encompasses of self-efficacy, intrinsic value and

test anxiety and self-regulated learning encompasses of cognitive strategy use and self-regulation. The review of literature is divided into the following sections:

1. Motivational beliefs
 - a) Self-efficacy
 - b) Intrinsic value
 - c) Test anxiety
2. Self-regulated learning
 - a) Cognitive strategy use
 - b) Self-regulation
3. Attitude towards school

1.2. Self-regulated Learning and Academic Performance

Self-regulated learning is a relatively new construct in research on student achievement in classroom academic settings but it is important for all students as well as educators. This view becomes even more compelling as the lifelong learning concept continues to be defined and expanded in societal policies and educational forecasting. Self-regulated learning is systematic oriented toward the attainment of learning goals. Students judge their use of strategies as organizing, evaluating, goal setting and monitoring. It may be assumed that motivation and self-regulated learning strategies may operate independently or jointly to influence students' academic performance.

Self-regulation of cognition and behavior is an important aspect of student learning and academic performance, which are presumed to be applicable across subject matter. Three types of self-regulated learning strategies seem especially important for academic performance. The first type, metacognitive strategies, refers to planning, monitoring, and evaluation of students' own cognition (Brown et al, 1986). The second, cognitive strategies, refers to integrating new materials with prior knowledge (Corno, 1989). Finally, resource management strategies and it refers to effort, time use, the establishment a study environment and help seeking.

During the past few years, a number of theories have been proposed to describe how students become regulators of their own learning (McCombs, 1989; Corno, 1989). These theories of self-regulated learning share a view of students as metacognitively,

motivationally and behaviorally active promoters of their academic achievement (Zimmerman, 1986). Bandura (1986) suggested that students' effort to regulate their learning involve three classes of determinants: their personal processes, the environment, and their behavior. Strategies enable student learners to personally regulate their behavior and environment as well as their covert functioning. Students' selection and use of strategies depends on their perceptions of their academic efficacy and reciprocally on feedback through a cybernetic loop: If monitoring indicates a deficiency in performance, learners' self-efficacy will be affected and this, in turn, will affect their subsequent motivation and choice of strategies. Students' self-regulated learning is not an absolute state of functioning, but rather varies on the basis of the academic context, personal efforts to self-regulate, and outcomes of behavioral performance. Self-regulated learners are assumed to understand the impact of the environment on them covertly and behaviorally during acquisition and to know how to improve that environment through the use of various strategies.

Students use strategies to regulate their personal functioning, academic behavioral performance and learning environment. The strategies of organizing and transforming, rehearsing and memorizing and goal setting and planning focus on optimizing personal regulation. Strategies such as self-evaluation and self-consequencing enhance behavioral functioning. The strategies of seeking information, record keeping and self-monitoring, environmental structuring, seeking social assistance and reviewing academic materials are intended to optimize the students' immediate learning environment.

Self-regulated learning was defined by Zimmerman and Schunk (1989) as a learning process in which self-generated thoughts, feelings, and actions are systematically oriented towards attainment of the student's own goals. According to Boekaerts (1999), competencies that make a student capable of self-regulated learning reside in three different layers, namely, that of the regulation of information-processing modes, that of the regulation of the learning process, and that of the regulation of the self. The former two refer to the cognitive side of self-regulated learning and the latter refers to the motivational side of learning. In the field of self-regulated learning, for a long time, the emphasis has mainly been on the cognitive aspects of the learning process while the motivational aspects were neglected (Boekaerts, 1999). Motivational aspects, however, provide an interesting and essential complement to the assessment of preferences for

information-processing modes and to the evaluation of metacognitive awareness and skills (Pintrich & Schrauben, 1992; Zimmerman, 1999), since these aspects provide an indication of why students are prepared to do what they do and why they are or are not inclined to do what is expected from them (Boekaerts, 1999).

Self-regulated learning concerns the application of general models of regulation and self-regulation to factors of learning; in particular, academic learning that takes places in school or classroom contexts. There are a number of different models of self-regulated learning that propose different constructs and different conceptualizations (Boekaerts, Pintrich, & Zeidner, 2000), but all of these models share some general assumptions and features.

There are many different models of self-regulated learning that propose different constructs and mechanisms, but they do share some basic assumptions about learning and regulation. One common assumption might be called the active, constructive assumption which follows from a general cognitive perspective. That is, all the models view learners as active constructive participants in the learning process. Learners are assumed to actively construct their own meanings, goals, and strategies from the information available in the "external" environment as well as information in their own minds (the "internal" environment). Learners are not just passive recipients of information from teachers, parents, or other adults, but rather active, constructive meaning-makers as they go about learning.

A second, but related, assumption is the potential for control assumption. All the models assume that learners can potentially monitor, control, and regulate certain aspects of their own cognition, motivation, and behavior as well as some features of their environments. This assumption does not mean that individuals will or can monitor and control their cognition, motivation, or behavior at all times or in all contexts, rather just that some monitoring, control, and regulation is possible. All of the models recognize that there are biological, developmental, contextual, and individual difference constraints that can impede or interfere with individual efforts at regulation.

A third general assumption that is made in these models of self-regulated learning, as in all general models of regulation stretching back to Miller, Galanter, & Pribram (1960), is

the goal, criterion, or standard assumption. All models of regulation assume that there is some type of criterion or standard (also called goals, reference value) against which comparisons are made in order to assess whether the process should continue as is or if some type of change is necessary. The common sense example is the thermostat operation for the heating and cooling of a house. Once a desired temperature is set (the goal, criterion, standard), the thermostat monitors the temperature of the house (monitoring process) and then turns on or off the heating or air conditioning units (control and regulation processes) in order to reach and maintain the standard. In a parallel manner, the general example for learning assumes that individuals can set standards or goals to strive for in their learning, monitor their progress towards these goals, and then adapt and regulate their cognition, motivation, and behavior in order to reach their goals.

A fourth general assumption of most of the models of self-regulated learning is that self-regulatory activities are mediators between personal and contextual characteristics and actual achievement or performance. That is, it is not just individuals' cultural, demographic, or personality characteristics that influence achievement and learning directly, nor just the contextual characteristics of the classroom environment that shape achievement, but the individuals' self-regulation of their cognition, motivation, and behavior that mediate the relations between the person, context, and eventual achievement. Most models of self-regulation assume that self-regulatory activities are directly linked to outcomes such as achievement and performance, although much of the research examines self-regulatory activities as outcomes in their own right.

Given these assumptions, a general working definition of self-regulated learning is that it is an active, constructive process whereby learners set goals for their learning and then attempt to monitor, regulate, and control their cognition, motivation, and behavior, guided and constrained by their goals and the contextual features in the environment. These self-regulatory activities can mediate the relations between individuals and the context and their overall achievement. This definition is similar to other models of self-regulated learning (Butler & Winne, 1995; Zimmerman, 2000). Although this definition is relatively simple, the remainder of this section outlines in more detail the various processes and areas of regulation and their application to learning and achievement in the academic domain which reveals the complexity and diversity of the processes of self-regulated learning.

1.2.1. Cognitive Strategy Use

The cognitive variables provide ecologically valid data on academic performance on actual academic tasks in support of self-regulating learning. Students who are more cognitively engaged in trying to learn by memorizing, organizing, and transforming academic materials through the use of rehearsal, elaboration, and organizational cognitive strategies performed better than students who tended not to use these strategies (Wienstein and Mayer, 1986). Researchers indicate that self-regulation is the best predictor of academic performance on all the outcome measures suggests that the use of self-regulating strategies is essential for academic performance on difference types of actual academic work (Corno, 1986). Self-regulation is highly correlated with cognitive strategies, yet the two construct can be distinguished conceptually, and when both the entered as predictors of academic performance, cognitive strategy use has a negative relation to performance. The effect of negative strategy use on academic performance suggests that cognitive strategy use without the concomitant use of self-regulatory strategies is not conducive to academic performance. Research on metacognition and self-regulation suggests that student must be able to understand not only the “what” of cognitive strategies, but also how and how and when to use strategies appropriately (Pressly, 1986).

Cognitive control and regulation includes the types of cognitive and metacognitive activities that individuals engage in to adapt and change their cognition. In most models of metacognition and self-regulated learning, control and regulation activities are assumed to be dependent on, or at least strongly related to, metacognitive monitoring activities, although metacognitive control and monitoring are conceived as separate processes (Pintrich et al, 2000; Zimmerman, 2000). As in any model of regulation, it is assumed that attempts to control, regulate, and change cognition should be related to cognitive monitoring activities that provide information about the relative discrepancy between a goal and current progress towards that goal. For example, if a student is reading a textbook with the goal of understanding (not just finishing the reading assignment), then as the student monitors his or her comprehension, this monitoring process can provide the student with information about the need to change reading strategies.

One of the central aspects of the control and regulation of cognition is the actual selection and use of various cognitive strategies for memory, learning, reasoning, problem solving, and thinking. Numerous studies have shown that the selection of appropriate cognitive strategies can have a positive influence on learning and performance. These cognitive strategies range from the simple memory strategies very young children through adults use to help them remember (Schneider & Pressley, 1997) to sophisticated strategies that individuals have for reading (Pressley & Afflerbach, 1995), mathematics (Schoenfeld, 1992), writing (Bereiter & Scardamalia, 1987), problem solving, and reasoning (Nisbett, 1993). Although the use of various strategies is probably deemed more "cognitive" than metacognitive, the decision to use them is an aspect of metacognitive control and regulation as is the decision to stop using them or to switch from one strategy type to another.

In research on self-regulated learning, the various cognitive and learning strategies that individuals use to help them understand and learn the material. For example, many researchers have investigated the various rehearsal, elaboration, and organizational strategies that learners can use to control their cognition and learning (Zimmerman & Martinez-Pons, 1986). These strategies include the use of imagery to help encoding of information on a memory task as well as imagery to help one visualize correct implementation of a strategy (Zimmerman, 1998). The use of mnemonics would also be included in this cell as well as various strategies like paraphrasing, summarizing, outlining, networking, constructing tree diagrams, and note taking (Weinstein & Mayer, 1986).

Cognitive engagement represents the amount of effort spent in either studying or completing assignments. It is the result of motivation, not its source. Pintrich and Schrauben (1992) review a large body of research that suggests that (1) the value of an outcome to the student affects that student's motivation and (2) motivation leads to cognitive engagement, such engagement manifesting itself in the use or application of various learning strategies.

1.2.2. Self-regulation

Self-regulatory processes have primarily been linked to the study of academic achievement. Some research has indicated that such processes do not appear to influence academic performance alone (Patrick, 1997). Social competence, which involves skills in social goal setting, problem-solving capabilities, feelings of social support and trust and ability to exercise self-control in the face of social pressure, is found to require the execution of self-regulatory skills, thereby influencing academic outcomes. Since both academic and social learning share common self-regulatory features, it would appear that promoting the development of either aspect of behavior should have an impact on the other domain.

Research has shown that self-regulation can be effective in influencing educational outcomes if an individual has positive beliefs about his ability to negotiate and achieve optimal learning. Self-efficacy has been found to influence students' motivation in regulating cognitive and social processes. Students high in efficacy beliefs are better able to regulate their own learning activities, master difficult learning tasks and influence their academic motivation, interest and achievement performance. Such positive self-beliefs also impact on one's ability to regulate affect in social relations and vulnerability to peer pressure.

Regulation of behavior is an aspect of self-regulation that involves individuals' attempts to control their own overt behavior. Some models of regulation would not include this as an aspect of self-regulation since it does not explicitly involve attempts to control and regulate the personal self and would just label it behavioral control. In contrast, the framework of the triadic model of social cognition (Bandura, 1986; Zimmerman, 1989) where behavior is an aspect of the person, albeit not the internal 'self' that is represented by cognition, motivation, and affect. Nevertheless, individuals can observe their own behavior, monitor it, and attempt to control and regulate it and as such these activities can be considered self-regulatory for the individual.

Strategies for actual behavioral control and regulation address issues of behavioral control of physical health, mental health, work behaviors, and social relations with others, as well as behavioral control of activities for academic learning (Boekaerts et al., 2000). Students may regulate the time and effort based on their monitoring of their behavior and the

difficulty of the task. If the task is harder than they originally thought, they may increase their effort, depending on their goals, or they may decrease effort if the task is perceived as too difficult. Students may also try to manage their time and study context. They may manage their time by setting up study schedules and making plans for when to study.

Another behavioral strategy that can be very helpful for learning is help-seeking. It appears that good students and good self-regulators know when, why, and from whom to seek help (Karabenick & Sharma, 1994). Help-seeking is listed here as a behavioral strategy because it involves the person's own behavior, but it also involves contextual control because it necessarily involves the procurement of help from others in the environment and as such is also a social interaction (Ryan & Pintrich, 1997).

When learners cannot solve problems, understand text material, or complete assignments, their options include seeking assistance from friends, family, classmates, and teachers as well as persistence or abandoning tasks (Feather, 1963). Until recently, help seeking was stigmatized as an act of dependency, especially in Western cultures that highly value independence and individual success. This negative view has changed dramatically, however, with the recognition that it can also be adaptive and strategically beneficial (Newman, 2000). Whether help seeking contributes in this positive fashion depends on learners' goals. Asking other students for answers to problems would be an example of executive (also called expedient) help seeking that is designed to minimize effort. This may have short-term benefits but not decrease a learner's dependence on others when subsequently faced with similar problems. By contrast, instrumental (also called autonomous) help seeking is that undertaken to increase mastery and competence by obtaining the assistance necessary to further understanding, for example, by asking teachers for explanations rather than solutions. Butler (1998) has also proposed adding performance-related goals as a separate category of reasons why learners seek help.

Several approaches have advanced this positive perspective. Ames (1983) conceptualized help seeking as a strategic achievement behavior. In action control theory (Kuhl, 1985) help seeking is considered a way to exert volitional control over the environment, and Rohrkemper and Corno (1988) regard seeking assistance from others an adaptation to difficulty or unfamiliarity. Newman (2000) has identified "adaptive help seeking" as a strategy of self-regulated learners (Boekaerts, Pintrich & Zeidner, 2000) who efficiently

seek necessary assistance in response to a perceived lack of comprehension. Adaptive help seeking is based on actions that would be normative (i.e., ideal) at each phase of the help-seeking process (Gross & McMullen, 1983): well calibrated comprehension monitoring, assessing costs and benefits of seeking and not seeking help, instrumental help-seeking goals, identifying and securing appropriate source of help, and effectively processing help received.

Given its potential benefits, research has focused on the person and situation determinants of whether, for what reasons, and from whom help is sought (Newman, 2000). There is now considerable evidence that more motivated, active, engaged, and self-regulated learners are more likely to seek assistance when necessary (Karabenick, 1998). Student who prefer challenge and independent mastery are more likely to seek such help (Arbreton, 1998) and high school students who use other self-regulated strategies also seek help from peers, teachers, and adults. In response to poor performance, college students with achievement-oriented "help-relevant" beliefs (Ames, 1983) and those who use a variety of cognitive, metacognitive, and self-regulating learning strategies (Karabenick & Knapp, 1991) will also seek help more frequently. It is important to emphasize the conditional nature of these relationships. More motivated, self-regulated, and therefore successful students are actually less likely to need and to seek help (Karabenick & Knapp, 1988). They are only more likely given equivalent levels of (i.e., controlling for) need (Karabenick & Knapp, 1991), which as discussed subsequently has implications for the assessment of help seeking.

Several studies with elementary, middle school, and adolescent learners have examined effects of achievement goals (Pintrich & Schunk, 2002). Typically, students' personal mastery goal orientations have been associated with instrumental/autonomous help seeking, whereas help-seeking threat, avoidance, and executive (expedient) help seeking relates to performance avoid goals (Karabenick, 2003; Newman, 1998). Help seeking is subject to the same person and situation influences as are other strategies (Karabenick, 2003), with one important difference: successful help seeking involves other- as well as self-regulation (Newman, 2000). For this reason, the help-seeking process is especially sensitive to learners' social-interactive context, including whether teachers are perceived to be receptive to questioning (Karabenick & Sharma, 1994). The focus on socio-cultural context in motivation and learning is thus particularly relevant for understanding the

conditions that determine whether and how help seeking is expressed (Salili, Chiu & Hong, 2001).

Recent work has also examined whether students could be characterized not only according to their intentions to seek or avoid seeking help (Ryan, et al., 1998), or by their help-seeking goals (instrumental vs. expedient), but rather according to more elaborated orientations (Karabenick, 2002). Somewhat analogous to achievement goals, which include both the purposes of task engagement and standards against which success is measured, orientation as used here is intended to capture affect, cognition, and behavior that, in combination, reflect students' help-seeking experiences. Building on previous research that has examined associations between components of the help-seeking process (Newman, 1990), general orientations provide a parsimonious way to summarize different components, or indicators, the help-seeking process. Consistent with recent analyses of approach and avoidance dimensions in motivation (Elliot & Covington, 2001; Elliot & Thrash, 2002), two rather than one dimension were required to describe students' help-seeking, orientations (Karabenick, 2002).

Approach and avoidance help-seeking orientations are related in very different ways to students' motivation, achievement goals, and use of learning strategies. Students with higher approach orientations are more motivated and higher mastery approach personal goal orientation, and indicated they used other learning strategies. Conversely, students higher in help-seeking avoidance were less motivated, more test anxious, had lower mastery approach and higher mastery avoid and performance personal achievement goals, and tended to use lower-level rehearsal rather than higher level learning strategies. In sum, help-seeking approach orientation is typical of students who are more engaged in learning, whereas avoidance-oriented students are less engaged, with more negative affect, and greater concerns about their level of performance in the course. These results are consistent with studies of younger learners and suggest the way approach-oriented help seeking is integral to positive approaches to learning: an adaptive self-regulated strategy.

1.3. Motivational Beliefs and Academic Performance

Educational theorists have argued that there is much more to learning than the “cold” processing of information (Pintrich et al, 1993). Learning also involves the cultivation of adaptive motivational beliefs. To the extent that students develop adaptive motivational beliefs, they are more likely to seek out challenges, take risks, persist in the face of difficulty, and ultimately demonstrate higher levels of achievement. Over the past 15 years, one of the most active areas of research on students’ motivational beliefs has been the investigation of achievement goal orientations. Goal orientations are students’ reasons for engaging in or avoiding achievement-directed behavior. These goal orientations are important because they serve as the basis for how students define their own competence (Pintrich and Schunk, 2002). Students’ goal orientations are context-sensitive and can be influenced by classroom procedures, practices and policies (Ames, 1992).

Researchers have distinguished two types of goal orientations: mastery goals and performance goals. Recently, motivational theorists have further distinguished achievement goal orientations to highlight how much each has an approach and avoidance component. The following three configurations of goal orientations have received the most attention in the research literature: mastery-approach goals, performance-avoid goals and performance-approach goals.

Students who have mastery-approach goals define competence in terms of self-improvement and self-set standards. When engaged in achievement-directed behavior, they focus on learning, skills, development, creativity and understanding. The empirical evidence suggests that when students approach achievement tasks with a mastery orientation, they experience a variety of desirable outcomes: enhanced interest in learning, more positive attitude toward learning, viewing of errors as informational, attribution of failure to lack of effort, academic engagement and effort, perseverance in the face of challenges, more risk-taking and asking assistance when needed (Pintrich and Schunk, 2002).

Students holding performance-avoid goals, on the other hand, are focused on avoiding looking dumb, stupid or less able than other students. Students with these goals are concerned with protecting their self-worth at all cost. Consequently they are more likely to engage in self-sabotaging behavior, such as cheating, avoiding help when they need it,

and withdrawing effort. Pintrich and Schunk (2002) point out that student who have performance avoid goals are more likely to view errors as indicating a lack of ability, experience high level of anxiety, exert less effort, place less value on tasks, give up in the face of difficulty and ultimately demonstrate lower levels of achievement.

Finally, students holding performance-approach goals in achievement behavior for the purpose of demonstrating their ability, besting others and obtaining recognition (Pintrich and Schunk, 2002). Student with performance-approach orientation define competence in relation to others (e.g. getting the highest grade)

In any school setting, whether it may be elementary, secondary or higher education, a student's motivation for learning is generally regarded as one of the most critical determinant, of the success and quality of any learning outcomes (Mitchell, 1992). Student motivation naturally has to do with students' desire to participate in the learning process. But it also concerns the reasons or goals that underlie their involvement or noninvolvement in academic activities. Although some students may be equally motivated to perform a task, the sources of their motivation may differ.

The term 'Motivation to learn' has a slightly different meaning. It is defined by one author as "the meaningfulness, value and benefits of academic tasks to the learner- regardless of whether or not they are intrinsically interesting" (Hermine Mashall, 1987). Other notes that motivation to learn is characterized by long term, quality involvement in learning and commitment to the process of learning (Ames, 1990).

An article from ERIC (Educational Resources Information Center, 1997) pointed out an important distinction in types of motivation: "Student motivation naturally has to do with students' desire to participate in the learning process. But it also concerns the reasons or goals that that underlie their involvement or noninvolvement in academic activities". These types of motivation are intrinsic and extrinsic motivation. If a learner is motivated intrinsically than they "learn for the sake of learning". A student who is intrinsically motivated undertakes an activity "for its own sake, for the enjoyment it provides, the learning it permits or the feelings of accomplishment it evokes (Mark Lepper, 1988). As opposed to an extrinsically motivated learner who will perform a task for external reasons such as good grades, prizes, stickers, teacher approval etc. An extrinsically motivated

student performs "in order to obtain some reward or avoid some punishment external to the activity itself" (Mark Lepper, 1988). This difference is important to point out because different theories have different kinds of motivation as their goal.

Goal theory considers beliefs about what success at school entails, and suggests that these determine how an individual will approach a particular learning situation. When students adopt task goals, they believe that academic success involves improving one's own skills and knowledge and so they seek to increase their competence and to understand or master new tasks. They are primarily concerned with learning for their own sake and attribute success to their efforts. Students with ego goals believe that academic success involves proving one's skill or knowledge to others such as peers, teachers or parents and they seek to appear successful and to gain favorable judgments of their competence. Success is defined as doing better than others and errors are viewed as evidence of a lack of ability or worth. A third academic goal is that of work avoidance where the aim is to survive in school with as little effort as possible.

Most researches have concentrated on academic goals in schools. Urdan and Maehr (2002) present a comprehensive case for the inclusion of social goals in theory and research on motivation. Wentzel (1991) argued that academic goals are not the only possible goals in school and proposed that social responsibility (defined as the adherence to social rules and role expectations) has long been an implicit and explicit goal for education. In another paper (Wentzel, 1994), also investigated pro-social goals where students seek to have fun and make friends at school. His main focus is on successful social interaction. He also pointed out that students have five personal motivational goals such as task, ego, work avoidance, social responsibility and pro-social those influence the academic performance.

Students must be involved in an active process of integrating and organizing new information, constructing meaning, and monitoring comprehension so that they can develop a sound understanding of a subject matter. However, students have difficulties in activating effectively their appropriate knowledge and strategies in their class. These problems may be attributable to both cognitive and motivational variables that play an important role in students' learning (Pintrich & De Groot, 1990). The research has suggested that students' learning strategies are motivated by their achievement goal orientations (Anderman & Young, 1994; Pintrich & Schrauben, 1992). Students with

learning, task-involvement, and mastery goal orientations used deep, metacognitive, and self-regulated learning strategies; they were oriented toward improving new skills and attaining a sense of mastery by their standards. Students with performance and ego-involvement goal orientations were oriented toward achieving normatively defined goal and focused on public recognition; they were likely to use superficial learning strategies, such as memorizing and writing down quickly what they learned in the classroom (Ames, 1990).

The researchers argued that students' goal orientations should be understood as three theoretical constructs: task goal orientation, ability-approach, and ability-avoidance goal orientations and empirically showed three constructs of goal orientations (Midgley et al., 1998). They also indicated that performance goal orientation sometimes relate to adaptive learning strategies and other times to maladaptive patterns of learning strategies. According to their argument, however, the reason is that previous research has been done without separating performance goal orientation into two constructs: ability-approach and ability-avoid (Midgley et al., 1998). In this study, we predicted that students' task and ability-approach goal orientations positively related to their deep learning strategies and negatively related to their superficial learning strategies. We also predicted that students' ability-avoid goal orientation negatively related to their deep learning strategies and positively related to their superficial learning strategies.

Researchers have suggested that students' motivational beliefs, such as competence beliefs and task values influence their achievement-related behavior. Student's competence beliefs positively related to their task goal orientation. Students who are competent with their ability seek out opportunities that allow them to satisfy needs for competence, curiosity, and mastery (Pintrich & De Groot, 1990; Wigfield & Eccles, 2000). Seo et al. (2000) reported that students' competence beliefs positively related to their ability-approach goal orientation.

The research has suggested that task values are empirically distinguished as three components of achievement value, such as importance, interest, and usefulness and those three components positively related to their competence beliefs (Wigfield & Eccles, 2000). Researchers also found that students' task values positively related to their deep learning strategies (Ames and Archer, 1988; Pintrich & De Groot, 1990). However, few

studies have been done to investigate how three different task values related to three goal orientations suggested by Medgley (1998).

1.3.1. Self-efficacy

Self-efficacy is the judgment of capabilities to organize and effect courses of action to attain goals. Goal orientations have frequently been found to be related to popular motivational variables. These goal orientations may mediate the extent and nature of the influence of self-efficacy on effort, motivation and performance. Efficacy refers to denote individuals' beliefs in their capabilities to exert control over aspect of their lives. A sense of efficacy for performing well in school may lead students to expend effort and persist at tasks, which promotes learning. As students perceive their learning progress, their initial sense of efficacy is substantiated, which sustains motivation. Even when students have encountered prior difficulties, the belief that they are capable of succeeding can override negative effects of prior performance and produce motivated behavior (Schunk, 1985).

Bandura (1997) introduced the concept of self-efficacy as a key component in social cognitive theory in the late 1970's and it has been found to be an important predictor of student achievement (Zimmerman, 2000). Self-efficacy is the personal belief held by an individual in his or her ability to successfully perform tasks at a given level. This is related to the construct of self-concept but where self-efficacy is a task/goal specific belief, self-concept is a more general self-description incorporating many forms of self-knowledge and feelings (Zimmerman, 2000). Self-efficacy is related only to performance expectations and does not depend on the value placed on the task. For example (Bandura, 1997) notes that it is possible to have high self-efficacy about a capability that one does not particularly value as well as the reverse. The more specific and skill-related the self-efficacy measure is, the more predictive it is likely to be for performance achievement.

Self-efficacy has been researched extensively in the field of psychology and education. A multi-dimensional construct, it influences human functioning direct or indirectly through its effects on other determinants such as motivation, self-regulation, attribution and emotion. He defined as "a generative capability in which cognitive, social, emotional, and behavioral subskills must be organized and effectively orchestrated to serve innumerable purposes". Self-efficacy mediates between an individual's ability and their purposive action. Self-efficacy influences the course of action adopted, effort invested, endurance

and resilience in the face to obstacles and failures, coping and the level of accomplishments. Bandura states that people with high self-efficacy tend to be future oriented, take effective course of action and in turn self-efficacy is enhanced. In its role as a mediator between task capability and action, self-efficacy is dependent on one's beliefs in control capability. Self-efficacy is concerned with people's beliefs in their capabilities to perform in ways that give them some control over events that affect their lives" (Bandura, 1997).

Self-efficacy regulates functioning through four processes: (a) cognitive (b) motivational (c) choice behavior (d) emotional (Bandura, 1997). This regulatory role of self-efficacy in the domains of cognition, behavior and emotion is measured by assessing cognitive self-efficacy, motivational self-efficacy, behavioral self-efficacy and emotional self-efficacy. Cognitive self-efficacy impacts on choice of strategies, development of rules for predicting and influencing events and efficiency and effectiveness in problem solving and decision making. Cognitive processes include one's ability to exercise control over one's thought and mental processes. Motivational self-efficacy is crucial for the development and regulation of motivation. Bandura (1997) stated that cognitive motivation based on goal intentions are mediated by three types of self-influences: self-evaluation, perceived self-efficacy for goal attainment and ongoing adjustment of personal standards. Among these three mediators of motivation, self-efficacy has a casual influence on motivation. Choice behavior self-efficacy influences choice of goals, activities directed to attaining the goal, the amount of effort expended and perseverance in the face of obstacles. High self-efficacy leads to setting higher goals and greater commitment to attaining them. Emotional self-efficacy beliefs impact on both the type and intensity of emotion, with low self-efficacy to attain a goal leading to despondency. Lack of self-belief in controlling disturbing thoughts results in negative affect states leading to poor self-efficacy, lowered performance and further despondency. Positive affect states leads to enhanced self-efficacy. Emotional efficacy can be measured through measurement for cognitive and behavioral self-efficacy for controlling emotions, cognitive self-regulation and for performing pleasant or mastery-related behavior.

Bandura (1997) has given a three-fold classification of the structure of self-efficacy which includes: (a) level/magnitude, (b) generality and (c) strength. Level/magnitude refers to self-efficacy on task ranging from simple to most difficult performances. Generality of

self-efficacy refers to its pervasiveness of across behaviors and contexts. People may perceive themselves to be generally efficacious in a range of activities or only within a domain of functioning. Strength of self-efficacy refers to the resoluteness of one's conviction to perform a task and the stronger the self-efficacy expectancy the greater the likelihood of selecting challenging task, striving despite obstacles and successfully attains their goal. The dimension of self-efficacy suggest that an individual can have self-efficacy on a task which is limited in its specificity to a particular level, can not be generalized across domains, and is of limited strength. Conversely, an individual can have a high level of self-efficacy within a task, with wide generality in applicability across domains and strength of conviction to accomplish the goal despite any obstacles.

Viewing motivation and efficacy as interacting mechanism has important theoretical and practical implication. Self-efficacy is positively related to student cognitive engagement and performance. Student who believe they are more likely to report use of cognitive strategies, to be more self-regulating in terms of reporting more use of metacognitive strategies and to persist more often at difficult or uninteresting academic task. These relations are independent of and do not interact with prior achievement levels or intrinsic value and test anxiety. Schunk (1985) has suggested that self-efficacy plays a facilitative role in relation to cognitive engagement, but the cognitive engagement variables are more directly tied to actual performance. This implies the teaching students about different cognitive and self-regulatory strategies may be more important for improving actual performance on academic tasks, but that improving students' self-efficacy beliefs may lead to more of these cognitive strategies. Though efficacy bears a positive relation to strategy use and performance, it may affect performance indirectly through its influence on strategy use.

Self-efficacy and self-regulation share a reciprocal relationship. Self-efficacy contributes to the self-regulation of cognitive functioning through the use and monitoring of learning strategies, structuring the environment, regulating motivational, affective and socio-cognitive skills to attain a person's goal (Bandura, 1997). Self-efficacy operates during all phases of self-regulation i.e. forethought, performance and self-evaluation based on reflection. Zimmerman (2000) has reported that Self-regulation is important because a major function of education is the development of life-long learning skills. Skills are: (a) setting specific proximal goals, (b) adopting strategies to attain the goals, (c) monitoring

progress, (d) restructuring context to suit the goal, (e) efficient use of time, (f) self-evaluation of method and (g) attribution.

Performance attainment, enactive attainments, vicarious experiences, verbal persuasion, physiological states are the major sources of self-efficacy information. Self-efficacy research in academic settings has focused primarily in the area of its link with career choice and with related psychological constructs of academic motivation and achievement (Pajares, 1997). While perception of self-efficacy enables participation in activities, leading to further acquisition of competencies, self-efficacies can lead to avoidance behavior, giving up easily deterring the development of one's true potential. Pajares (1997) report the predictive role of self-efficacy in elementary student's writing. Student self-efficacy in writing capability influenced writing apprehension and essay writing performance. Research in the field of education and in particular in its role in academic achievement has shown positive correlation with performance attainment (Bandura, 1986).

Zimmerman's (2000) review of the major findings into self-efficacy beliefs concludes that they are positively related to motivation. Researchers have found that students who are self-efficacious are more likely to undertake difficult and challenging tasks than are students who are not self-efficacious. They are also more likely to exert more effort and to persist longer in the face of difficulties. It has been found that perceived self-efficacy influences students' methods of learning as well as their motivational processes. Students who are self-efficacious appear to use more self-regulating strategies which lead to higher achievement. Pintrich and De Groot (1990), for example, found that "self-efficacy was positively related to student cognitive engagement and performance. Students who believed they were capable were more likely to use cognitive strategies, to be more self-regulating and to persist more often at difficult or uninteresting academic tasks". Although self-efficacy was found to be linked to performance, only indirectly, through cognitive engagement in their study, other researchers have found direct links. In a meta-analytic review of 70 studies of persistence and rate measures of motivation, it was (1991) found a significant positive effect size of students' self-efficacy beliefs. They found an overall effect of .38, indicating that self-efficacy accounted for approximately 14% of the variance in students' academic performance across a variety of student samples, experimental designs, and criterion measures (Zimmerman, 2000).

Academic efficacy and moral self-concept are accounted for substantial unique variance in the prediction of academic and social self-regulation. They also found that the moderate correlations between efficacy beliefs, specific domains of self-concept and affiliation-based motives facilitate the successful regulation of academic work and social competence may require a combination of these factors at work.

1.3.2. Intrinsic Value

Intrinsic value has traditionally been thought to lie at the heart of ethics. Philosophers use a number of terms to refer to such value. The intrinsic value of something is said to be the value that that thing has "in itself," or "for its own sake," or "as such," or "in its own right." The concept of intrinsic value has been characterized above in terms of the value that something has "in itself," or "for its own sake," or "as such," or "in its own right." Academic intrinsic motivation involves enjoyment of school learning characterized by a mastery orientation, curiosity, persistence, task-indigence and the learning of challenging difficult and novel task (Gottfried, 1985). According to Harter (1981), a student has an intrinsic orientation when classroom learning is determined by internal interest such as mastery, curiosity, and performance for challenge.

Examining the construct of intrinsic motivation in students is significant and important, because academic intrinsic motivation in the early elementary years may have profound implications for initial and future school success. Students who are more intrinsically than extrinsically motivated fare better and who are not motivated to engage in learning are unlikely to success (Gottfried, 1985). Intrinsic motivational patterns have been associated with high-perceived ability and control, realistic task analysis and planning and the beliefs that effort increases one's ability and control.

Gottfried (1985) states that students who reported higher academic intrinsic motivation had significantly higher school achievement. She also found that academic intrinsic motivation is a valid construct for students. Positive correlation between motivation and achievement were obtained. Specifically, students with higher academic intrinsic motivation had significantly higher achievement and intellectual performance. Overall, students with higher academic intrinsic motivation functioned more effectively in school. She also found that early intrinsic motivation correlates with later motivation and

achievement and that later motivation is predictable from early achievement (Gottfried, 1985).

Biggiano et al. (1992) revealed that academic motivation positively influenced academic performance. He found that motivational orientation predicted students' standardization achievement scores. Specifically, students with an intrinsic motivational orientation had higher reading and math scores and higher overall achievement scores than their extrinsic counterparts. The findings of their study suggest that motivational orientation may be a determinant of attributions and perceptions of competence that undoubtedly contribute to students' achievement.

Research has shown that intrinsic value is very strongly related to use of cognitive strategies and self-regulation, independent of initial performance levels or self-efficacy and test anxiety. Students who are motivated to learn the material and belief that their academic work is interesting and important are more cognitively engaged in trying to learn and comprehend the material. These students are more likely to be self-regulating and to report that persist on their academic work. It is important to note that intrinsic value does not have a direct influence on student achievement in any regression that included cognitive strategy use or self-regulation. The cognitive variables, self-regulation in particular, are better predictors of actual performance (Eccles, 1983). Intrinsic value is an important component of students' "choice" about becoming cognitively engaged in their academic work. It appears that the students who choose to become cognitively engaged and self-regulating are those who are those interested in and value the task they work on in their academic work. Accordingly students' intrinsic value and motivation to learn is an important component to be considered of how students come to use different cognitive strategies and become self-regulating learners. It is important for teachers to socialize students' intrinsic value for academic work (Brophy, 1983) not because it will necessarily lead to higher scores on academic assignments or standardized achievement test directly, but it may lead to more cognitive engagement in day-to-day academic work.

It should be noted that some studies have found little or no significant relationship between motivation and academic achievement. Neibuhr (1995) completed a study that examined relationships between several variables and student academic achievement. The study included an investigation of the relationship of individual motivation and its effect

on academic achievement. Findings indicate that student motivation showed no significant effect on the relationship with academic achievement.

A study by Stipek and Ryan (1997) found a weak relationship between motivation and student achievement. To assess motivation, the students responded to questions about their worries, attitudes, abilities, emotions, and expectations related to school. They revealed that both advantaged and disadvantaged students entered school with positive motivation profiles, the motivation of the more advantaged students showed a tendency to decline over the first year. Overall, little or no relationship was found between students motivation and achievement. They also found that students' cognitive skills were far better predictors of end-of-the-year achievement than motivation.

The literature suggests that most of the students begin their academic career with a desire to learn and with an intrinsic approach to achievement. It has also been revealed that an intrinsic orientation toward education switches to more extrinsic orientation as students increase in age. It also revealed that intrinsic motivation is an important construct in classroom academic performance of the students.

1.3.3. Test Anxiety

Anxiety is experienced as a combination of mental and physical reactions. Person's mind automatically interprets worry and anxious feelings as a sign of danger. It triggers his/her body to react as it would in any dangerous or highly stressful situation. Facing a test becomes the same as facing an angry bear. Then person feel at risk. Highly test-anxious students experience the same physical reactions to an upcoming examination as they do in any dangerous or risky situation.

Anxiety caused by what individual expect to happen has no clear end point. After the test is over, individual anxiety moves to the expected poor grade, feelings of failure, and the next examination. Test-anxious individuals have learned to believe that they will do poorly. Irrational worrying leads to a distorted self-image and an inaccurate perception of themselves. The result is often poor self-esteem. Overcoming test anxiety means that something has to change. Since the tests are going to remain fairly much the same, what must be altered is your approach to taking tests. Reducing test anxiety and stress reactions to a comfortable level means learning to alter the way person's body feels, from being

tight and rigid to calm and relaxed. The ways in which individual think about himself/herself and his/her abilities have to change from expectations of failure to the anticipation of success.

Anxiety is a constant companion of education. Every student feels some anxiety at some time while in school, but for certain students' anxiety seriously inhibits learning or performance, particularly on tests. The main source of anxiety in school is the fear of failure, and with it, loss of self-esteem. Low achievers are particularly likely to feel anxious in school, but they are by no means the only ones; we all know very able, high-achieving students who are also very anxious, terrified to be less than perfect on any school task.

Anxiety can block school performance in several ways. Anxious students may have difficulty learning in the first place; they may have difficulty using or transferring knowledge they do have, and they may have difficulty demonstrating their knowledge on tests. Anxious students are likely to be overly self-conscious in performance a setting, which distracts attention from the task at hand.

One particularly common form of debilitating anxiety is "math phobia." Many students (and adults) simply freeze up when given math problems, particularly word problems. Girls are especially likely to suffer from serious math anxiety, at least in part because girls, particularly in adolescence, feel less able in math than boys.

There are many strategies; teachers can apply to reduce the negative impact of anxiety on learning and performance. Clearly, creating a classroom climate that is accepting, comfortable, and noncompetitive helps. Giving students opportunities to correct errors or improve their work before handing it in also helps anxious children, as does providing clear, unambiguous instructions. In testing situations, teachers can do many things to help anxious students to do their best. One is to avoid time pressure, to give students plenty of time to complete a test and check their work. Tests that begin with easy problems and only gradually introduce more difficult ones are better for anxious students, and tests with standard, simple answer formats help such students. Test-anxious children can be trained in test-taking skills, and this can have a positive impact on their test performance.

Although there are a number of theories regarding the nature of anxiety, psychologists generally agree that arousal and tension play an important part. Moderate levels of anxiety seem to facilitate general effectiveness. At high levels of anxiety, arousal and tension are at such a peak those individuals are more likely to be concerned about their own state of disturbance than they are about dealing with tasks or problems. The use of the term “anxiety” is often confusing because, Charles D. Spiegeberger (1972) has pointed out; the same term is used to refer to both a trait of personality and a sense. Psychologists are using the term in its trait sense when they refer to “high anxiety” and “low anxiety” individuals. A high anxiety individual is one who is consistently keyed up, who tends to be in a relatively high state of tension and arousal. A low anxiety individual, conversely, is one who is characteristically slow to react, is very relaxed, and is not easily aroused. Anxiety is also used to refer to responses to a specific event. Some situations generate considerable anxiety because they are more threatening or merely because they are more complex or confusing. Situations that are reassuring or are simple and unconfused produce little anxiety. In situations that characteristically are anxiety arousing, individuals in the high anxiety category may find themselves so upset that they are less effective than usual, whereas low anxiety individuals in the same situation may find the higher level of arousal beneficial.

The most common form of trait anxiety in the classroom is test anxiety. Test anxiety is not the same as general anxiety, although the two are related. Test anxiety is specific to situations in which individuals are evaluated. The test anxious person characteristically responds to his or her emotional state, instead of the question on the test. The victim of test anxiety tends to think only of his discomfort and as a consequence does not attend to the test problems.

Research on test anxiety has been linked to students’ metacognition, cognitive strategy use and effort management. Although the other two motivational components generally show simple, positive and linear relation with the component of self-regulated learning, the other results for test anxiety are not straightforward. Benjamin et al. (1981) found that although high-anxious student seemed to be as effortful and persistent as low-anxious students, they appeared to be very ineffective and inefficient learners who often did not use appropriate cognitive strategies for achievement. High anxious children are not persistent or avoid difficult tasks.

Research suggests that test anxiety is not significantly related in a linear or nonlinear fashion to use of cognitive strategies of self-regulation; it is negatively related to self-efficacy and performance on examination. The linear relation between test anxiety and self-regulation, although not significant, is in the expected direction; high anxious students report less self-regulation and persistence. The direct relation between test anxiety and examination performance and the lack of any information between test anxiety and self-regulation suggest that the effects of test anxiety are related to retrieval problems at the time of testing rather than lack of effective cognitive strategies encoding or organizing course material. Test anxious students who actually have adequate cognitive skills, test anxiety during examinations engender worry about their capabilities that interferes with effective performance.

1.4. Attitude towards School and Academic Performance

Attitude is an important aspect of human life. Individual sometimes hold positive attitude and sometimes negative attitude toward person or things. Attitude is acquired from social environment in which one is brought up. It is an efficient way to size up the world. It is favorable or unfavorable reaction and evaluation toward something. It is exhibited in one's beliefs, feeling and intended behavior. Attitude as certain regularities of an individual's feelings, thoughts and predisposition to act towards some aspect of his environment. Attitude is the end product of socialization process, significantly influence man's response to culture products, to other person and to group of persons. If the attitude of a person toward a given object or class of objects is known, it can be used in conjunction with situational and other disposition variables to [predict and explain reaction of the person to the class or objects. Cardno (1955) also stated that attitude entails an existing predisposition to respond to social object which in interaction with situation and other dispositional variables, guides and directs the overt behavior of the individual.

Attitude may influence students' motivation. But teacher, guardian and relatives influence the students to study in order to well in school. Some of the students are motivated then and some of the students have a negative attitude toward their school. It may happen for low test score, low school spirit, lack of motivation and interest. For this reason,

sometimes they are not interested to learn in the classroom situation. And they change their mind set toward other things. The negative attitudes of the students influence their teachers, peer group, school management, teaching strategies, classroom environment etc.

The tendency of students' negative attitudes toward school becomes less favorable during the later elementary years, a tendency that persists into high school. This negative shift in attitudes pinpointed in a survey of 121 classes in 69 schools in Illinois, grades six to twelve. Students were asked to rate, on a four-point scale, the emphasis that prevailed in their classes with respect to a number of goals and activities taken from Bloom's (1956) Taxonomy and a list of attitudes. The investigators found that activities that got students to participate, to use their imagination, and to engage in problem solving declined throughout the elementary school years and in high school. There was a corresponding drop in attitudes indicating positive involvement, such as excitement about learning and initiative, as well as an increase in anxiety about grades. The only positive note in an otherwise gloomy picture was a movement toward a more positive approach in the senior year of high school (Walberg, House and Steele, 1973).

There are many reasons for unhappy situation in the school. One is the restive nonconformity and rebelliousness that some students display during the adolescent years. The natural tendency of teachers is to react repressively when their authority is challenged, to make assignments more specific and more detailed, and to establish hard-and-fast rules about deadlines, length of reports, and the like. The accomplishment of learning tasks becomes more a measure of obedience and conformity than a source of personal satisfaction.

A somewhat related cause is the complexity and abstraction of subject matter with each succeeding year of school. When students are positively motivated, complex and abstract material may appear "more adult" and hence interesting and relevant, but when it is presented teachers who themselves are uninterested in it and are conducting routine, evaluation, apathy, or rebellion, is a natural outcome.

A small number of cross-cultural studies have suggested that the relationship between self-beliefs in learning, motivation and achievement, and self-regulation is not a straightforward one, suggesting that such beliefs may have greater predictive power in

individualistic rather than collective societies. In Asian societies, academic achievement is a way of honoring the family and is often considered the filial duty of a good son or daughter. Making one's family proud, saving face (Salili, 1995), and avoiding shame or unhappy consequences may be a greater incentive for individual success than a personal sense of achievement. Eaton & Dembo (1997) demonstrated that fear of failure rather than efficacy beliefs elicit a stronger motivation to succeed academically in a group of Asian-American students, whereas Anglo-American students were motivated more by their level of self-efficacy. Similarly, in terms of social behavior, the Asian emphasis is to conform and "fit in" with others and on the importance of harmonious interdependence with them. Affiliation-based motives, characterized by being collectivistic and socially oriented in nature, may offer a more useful explanation for Asian students' self-regulatory efforts towards academic achievement and social competence.

The present investigation sought to demonstrate the role of motivational beliefs, self-regulated learning strategies and attitude towards school on classroom academic performance of the secondary school students. The study focuses on the aspects of students' self-efficacy, intrinsic value, test anxiety, cognitive strategy use, self-regulation and attitude toward school that how can contribute to students' learning and classroom academic performance.

1.5. Rationale of the Study

Motivating students to achieve in school is a topic of great practical concern to teachers, parents and of great theoretical concern to researchers. New books on the topic appear with increasing frequency and relevant research is proliferating at a rapid rate. One of the greatest challenges and opportunities of the 21st century is for the schools at all levels to focus more on assisting students to become motivated in order that they can succeed in school.

Education arena in Bangladesh is not so developed. Bangladesh's public spending on education still ranks among the lowest in the world. There has been a national concern for Bangladesh educational situation and rank when compared to other countries in the world. Concern for our national dropout rate and the prevalence of standardized testing in public, private, and parochial schools as well as suggestions and considerations for a longer school year all demonstrate the reality of this situation.

Secondary education is to consider the most important stage in the educational system in Bangladesh. Secondary School Certificate (SSC) examination is the first national examination by which the students acquire the first certificate that provides opportunity for higher education. The highest numbers of students appear in the SSC examination. It is observed that a big portion of the students fail in the examination. BENBEIS report (2004) indicates that about 59.34% of the students fail in the Secondary School Certificate (SSC) examination-2002 and about 64.09% of the students fail in Secondary School Certificate (SSC) examination-2003.

There are very high drop out rate in the secondary education. BENBEIS (2005) report indicates that out of 100 students starting at grade VI, 60% complete grade X and takes the national examination in which about 52% passes, resulting in only 31% survival rate at the end of national examination. The country's secondary school enrollment rate is just 17% and 7 out of 10 students cannot complete grade ten.

The fact that poverty is widespread in Bangladesh should not be news to anyone. Secondary education in Bangladesh requires tuition payment. Since many families struggle for managing to survive, paying for tuition and proving educational materials are not possible. Other problems include limited laboratories and computers, large class size and high student teacher ratio (60:1). Large classes do not make easy for teachers to improve teaching methods and learning in the classroom. A small portion of the teachers receive professional training and academic supervision is inadequate.

Intelligence is not only the determinant for academic achievement. High motivation and engagement in learning have consistently been linked to reduced dropout rates and increased levels of student success (Kushman et al. 2000). Development of academic motivation in students is an important goal for educators because of its inherent importance for future motivation, as well as for students' school functioning (Gottfried, 1990). The purpose of this study is to investigate the role of motivational beliefs, self-regulated learning and attitude towards school on classroom academic performance of the students.

Motivational beliefs, self-regulated learning and attitude towards school are the important aspects of the students' performance in the classroom environment. All of these aspects play a vital role on the learning situation and processes as well as learners to learn the subject matters and related elements. Motivational beliefs influence the academic outcomes. Stiggins (2001) explains that we can not separate affect and achievement from one another in the classroom. So as a teacher, we must know how to help the students develop academically empowering dispositions. Classroom teacher need to monitor students' goal orientations when evaluating the success of their instructional efforts. Pintrich and Schunk (2002) have found out that the classroom environment has powerful influence on students' motivational beliefs. Teachers have both the opportunity and the responsibility for cultivating healthy motivational beliefs in their students. By fostering beliefs grounded in positive goal orientations, teachers will increase the likelihood that their classroom will be a dynamic and high achieving learning environment.

The findings of the present research can help to understand whether poor academic performance is related to lack of motivation, self-regulated learning. Through this research, it can be identified whether students performance depend upon attitude towards school. In our country we observe that teachers and parents do not put effort to motivate the students and also there is lack of self-regulation when their learning in the academic institution is concerned. But these factors have an important role on academic performance. It may possible to know how these cognitive factors influence students' academic performance from this research. It will help to understand the existing circumstances of the classroom academic performance of the students in the context of our country. It will be helpful for students as well as teachers, parents and policy makers to contribute to educational sectors of our country. It is possible to know how motivational beliefs, self-regulated learning and attitude towards school influence the classroom academic performance through the present research. The present research will provide information to the authority about the levels of students' motivational beliefs, self-regulated learning and attitude towards school. Then the educators and policy makers will take necessary steps for improving students' motivational beliefs, self-regulation and attitude towards school that will impact on the classroom academic performance. Policy makers can include the improved strategies of motivational beliefs, self-regulated learning and attitude towards school in the national plan of action of education. Also the

findings of the present research will be helpful for the educators, guidance workers and student counselors to deal with classroom academic problems of the students.

Through the research it may find out responsible for students' failure, taking advantage in the examinations, drop out from the school. It will help to understand the existing situation of the role of motivational beliefs, self-regulated learning and attitude towards school on classroom academic performance of the secondary school students. The lack of existing research in this regard has inspired the researcher to conduct the study on the secondary school students.

1.6. Objectives of the Study

Motivational beliefs, self-regulated learning strategies and attitude towards school are the important aspects that may operate independently or jointly influencing students' classroom academic performance. The purpose of the present study is to measure the role of motivational beliefs, self-regulated learning and attitude towards school on classroom academic performance of the students of secondary school. In order to investigate the role of motivational beliefs, use of self-regulated learning strategies and attitude towards school on classroom academic performance, the following specific objectives of the study were as follows:

1. To investigate the effect of self-regulated learning (cognitive strategy use and self-regulation), motivational beliefs (self-efficacy, intrinsic value and test anxiety), and attitude towards school on classroom academic performance.
2. To investigate the effect of sex, class and group on self-regulated learning motivational beliefs, attitude towards school and classroom academic performance.
3. To find out the relationship of self-regulated learning (cognitive strategy use and self-regulation), motivational beliefs (self-efficacy, intrinsic value and test anxiety) and attitude towards school and classroom academic performance.
4. To predict self-regulated learning, motivational beliefs and attitude towards school on classroom academic performance of the secondary school students.
5. To predict all the independent variables on classroom academic performance of the secondary school students by sex and class.
6. To collect some additional qualitative information related to independent variables which facilitate the classroom academic performance.
7. To recommend actions that can be taken for improving motivational beliefs, self-regulated learning strategies and positive attitude towards school of the secondary school students which will contribute to the classroom academic performance.

CHAPTER TWO

METHODOLOGY

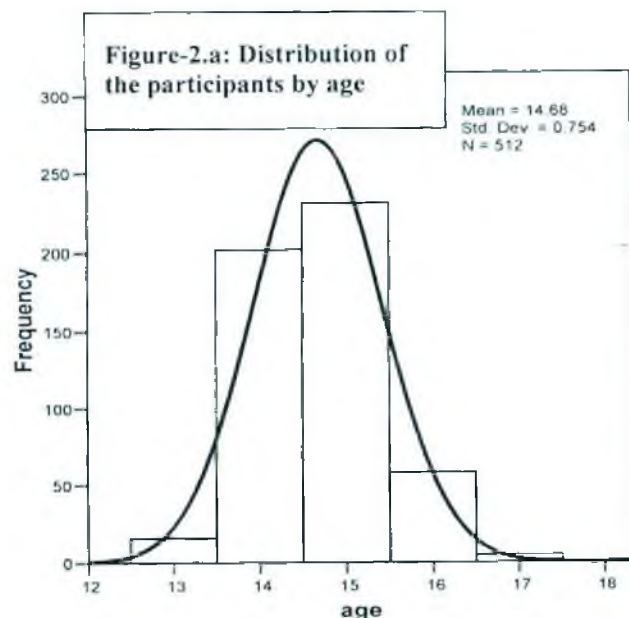
METHODOLOGY

2.1. Research Approach

The main objectives of the present study were to examine the role of motivational beliefs, self-regulated learning strategies and attitude towards school on classroom academic performance of the secondary school students. It was also aimed to determine the relationship among the variables and to predict the criterion with the help of predictors when the measures of all the variables were gathered under the existing conditions. The mentioned characteristics were usually concerned with quantitative and qualitative research in a broad sense. Quantitative and qualitative data were collected in the present study. Qualitative data confirmed the validation of the quantitative data. For collecting qualitative data, Focus Group Discussion (FGD) was administered to secondary school students.

2.2. Participants

The participants of the present study consisted of 512 students who were drawn from the various secondary schools located in the city of Dhaka. The students were selected through stratified random sampling technique. At first, six thana out of 22 thana were selected randomly. The list of secondary schools from district education office of Dhaka was collected. From the list of school, 2 government and 10 non-government schools were selected. It is mention here that 2 schools were selected from each thana. The students of both and single sex, studying in Bengali-medium secondary schools which were recognized by the board of Secondary Education, Dhaka, constituted the population of the present study. All the students followed same curriculum and syllabus which was approved by the National Curriculum Text Book Board of Bangladesh. The students who were present in the class, they were selected as participants. They were the students of



class IX and X. Their average age was 14.68 years. They came from mid-level socio-economic status and their average family income was 9523.44 Taka.

The participants for FGDs were selected randomly those who were present in the classroom. Total 72 participants were selected from the selected schools to conduct the FGDs. Number of Government and Non- Government schools in six Thana and description of the participants were made in the following table 2.1, 2.2, 2.3 and 2.4 respectively:

Figure-2.b: Distribution of the participants by their family income.

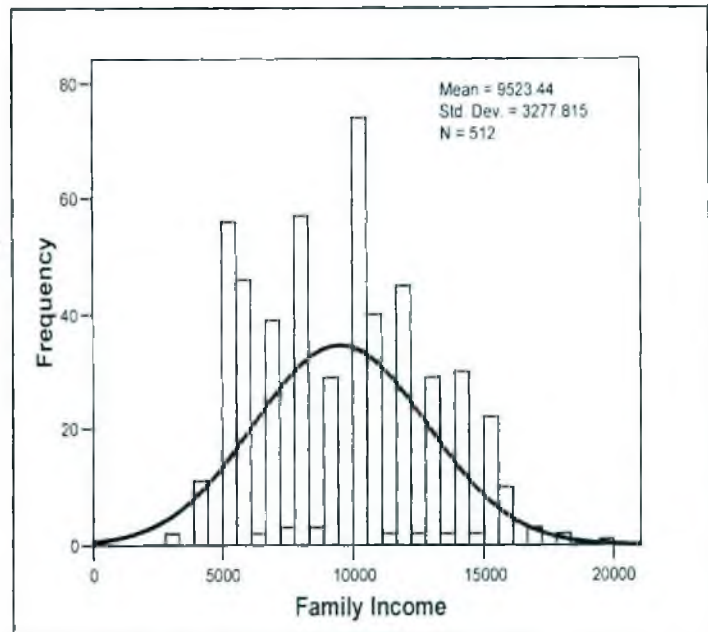


Figure-2.c: Distribution of participants by academic performance.

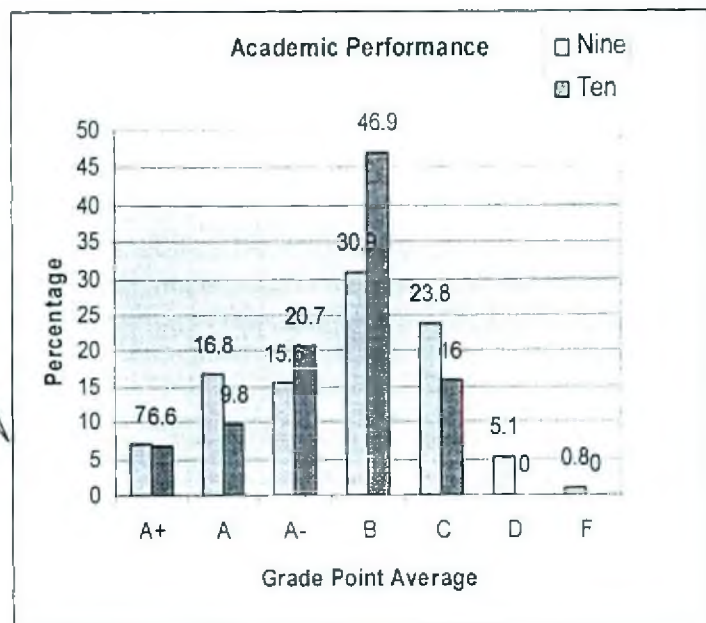


Figure-2.d: Mapping of Sampling Areas in Dhaka City.

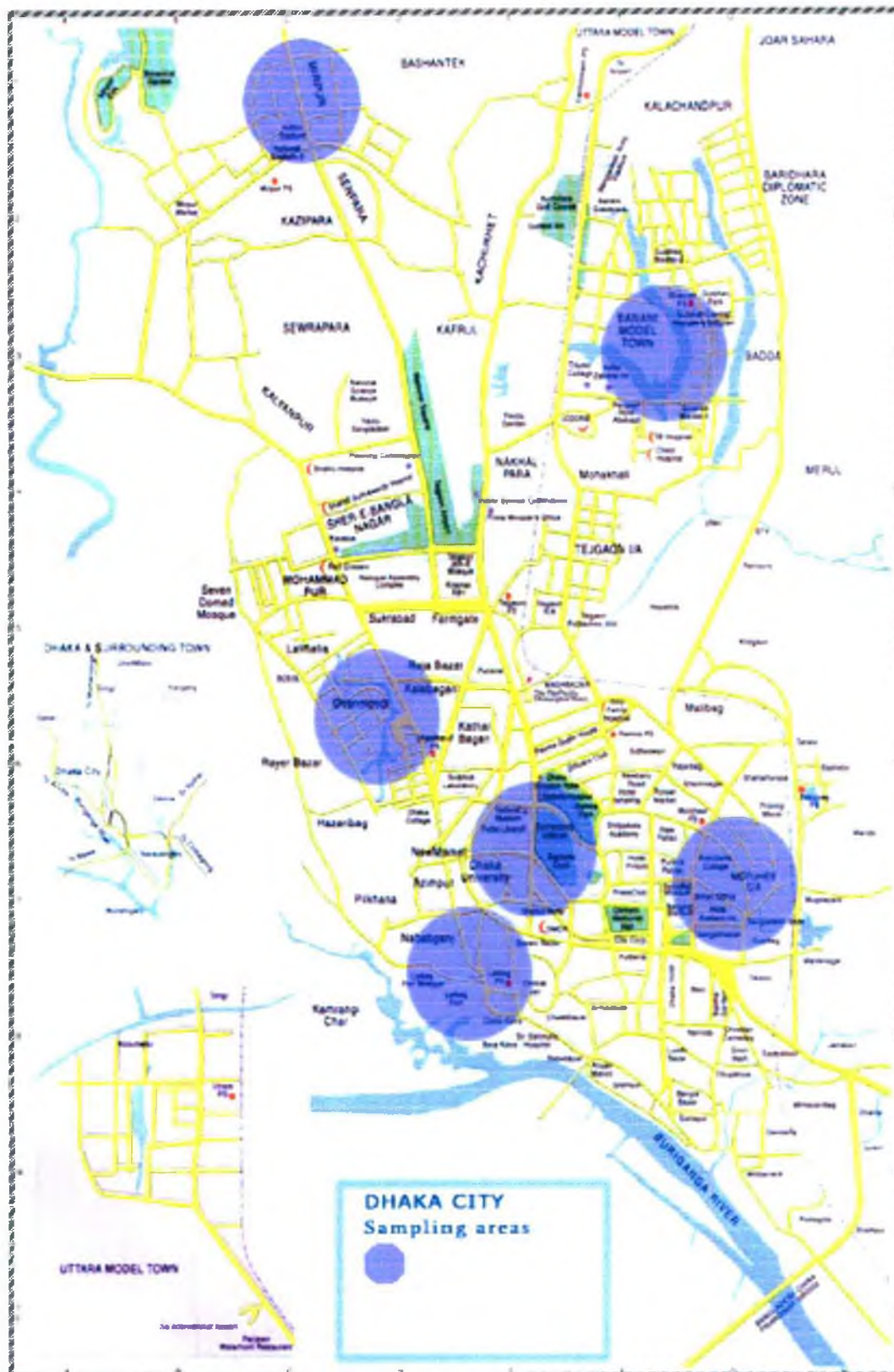


Table-2.1: Frequency distribution of type of school and Thana.

Type of School	Gulshan	Mirpur	Motijheel	Lalbagh	Ramma	Dhanmondi
Government School	0	0	1	1	0	2
Non-Government School	2	2	1	1	2	0

Table-2.2: Distribution of participants by type of school and Thana.

Type of School	Gulshan	Mirpur	Motijheel	Lalbagh	Ramma	Dhanmondi	Total
Government School	0	0	40	40	0	80	160
Non-Government School	87	85	42	56	82	0	352
Total	87	85	82	96	82	80	512

Table-2.3: A brief description of the participants by sex, class and type of school.

Type of School	Class Nine		Class Ten		Total (%)
	Boys (%)	Girls (%)	Boys (%)	Girls (%)	
Government School	40 (7.81%)	40 (7.81%)	40 (7.81%)	40 (7.81%)	160 (31.25%)
Non-Government School	88 (17.19%)	88 (17.19%)	88 (17.19%)	88 (17.19%)	352 (68.75%)
Total (%)	128 (25%)	128 (25%)	128 (25%)	128 (25%)	512 (100%)

Table-2.4: Distribution of the participants of FGDs by class and type of school.

Class	Government School	Non-Government School	Total
IX	18	18	36
X	18	18	36
Total	36	36	72

There were equal number of boys and girls and the classes in the sample while only 160 students came from the Government schools and the remaining 352 students came from the non-government schools. The total participants in representation of the Government and Non-government were not equal, because the less number of Government schools compared to Non-Government school are situated in the city of Dhaka.

2.3. Sampling Design

The present study was designed to get a representative sample of the population and defined the sampling design must take note of heterogeneity coming from various strata of the population that might contribute to the variation in the dependent variable measures. It was further reasoned out that type of school (Government School & Non-Government School and Boys school & Girls school) might be the important strata. Therefore, it was thought that first whole population of single-sex secondary schools recognized by the Board of Secondary Education, Dhaka would be subjected to two way classifications (a) Government School & (b) Non- Government School, (c) Boys school & (d) Girls school. Thus, there would be four sub division of single sex recognized school: Government Boys School, Government Girls School, Non-Government Boys School and Non-Government Girls School. Accordingly, researcher made four separate list of the population of school. The investigator planned to draw stratified random equal number of schools from the above mentioned four separate lists of schools and he drew two schools randomly from each of the Thana. The students, who were present in the class of nine and ten, were selected for collecting data.

The participants of the FGDs were selected randomly from selected school. Six participants were participated in each FGD. Total 12 FGDs were conducted from the selected schools. And all the FGDs were conducted in the classroom setting.

And 12 teachers were randomly selected from the respective schools for rating the motivational components and classroom academic performance of the students. One teacher from each school was selected with the willingness of him/her and permission of the headmaster of the respective school. And finally, researcher observed the students in the class without students' consent from outside from the classroom. Thus, in brief, the

sampling design was a stratified random sampling technique which ensured representative samples of the study.

2.4. Variables Involved

The following variables are included in the present study:

2.4.1. Independent Variables:

(a) Motivational beliefs

- Self-efficacy
- Intrinsic value
- Test anxiety

(b) Self-regulated learning strategies

- Cognitive strategy use
- Self-regulation

(c) Attitude toward school

2.4.2. Dependent Variables:

- Academic result (Average of total marks obtained by a student in the last three examinations of the school)
- Multiple Choice Question (MCQ) test result

2.5. Measuring Instruments

Six instruments were used in this study for collecting data. The instruments were as follows:

1. Motivated Strategies for Learning Questionnaire (MSLQ)
2. Rao School Attitude Inventory
3. MCQ Test
4. Teacher's Rating Questionnaire
5. Researcher's Observation Checklist
6. Focus Group Discussion (FGD) Guideline

2.5.1. Motivated Strategies for Learning Questionnaire (MSLQ)

The original scale of MSLQ was developed by Paul R. Pintrich and Elisabeth V. De Groot (1990). The researcher of the present study has translated the original scale in Bengali and four experts who are the teachers of the University of Dhaka have judged the

translation. The Motivated Strategies for Learning Questionnaire (MSLQ) has been in existence since the late 1980s and was finalized in the early 1990s. In the present study, MSLQ has been administered with the students in high school. The MSLQ measures student's motivational beliefs and self-regulated learning. It has 44 items consisting of five scales. Items were adapted from various instruments used to assess student motivation, cognitive strategy use and metacognition (Eccles, 1983). Motivational beliefs items revealed three distinct motivational factors: Self-efficacy, Intrinsic value and Test anxiety. The self-efficacy scale consisted of nine items regarding perceived competence confidence in performance of classroom (e.g., I expect to do very well in the class). The intrinsic value scale was constructed by taking mean score of the student's response to nine items concerning intrinsic interest in and perceived importance of course work as well as preference for challenge and mastery goals (e.g., I prefer class work that is challenging so I can learn new things). Four items concerning worry about and cognitive interference tests were used in test anxiety scale (e.g., I am so nervous during a test that I can not remember facts I have learned). Self-regulated learning strategy items revealed two distinct cognitive factors: Cognitive strategy use and Self-regulation. The cognitive strategy use scale consisted of thirteen items pertaining to the use of rehearsal strategies, elaboration strategies such as summarizing and paraphrasing and organizational strategies (e.g., I outline the chapter in my book to help me study). Self-regulation scale consisted of nine items which were constructed from metacognitive and effort management items. The items on metacognitive strategies such as planning, skimming, comprehension and monitoring (e.g., I ask myself questions to make sure I know the materials I have been studying). Effort management strategies included students' persistence at different or boring tasks and working diligently (e.g., When work is hard I either give up or study only the easy parts). The MSLQ is a self-report instrument.

2.5.2. Rao School Attitude Inventory

The original scale of Rao School Attitude Inventory was developed by D. Gopal Rao (1970). The researcher of the present study has translated the original scale in Bengali and four experts who are the teachers of the University of Dhaka have judged the translation. Rao School Attitude Inventory measures the students' attitude towards their school. The inventory consists of 30 questions covering various aspects of the school. Such as teachers, school subjects, class fellows, home works, co-curricular activities and parental

attitude to school as perceived by the pupils. Each question has five category responses such as always, most often, frequently, some times, and never.

2.5.3. MCQ Test

MCQ Test measures the students' academic knowledge on the various subjects in the classroom. The MCQ test was developed by the researcher with the help of a teacher of the secondary school. The questions of the MCQ test were taken from the three subjects of the academic text book: Bengali, English and Mathematics. Total 20 questions were developed from the various subjects and Bengali and English were separately consisted of six questions and Mathematic was consisted of 8 questions. Primarily the MCQ test was administered to a small sample of the student of class nine and ten. The result was judged by the two secondary school teachers.

2.5.4. Teacher's Rating Questionnaire

Teacher's Rating Questionnaire measures the students' motivational beliefs, learning strategies, academic classroom performance and attitude towards the school teacher, peers, school subject matters, home work, curriculum activities and parental attitude towards school. The questionnaire was developed by the researcher.

2.5.5. Researcher's Observation Checklist

Researcher's Observation Checklist consisted of items related to students' attention, response to the teachers' question, pattern of students' question to the teachers, note taking, spontaneity in the classroom, seeking help from peers and teachers, problem behavior, non verbal communication, interest to know, students' presence in the class and participation in the class which measure the students' classroom academic performance. The checklist was developed by the researcher.

2.5.6. Focus Group Discussion (FGD) Guideline

Focus Group Discussion (FGD) Guideline was developed by the researcher which was used to measure the students' self-efficacy, intrinsic value, test anxiety, and identify the use of cognitive strategies, and self-regulation strategies. And also it was used to measure the students' attitude towards school.

2.6. Reliability and Validity of Measuring Instruments

2.6.1. *Motivated Strategies for Learning Questionnaire (MSLQ)*

In terms of the general structure of MSLQ, both exploratory and confirmatory factor analyses on different samples demonstrate that the four cognitive strategy factors of rehearsal, elaboration, organization, and metacognitive self-regulation is supported (Pintrich et al. 2001). Estimates of internal consistency, computed using Cronbach's alpha, also are reasonable with ranges across the different studies and samples, rehearsal (0.50 to 0.69), elaboration (0.75 to 0.85), organization (0.64 to 0.81) and metacognitive self-regulation (0.71 to 0.81).

Factor analyses with younger students support the creation of one general cognitive strategy scale and one metacognitive strategy scale. Developmentally it appears that for these younger students, being cognitively engaged in learning the material includes using a combination of rehearsal, elaboration, and organizational strategies and that they do not make fine distinctions between these strategies as do college students. The alphas for the general cognitive strategy scale are acceptable (alpha= 0.83 to 0.88) and also for the metacognitive self-regulation scale (alpha=0.63 to 0.74) across different studies (Pintrich & De Groot, 1990; Pintrich et al, 1994).

Besides the internal consistency of the scale, it has been found evidence of the construct validity of the scales in terms of their relations with other motivational and achievement measures. First, in terms of motivation, in general, it has been found that, as theoretically expected, positive motivational beliefs such as self-efficacy, interest, task value are positively related to cognitive strategy use and metacognitive self-regulation (Pintrich, 1999).

Khanam and Islam (2003) have determined the reliability of the Bengali version of the MSLQ. They found the internal consistency of the MSLQ's coefficient ($r = \text{item total correlation}$) ranged from 0.20 to 0.62. The test-retest reliability coefficient of the whole questionnaire was found to be 0.88 and the split-half reliability for 0.75. The validity of the questionnaire was also determined. Face validity was examined by four expert's judgment of Bengali translation. Criterion related validity of the questionnaire was examined by correlating with one external criteria of previous academic record. The

results of the coefficient previous academic record with self-efficacy, intrinsic value, test anxiety, cognitive strategy use and self-regulation which were found to be $r = 0.36$, $r = 0.23$, $r = -0.04$, $r = 0.21$, $r = 0.19$ respectively. These results indicate that the questionnaire of MLSQ is valid and reliable.

2.6.2. Rao School Attitude Inventory

The reliability and validity of the original inventory has been determined by the researcher. Test-retest reliability coefficient has been found to be $r = 0.81$. Content validity has been established by the researcher. Also the inventory has high discrimination value between the known groups. The test-retest reliability coefficient of Bengali version of the inventory has been found to be $r = 0.79$ and the split-half reliability for $r = 0.75$. Also the validity of the inventory has been determined the researcher. Face validity of Bengali translation of the inventory has been examined by five experts who were professors of the University of Dhaka. These results indicate that the inventory is valid and reliable.

2.7. Procedure Followed

2.7.1. Motivated Strategies for Learning Questionnaire, Rao School Attitude Inventory and MCQ Test

After selecting the schools, the investigator personally met each of the Head of the selected institutions and narrated his purpose and plan of data collection and he got permission to do so. After having such permission, on the appointed date and time the investigator went to a particular school and then he selected the class. There he was introduced by the Head of the institution. He narrated the purpose of visit and then a few minutes conversation was carried out with the participants to establish rapport. Finally when he was assured that the psychological climate of the class was good enough for the administration of the questionnaire, he began his job. First, he distributed the questionnaire to each student and read out loudly the instructions to be followed by them. At this time students were requested to make silent reading of the instructions printed on the top of the questionnaire. The researcher answered the questions that they were asked by the students regarding filling up of the questionnaire and when he felt that each of the student had understood the instructions he requested them to begin by themselves without consulting with others. They were also told that their cooperation in giving honest opinion

would be appreciated. They were also assured that the information supplied by them would be kept strictly confidential and would be used for research purpose only. They were requested to give answer all the items of the questionnaire. At first they were instructed to fill up their personal information on the questionnaire and finally, to answer the questions of the questionnaire. Three questionnaires were presented to the participants at a time: (1) Motivated Strategies for Learning Questionnaire, (2) Rao School Attitude Inventory and (3) MCQ Tests. The questionnaire was administered to the participants in the classroom situation of their school. There was no time limit to fill up the questionnaire. They took about 45 to 50 minutes to complete the questionnaire. This questionnaire was self-administered by the participants. In this way the data collection in all the selected schools was covered and it took nearly 3 months. After completion of responding of the questionnaire by the students, he collected the questionnaire.

2.7.2. Teacher's Rating Questionnaire: The researcher selected 12 teachers with consultation with the head of the schools. They were selected for rating the students' classroom academic performance. The selected teachers were given proper instructions of the answering procedure by the researcher and were requested to answer the questions in descriptive way on the students' academic performance with using strategies to perform in the classroom from their experiences. The teachers were provided questionnaire with white paper at the first day and the answer sheet and questionnaire was collected from them in the next day.

2.7.3. Researcher's Observation Checklist: First day the researcher only observed the students in the classroom situation and in the next day he rated the students of their classroom performance according to the checklist. The researcher observed the students from the outside of the classroom. The researcher observed the students' behaviors and interaction process with their peers and teachers.

2.7.4. Focus Group Discussion (FGD): Focus Group Discussion (FGD) was conducted by the researcher. Six students were selected for each FGD. FGDs were administered on the basis of FGD guidelines. FGDs were conducted on the students of class IX and X separately. Twelve (12) FGDs were conducted according to the guidelines of FGD. The statements of the students were recorded by the cassette with the permission of the participants.

After completion of the first part and conduction of the FGD researcher thanked all of the participants for their kind cooperation and help. Researcher also thanked the teachers for their cooperation and providing honest information.

2.8. Scoring Procedure

The participants responded to the self-reported questionnaires (MLSQ, Rao Attitude School Inventory and MCQ Test). The scoring procedures were as follows:

2.8.1. Motivated Strategies for Learning Questionnaire

Participants were instructed to respond to the items of the scales on five Point Likert-type scales. Two types of scores were calculated from the questionnaire: total score and part score. The total scores of each respondent were determined by summing up the all items representing in the questionnaire. On the other hand, part scores of each respondent were calculated by summing up the separate items of each component. Scoring of the responses to each item of the five components (viz., self-efficacy, intrinsic value, test anxiety, cognitive strategy use and self-regulation) were marked by 1 = not at all true of me to 5 = very true of me for positive item and 1 = very true of me to 5 = not at all true of me for negative item. The numbers of each item were recorded in the computer and calculated the raw scores. The summations of the total raw scores were motivational beliefs and self-regulated learning scores. Total scores, therefore, is ranged form 44 (low motivational beliefs and self-regulated learning) to 220 (high motivational beliefs and self-regulated learning). Numerically higher score indicated higher motivational beliefs and self-regulated learning and lower score indicated lower motivational beliefs and self-regulated learning.

2.8.2. Rao School Attitude Inventory

Participants were instructed to respond to the items of the scales on five Point Likert-type scale. The total score of each respondent was determined by summing up all the items scores representing in the questionnaire. Scoring of the responses to each item of the questionnaire were marked by 1 = not at all true of me to 5 = very true of me for positive item and 1 = very true of me to 5 = not at all true of me for negative item. The numbers of each item were recorded in the computer and calculated the raw scores. The summations of the total raw scores were attitude towards school scores. Total scores, therefore, is

ranged from 30 (low attitude towards school) to 150 (high attitude towards school). Numerically higher score indicated more positive attitude towards school and lower score indicated less positive attitude towards school.

2.8.3. MCQ Test

Participants were instructed to respond to the items of the MCQ test. The score of each participant was calculated by summing up all the item scores representing in the MCQ test. For each component, separate scores were obtained for classroom academic performance in specific subject. Scoring of the responses to each item of the three components (viz., Bengali, English and Mathematics) were marked by 1 for each item. The total number of marks of each component was recorded in the computer and calculated the total raw scores. The score, therefore, is ranged from 0 (low academic performance) to 20 (high academic performance).

2.9. Data Analysis

In the present study, two types of data were collected from the participants: quantitative and qualitative. Before analyzing the data, it was organized and recorded sequentially.

For the quantitative data, the obtained raw scores were statistically analyzed using Statistical Package for Social Science (SPSS) 12.0 for Windows of the computer program. Several descriptive and inferential statistical procedures were followed. Frequencies and percentages were calculated to furnish description of the sample under investigation. Correlation and multiple regression analysis were calculated for identifying the relationship among the variables. For calculating correlation, Pearson Product Moment method was used. Besides these, other necessary calculation such as Mean, F-test were computed for interpreting the results of the study.

And for the qualitative data, the recorded information from the FGD was accumulated and organized. In the same way, teachers' rating information about the students was compiled. And also researcher's observation checklist information was elaborated on the basis of the students' behavior in the classroom situation. Finally, qualitative data were translated English and added to the results obtained through qualitative analysis.

CHAPTER THREE

RESULTS

RESULTS

The present study was designed to explore the role of motivational beliefs, self-regulated learning and attitude towards school on classroom academic performance of the secondary school students. On the basis of this, responses were collected from the student of class IX and X to measure the different components of motivational beliefs, self-regulated learning and attitude towards school. The results of the present study were analyzed into two ways: (1) Quantitative results and (2) Qualitative results. Both of the results of the study are described below:

3.1. Results of Quantitative Analysis

3.1.1: ANOVA Analysis

ANOVAs were analyzed to find out the main effect of self-regulated learning, motivational beliefs, and attitude towards school on classroom academic performance and also to explore the effect of sex, class and group on motivational beliefs, self-regulated learning, attitude towards school and classroom academic performance. ANOVAs are presented in the following tables:

Table-3.1: Analysis of Variance of Classroom Academic Performance according to Self-regulated Learning (Cognitive Strategy Use and Self-regulation)

Source	Sum of Squares	df	Mean Square	F
Cognitive Strategy Use	3585829.136	24	149409.547	1.110
Self-regulation	5292063.488	21	252003.023	1.872*
Cognitive * Self-regulation	17589632.057	141	124749.164	.927
Error	43747610.193	325	134608.031	
Corrected Total	71239110.469	511		

*P<.01

Table-3.2: Analysis of Variance of Classroom Academic Performance according to Motivational Beliefs (Self-efficacy, Intrinsic Value and Test Anxiety).

Source of Variance	Sum of Squares	df	Mean Square	F
Self-efficacy	3290477.714	19	173183.038	1.321
Intrinsic value	2444186.938	17	143775.702	1.097
Test anxiety	199329.935	4	49832.484	.380
Self-efficacy * intrinsic	7052020.777	47	150042.995	1.145
Self-efficacy * test anxiety	4377986.253	29	150965.043	1.152
intrinsic * test anxiety	3863500.913	28	137982.175	1.053
Self efficacy * intrinsic * test anxiety	2770491.307	23	120456.144	.919
Error	44040536.678	336	131073.026	
Corrected Total	71239110.469	511		

Table-3.3: Analysis of Variance of Classroom Academic Performance according to Attitude towards School.

Source	Sum of Squares	df	Mean Square	F
Attitude towards School	17643091.744	58	304191.237	2.571*
Error	53596018.725	453	118313.507	
Corrected Total	71239110.469	511		

* P<0.01

The main effect of self-regulation ($F = 1.872$, $df = 21$) (Table-3.1) and attitude towards school ($F = 2.571$, $df = 58$) (Table-3.3) were found significant at the level of .01. But the main effect of cognitive strategy use (Table-3.1), self-efficacy, intrinsic value and test anxiety (Table-3.2) were not found significant. Also, the interaction effect of cognitive strategy use*self-regulation (table3.1), Self-efficacy * intrinsic value, self-efficacy * test anxiety, intrinsic value * test anxiety, self efficacy * intrinsic * test anxiety (table-3.2) were not found significant. Therefore, it can be explained that self-regulation component of self-regulated learning and attitude towards schools significantly influence the classroom academic performance of the secondary school students.

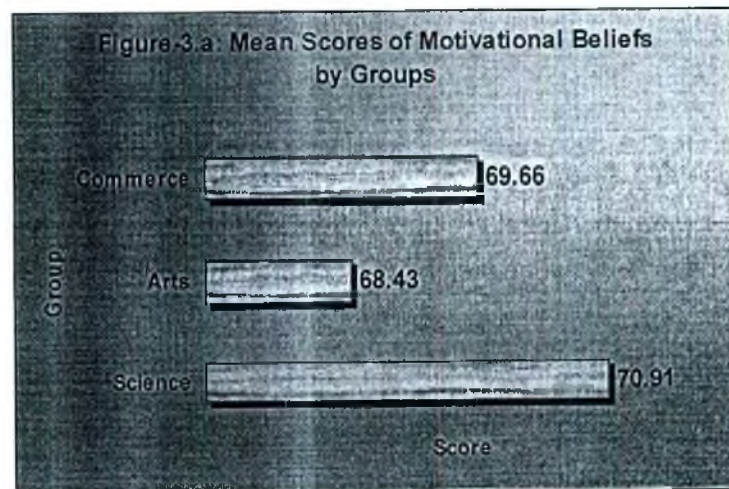
Table-3.4: Analysis of Variance of Motivational Beliefs according to Sex (Boys and Girls), Class (Nine and Ten) and Group (Science, Commerce and Arts)

Source of Variance	Sum of Squares	df	Mean Square	F
Main effect (sex)	36.982	1	36.982	0.661
Main effect (class)	0.017	1	0.017	0.000
Main Effect (group)	369.597	2	184.798	3.305**
Interaction effect (sex * class)	16.343	1	16.343	0.292
Interaction effect (sex * group)	541.930	2	270.965	4.846*
Interaction effect (class * group)	435.167	2	217.583	3.891**
Interaction effect (sex * class * group)	9.326	2	4.663	0.083
Error	27957.020	500	55.914	
Total	29593.742	511		

* $P < .01$

** $P < .05$

Table-3.4 showed that the main effect of class ($F = 3.305$, $df = 2$) was found significant at the level of .05. On one hand the main effect of sex ($F = 0.661$, $df = 1$) and class ($F = 0.000$, $df = 1$) were not found significant. On the other hand the interaction effect of sex * group ($F = 4.846$, $df = 2$) and class * group ($F = 3.891$, $df = 2$) were found significant at the level of .01 and .05 respectively. But Interaction effect of sex * class ($F = 0.292$, $df = 1$) and sex * class * group ($F = 0.083$, $df = 2$) were not found significant. Therefore, it can be explained



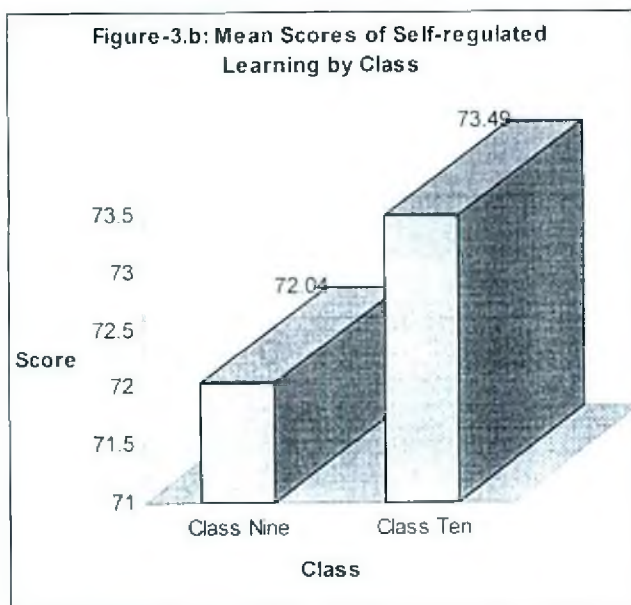
that there is no significant difference of the motivational beliefs of the students according to the sex (boys and girls) and class (nine and ten). Group can also be explained that the student of science group is higher motivational beliefs than that of arts and commerce group of students. Means scores of motivational beliefs of different groups of students are presented in the figure-3.a.

Table-3.5: Analysis of Variance of Self-regulated Learning according to Sex (Boys and Girls), Class (Nine and Ten) and Group (Science, Commerce and Arts)

Source of Variance	Sum of Squares	df	Mean Square	F
Main effect (sex)	1.526	1	1.526	0.027
Main effect (class)	389.422	1	389.422	6.770*
Main effect (group)	379.244	2	189.622	3.296**
Interaction effect (sex * class)	142.564	1	142.564	2.478
Interaction effect (sex * group)	763.088	2	381.544	6.633*
Interaction effect (class * group)	327.458	2	163.729	2.846**
Interaction effect (sex * class * group)	121.551	2	60.775	1.057
Error	28761.161	500	57.522	
Total	30892.404	511		

* $P < .01$ ** $P < .05$

Table-3.5 shows that the main effect of class ($F = 6.770$, $df = 1$) and group ($F = 3.295$, $df = 2$) were found significant at the level of .01 and .05 respectively. But the main effect of



sex ($F = 0.027$, $df = 1$) was not found significant. On the other hand, the interaction effect of sex * group ($F = 6.633$, $df = 2$) and class * group ($F = 2.846$, $df = 2$) were found significant at the level of .01 and .05 respectively. But the interaction effect of sex * class ($F = 2.478$, $df = 2$) and sex * class * group ($F = 1.057$, $df = 2$) were not found significant. Therefore, it can be explained that there were significant

difference according to class (nine and ten) and group (science, arts and commerce). It also can be explained that mean score of the student of class ten was higher self-regulated learning than that of class nine and the student of science group was higher than that of the group of arts and commerce. The mean scores according to class and groups are presented in the figure-3.b and figure-3.c.

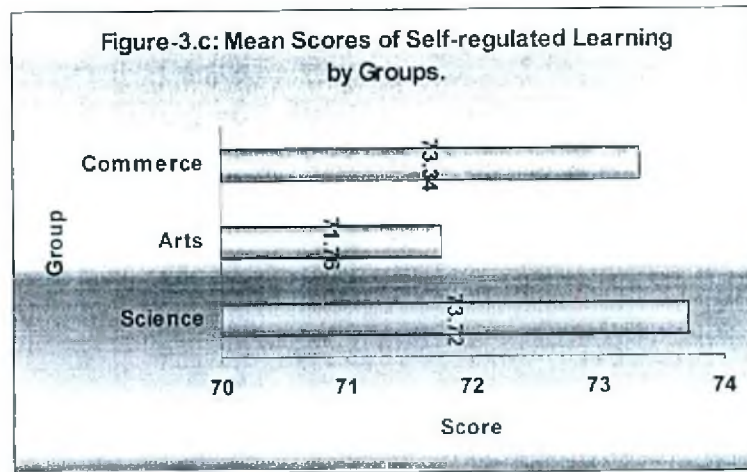


Table-3.6: Analysis of Variance of Attitude towards School according to Sex (Boys and Girls), Class (Nine and Ten) and Group (Science, Commerce and Arts).

Source of Variance	Sum of Squares	df	Mean Square	F
Main effect (sex)	5.213	1	5.213	0.039
Main effect (class)	7.457	1	7.457	0.056
Main effect (group)	1393.983	2	696.991	5.216*
Interaction effect (sex * class)	3.176	1	3.176	0.024
Interaction effect (sex * group)	1323.335	2	661.667	4.952*
Interaction effect (class * group)	401.529	2	200.764	1.503
Interaction effect (sex * class * group)	14.888	2	7.444	0.056
Error	66809.560	500	133.619	
Total	69777.092	511		

* $P < .01$

Table-3.6 shows that the main effect of group ($F = 5.216$, $df = 2$) was found significant at the level of .01. But the main effect of sex ($F = 0.039$, $df = 1$) and class ($F = 0.056$, $df = 1$) were not found significant. On the other hand, the interaction effect of sex * group ($F = 4.952$, $df = 2$) was found significant at the level of .01. But the interaction effect of sex * class ($F = 0.024$, $df = 1$), class * group ($F = 1.503$, $df = 2$) and sex * class * group ($F = 0.056$, $df = 2$) were not found significant. Therefore, it can be explained that there was significant difference of attitude towards school between class nine and class ten grade

students. It also can be explained that mean score of the student of science group was higher attitude towards school than that of group of arts and commerce. The mean scores according to groups are presented in the figure-3.d.

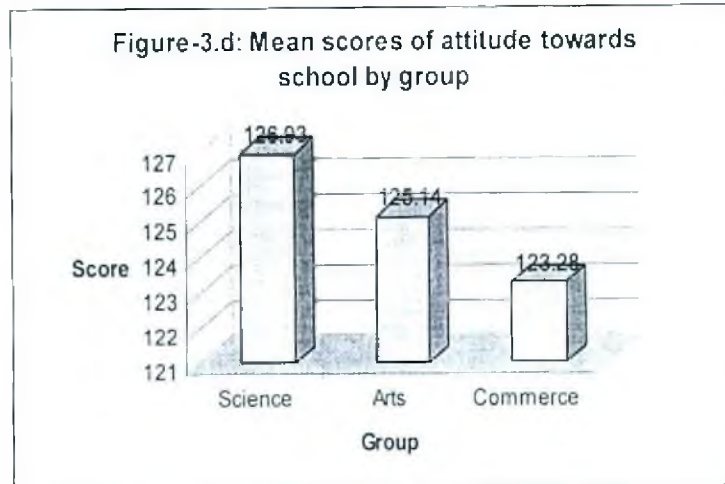


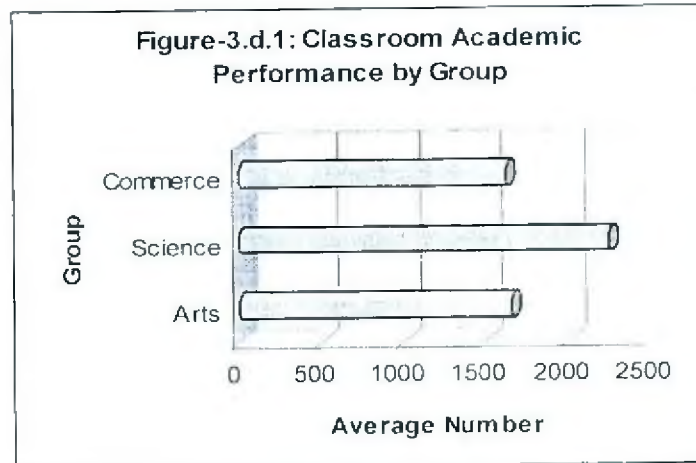
Table-3.7: Analysis of Variance of Classroom Academic Performance according to Sex (Boys and Girls), Class (Nine and Ten) and Group (Science, Commerce and Arts).

Source of Variance	Sum of Squares	df	Mean Square	F
Main effect (sex)	158685.282	1	158685.282	2.372
Main effect class	40715.498	1	40715.498	.609
Main effect (group)	26655718.794	2	13327859.397	199.237*
Interaction effect (class * sex)	95912.282	1	95912.282	1.434
Interaction effect (group * sex)	609726.776	2	304863.388	4.557*
Interaction effect (class * group)	3658834.089	2	1829417.044	27.348*
Interaction effect (class * group * sex)	13277.903	2	6638.951	.099
Error	33447168.124	500	66894.336	
Total	71239110.469	511		

* $P < 0.01$

Table-3.7 shows that the main effect of group ($F = 199.237$, $df = 2$) was found significant at the level of .01. But the main effect of sex ($F = 2.372$, $df = 1$) and class ($F = 0.609$, $df = 1$) were not found significant. On the other hand, the interaction effect of sex * group ($F = 4.557$, $df = 2$) and class * group ($F = 27.348$, $df = 2$) was found significant at the level of .01. But the interaction effect of sex * class ($F = 1.434$, $df = 1$) and sex * class * group ($F = 0.099$, $df = 2$) were not found significant. Therefore, it can be explained that there was

significant difference of classroom academic performance among the students of science, arts and commerce group. It also can be explained that mean score of the student of science group was better classroom academic performance than arts and commerce. The mean scores according to groups are presented in the figure-3.d.1.



3.1.2: Correlation Analysis

Correlational analysis was used to find out the relationship of motivational beliefs, self-regulated learning and attitude towards school with classroom academic performance (academic results and MCQ test) of the secondary school students. For satisfying the objective of the study, the investigator used the Pearson Product Moment Correlation. The correlational analysis is presented in the below:

Table-3.8: Inter Correlation of Motivational Beliefs, Self-regulated Learning and Attitude towards School with Classroom Academic Performance (Academic Result and MCQ test) for Total Sample.

Variables	1	2	3	4	5
1 Academic result	1.000				
2 MCQ test	.935**	1.000			
3 Motivational Beliefs	.172**	.191**	1.000		
4 Self-regulated Learning	.139**	.150**	.872**	1.000	
5 Attitude towards school	.175**	.202**	.364**	.332**	1.000

** Correlation is significant at the 0.01 level

Table-3.8 summarizes the between motivational beliefs, self-regulated learning strategies and attitude towards school with classroom academic performance. As shown, that motivational belief, self-regulated learning strategies and attitude towards school of the

secondary school students had a positive relationship with academic result and MCQ test. The inter correlations among the components were low to highly positive, ranging from 0.139 (between self-regulated learning and academic result) to 0.935 (between academic result and MCQ test). Specifically, motivational beliefs was most substantially correlated with self-regulated learning ($r = 0.872$), motivational beliefs and attitude towards school ($r = 0.364$), self-regulated learning and attitude towards school ($r = 0.332$). These close links confirmed that all the components (motivational beliefs, use of self-regulated learning strategies and attitude towards school) were closely related with classroom academic performance.

Table-3.9: Inter Correlation of all Independent Variables with Classroom Academic Performance (Academic Result and MCQ test) for Total Sample.

Variables	1	2	3	4	5	6	7	8
1 Academic result	1.000							
2 MCQ test	.935**	1.000						
3 Self-efficacy	.177**	.195**	1.000					
4 Intrinsic value	.155**	.175**	.900**	1.000				
5 Test anxiety	-0.031	-.029	-.060	-.061	1.000			
6 Cognitive strategy use	.100*	.102*	.700**	.685**	-0.003	1.000		
7 self-regulation	.155**	.175**	.923**	.819**	-.047	.635**	1.000	
8 Attitude towards school	.175**	.202**	.382**	.345**	-.047	.217**	.396**	1.000

** Correlation is significant at the 0.01 level

* Correlation is significant at the 0.05 level

Table-3.9 showed that self-efficacy and intrinsic value component of motivational beliefs were significantly correlated with academic result and MCQ test. Another component, test anxiety was negatively correlated with academic result ($r = -0.031$) and MCQ test ($r = -0.029$). And also found that test anxiety was negatively correlated with self-efficacy ($r = -0.060$), intrinsic value ($r = -0.061$), cognitive strategy use ($r = -0.003$), self-regulation ($r = -0.047$) and attitude towards school ($r = -0.047$). These correlations were not significant. Two components of self-regulated learning (cognitive strategy use and self-regulation) were positively correlated with academic result and MCQ test. And attitude towards school was found positively correlated with academic result and MCQ test. This table also showed that without test anxiety, all the components were positively correlated with each others. These findings suggest that motivational beliefs, self-regulated learning and

attitude towards school were associated with classroom academic performance.

3.1.3: Multiple Regression Analysis

The general purpose of multiple regression is to learn more about the relationship between independent or predictor variables and a dependent variable. In the present study, multiple regression analyses were carried out to assess the relative contribution of motivational beliefs (self-efficacy, intrinsic value and test anxiety), self-regulated learning (cognitive strategy use and self-regulation) and attitude towards school of the secondary school students.

Table-3.10: Multiple Regression Analysis with Academic Results as Dependent Variable and Motivational Beliefs, Self-regulated Learning and Attitude towards School as Independent Variables for Total Sample.

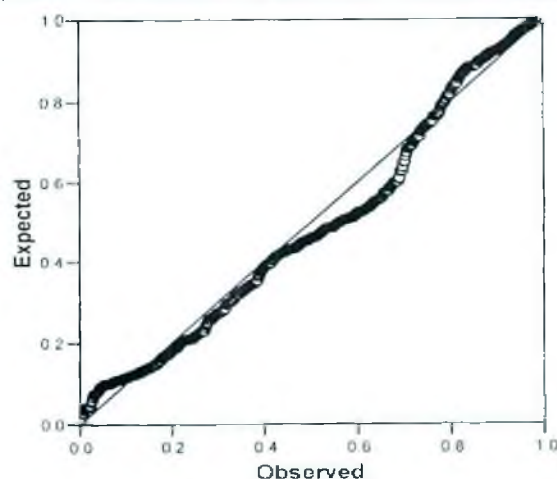
Predictor	Unstandardized Coefficients		Standardized Coefficients	t	R	R ²	F (3, 508)
	B	Std. Error	Beta				
(Constant)	869.642	200.680		4.333***	.212(a)	.045	7.942***
Motivational Beliefs	8.344	4.409	.170	1.893*			
Self-regulated Learning	-2.545	4.260	-.053	-.597			
Attitude towards school	4.187	1.488	.131	2.813**			

*P<.05
**P<.01
***P<.001

Academic result was entered as dependent variables while motivational beliefs, self-regulated learning and attitude towards school were treated as independent variables in the same block. As indicated in Table-3.10,

motivational beliefs ($P<.05$) and attitude towards school ($P<.01$) were statically significant predicting academic result or classroom academic performance.

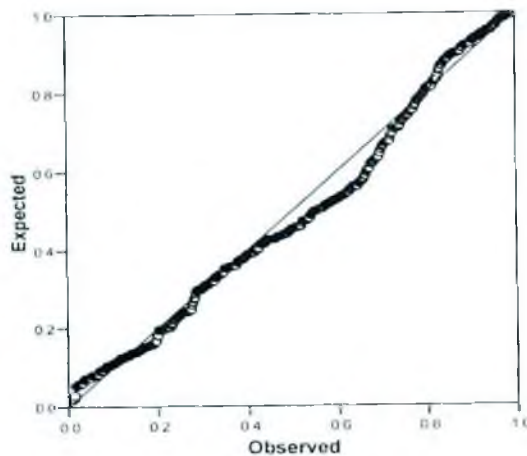
Figure-3.e: Normal Probability Plot of Regression Standardized Residual: Motivational Beliefs and Academic Result



Since the β coefficients provide a guide to the relative importance of the independent variables included in the equation (Hair et al., 1998), a decision was made to exclude variables that had a β value of less than 0.1 from the equation. The reduced set of variables included the dependent variables and the independent variables motivational beliefs and attitude towards school. The regression analysis of these variables showed an adjusted R^2 of .039, which was slightly smaller than that of the regression equation with

all variables ($R^2 = .045$). An ANOVA showed an $F(3,508)$ of 7.942 which was significant at $p < .001$ level.

Figure-3.f: Normal Probability Plot of Regression Standardized Residual: Attitude towards School and Academic Result



It was found that 4.5 % ($R = 0.212$) of the original variability of classroom academic performance in total sample of 512 students due to motivational beliefs, self-regulated learning and attitude

towards school and remaining 95.5% of the residual variability of the students' may be attributed to factors not included in this regression model.

The partial regression coefficients of motivational beliefs and attitude towards school variable out of 3 selected variables, viz., motivational beliefs, self-regulated learning and attitude towards school was found to be significant. The results tend to suggest that the unique contributions of the factors to the regression equation were found significant. It means that highly motivated student and their higher level of positive attitude towards school promote significantly classroom academic performance of the secondary school students.

Table-3.11: Multiple Regression Analysis with Academic Results as Dependent Variable and All Independent Variables for Total Sample.

Predictors	Unstandardized Coefficients		Standardized Coefficients	t	R	R ²	F 6, 505
	B	Std. Error	Beta				
(Constant)	291.662	78.328		3.724*	.218	.048	4.207*
Self-efficacy	8.024	4.824	.252	1.663			
Intrinsic value	-.649	3.316	-.020	-.196			
Test anxiety	4.475	7.026	.028	.637			
Cognitive strategy use	-.840	1.677	-.031	-.501			
Self-regulation	-2.977	3.557	-.095	-.837			
Attitude towards school	1.401	.507	.132	2.761**			

*P<.001

**P<.01

Academic result was entered as a dependent variable while self-efficacy, intrinsic value, test anxiety, cognitive strategy use, self-regulation and attitude towards school were treated as independent variables in the same block. As indicated in Table-3.11, when all independent variables were included in the equation, only attitude towards school was statistically significant ($P<.01$) predicting the academic results.

The independent variables were excluded in the equation that had a β value of less than 0.1 from the equation. The reduced set of variables included the dependent variable and the independent variables self-efficacy and attitude towards school. The regression analysis of these variables showed an adjusted R^2 of .036, which was slightly smaller than that of the regression equation with all variables ($R^2 = .048$). An ANOVA showed an F (6,505) of 4.207 which was significant at $p <.001$ level.

It was found that 4.8 % ($R = 0.419$) of the original variability of classroom academic performance in total sample of 512 students due to self-efficacy, intrinsic value, test anxiety, cognitive strategy use, self-regulation, attitude towards school and remaining 95.2% of the residual variability of the students' may be attributed to factors not included in this regression model.

The partial regression coefficients of attitude towards school variable out of 6 selected variables, viz., self-efficacy, intrinsic value, test anxiety, cognitive strategy use, self-

regulation was found to be significant. The results tend to suggest that the unique contributions of the factors to the regression equation are found significant. It means that higher level of positive attitude towards school is found to promote significantly classroom academic performance of secondary school students.

Table-3.12: Multiple Regression Analysis with Academic Results as Dependent Variable and All Independent Variables for Boys.

Predictors	Unstandardized Coefficients		Standardized Coefficients	t	R	R ²	F 6.249
	B	Std. Error	Beta				
(Constant)	379.613	126.989		2.989**	.420	.176	4.385**
Self-efficacy	10.668	5.709	.310	1.869*			
Intrinsic value	-.508	5.126	-.014	-.099			
Test anxiety	-3.994	10.710	-.023	-.373			
Cognitive strategy use	-1.601	2.475	-.057	-.647			
Self-regulation	-4.633	6.674	-.139	-.694			
Attitude towards school	1.919	.862	.173	2.226**			

*P<.05

**P<.01

Multiple regression was performed between the motivational variables (self-efficacy, intrinsic value and test anxiety) as independent variables, Self-regulated learning (Cognitive strategy use and self-regulation) and academic result as dependent variables. As indicated in Table-3.12, when all independent variables were included in the equation, self-efficacy and attitude towards school were statistically significant at the level of $P<.05$ and $P<.01$ respectively predicting the academic result.

The independent variables were excluded in the equation that had a β value were less than 0.1 from the equation. The reduced set of variables included the dependent and independent variables. The regression analysis of these variables showed and adjusted R^2 of .159, which was smaller than that of the regression equation with all variables ($R^2 = .176$). And ANOVA showed an F (6.505) of 4.207 which was significant at $p <.01$ level.

Self-efficacy and attitude towards school counted for 17.60% of unique variance in predicting academic results. The combination of intrinsic value, test anxiety, cognitive strategy use and self-regulation counted for remaining 82.40%.

The partial regression coefficients of self-efficacy and attitude towards school variable out of the selected variables, viz., self-efficacy, intrinsic value, test anxiety, cognitive strategy use, self-regulation was found to be significant. The results tend to suggest that the unique contributions of the factors to the regression equation are found significant. It means that higher level of self-efficacy and positive attitude towards school is found to promote significantly classroom academic performance of the boy students of secondary school.

Table-3.13: Multiple Regression Analysis with Academic Results as Dependent Variable and All Independent Variables for Girls.

Predictors	Unstandardized Coefficients		Standardized Coefficients	t	R	R ²	F 6,249
	B	Std. Error	Beta				
(Constant)	224.896	98.625		2.280*	.284	.081	3.650*
Self-efficacy	8.270	5.819	.281	1.421			
Intrinsic value	-1.915	4.359	-.063	-.439			
Test anxiety	14.945	9.318	.098	1.604			
Cognitive strategy use	-1.329	2.348	-.051	-.566			
Self-regulation	-1.586	4.118	-.054	-.385			
Attitude towards school	1.678	.619	.182	2.711**			

*P<.02

**P<.01

Academic result was entered as a dependent variable while self-efficacy, intrinsic value, test anxiety, cognitive strategy use, self-regulation and attitude towards school were treated as independent variables in the same block. As indicated in Table-3.13, when all independent variables were included in the equation, only attitude towards school was statistically significant ($P<.01$) predicting the academic results.

The independent variables were excluded in the equation that had a β value of less than 0.1 from the equation. The reduced set of variables included the dependent variable and the independent variable attitude towards school. The regression analysis of these variables showed an adjusted R^2 of .059, which was slightly smaller than that of the regression equation with all variables ($R^2 = .081$). An ANOVA showed an $F(6, 249)$ of 3.650 which was significant at $p < .01$ level.

It was found that 8.1 % ($R = 0.284$) of the original variability of classroom academic performance in total sample of 256 students due to self-efficacy, intrinsic value, test

anxiety, cognitive strategy use, self-regulation, attitude towards school and remaining 91.9% of the residual variability of the students' may be attributed to factors, not included in this regression model.

The partial regression coefficients of attitude towards school variable out of the selected variables, viz., self-efficacy, intrinsic value, test anxiety, cognitive strategy use, self-regulation was found to be significant. The results tend to suggest that the unique contributions of the factors to the regression equation are found significant. It means that higher level of positive attitude towards school is found to promote significantly classroom academic performance of secondary school girl students.

Table-3.14: Multiple Regression Analysis with Academic Results as Dependent Variable and All Independent Variables for Class Nine.

Predictors	Unstandardized Coefficients		Standardized Coefficients	t	R	R ²	F
	B	Std. Error	Beta				6.249
(Constant)	104.036	119.956		.867	.338	.114	5.359**
Self-efficacy	19.657	8.708	.542	2.257*			
Intrinsic value	-5.075	5.786	-.137	-.877			
Test anxiety	16.695	11.884	.085	1.405			
Cognitive strategy use	-2.997	2.577	-.099	-1.163			
Self-regulation	-5.144	6.586	-.138	-.781			
Attitude towards school	1.860	.799	.155	2.328*			

*P<.02

**P<.01

A statistical entered multiple regression was performed between the self-efficacy, intrinsic value and test anxiety, self-regulated learning, cognitive strategy use and self-regulation and attitude towards school as independent variables and academic result as a dependent variable. As indicated in Table-3.14, when all independent variables were included in the equation, self-efficacy and attitude towards school were statistically significant at the level of P<.02 predicting the academic result.

The independent variables were excluded in the equation that had a β value were less than 0.1 from the equation. The reduced set of variables included the dependent and independent variables. The regression analysis of these variables showed an adjusted R²

of .093, which was smaller than that of the regression equation with all variables ($R^2 = .114$). And ANOVA showed an $F(6,249)$ of 5.359 which was significant at $p < .01$ level.

It was found that 11.40% ($R = 0.338$) of the original variability of classroom academic performance in total sample of 256 students due to self-efficacy, intrinsic value, test anxiety, cognitive strategy use, self-regulation, attitude towards school and remaining 88.86% of the residual variability of the students' may be attributed to factors, not included in this regression model.

The partial regression coefficients of self-efficacy and attitude towards school variable out of the selected variables, viz., self-efficacy, intrinsic value, test anxiety, cognitive strategy use, self-regulation was found to be significant. The results tend to suggest that the unique contributions of the factors to the regression equation are found significant. It means that higher level of self-efficacy and positive attitude towards school is found to promote significantly classroom academic performance of the students of class nine of secondary school.

Table-3.15: Multiple Regression Analysis with Academic Results as Dependent Variable and All Independent Variables for Class Ten.

Predictors	Unstandardized Coefficients		Standardized Coefficients	t	R	R^2	F 5, 249
	B	Std. Error	Beta				
(Constant)	474.069	98.844		4.796*	.321	.103	4.635*
Self-efficacy	3.089	1.409	.103	2.192*			
Intrinsic value	.077	3.850	.003	.020			
Test anxiety	-5.085	8.219	-.039	-.619			
Cognitive strategy use	1.187	2.212	.050	.537			
Self-regulation	-.964	3.939	-.038	-.245			
Attitude towards school	2.012	.627	.111	3.209*			

* $P < .01$

As indicated in Table-3.15, a statistical entered multiple regression was performed between the self-efficacy, intrinsic value and test anxiety, self-regulated learning, cognitive strategy use, self-regulation and attitude towards school as independent variables and academic result as a dependent variable. When all independent variables were included in the equation, self-efficacy and attitude towards school were statistically

significant at the level of $P < .01$ predicting the academic result.

The independent variables were excluded in the equation that had a β value were less than 0.1 from the equation. The reduced set of variables included the dependent and independent variables. The regression analysis of these variables showed an adjusted R^2 of .091, which was smaller than that of the regression equation with all variables ($R^2 = .103$). And ANOVA showed an $F(6,249)$ of 4.635 which was significant at $p < .01$ level.

It was found that 10.30% ($R = 0.321$) of the original variability of classroom academic performance in total sample of 256 students due to self-efficacy, intrinsic value, test anxiety, cognitive strategy use, self-regulation, attitude towards school and remaining 89.70% of the residual variability of the students' may be attributed to factors, not included in this regression model.

The partial regression coefficients of self-efficacy and attitude towards school variable out of the selected variables, viz., self-efficacy, intrinsic value, test anxiety, cognitive strategy use, self-regulation was found to be significant. The results tend to suggest that the unique contributions of the factors to the regression equation are found significant. It means that higher level of self-efficacy and positive attitude towards school is found to promote significantly classroom academic performance of the students of class ten of the secondary school.

3.2. Results of Qualitative Analysis

The qualitative data was analyzed to have some additional information related to independent variables of the study. Answers related to components of motivational beliefs, self-regulated learning and attitude towards school related information were collected from the secondary school students to analyze the qualitative data. The qualitative data were then categorized into Students, Teachers and Researcher's perspective observation on the basis of classroom.

3.2.1. Students' Perspective

3.2.1.1. Factors related to self-regulated learning factor which promote classroom academic performance

(a) Cognitive strategy use

Organizing: Some students reported that they prepared important questions for the examinations and collected questionnaires of the previous examinations. If the words were hard to memorize, then they used similar easy words to learn. They organized the information sequentially and matched this information with the text book. They also indicated that they jotted down the important information that was presented in the class by their teacher. Organizing information helped them to obtain more marks in the class test and final examinations.

Memorizing: Students expressed that they memorized information of the text book. Most of the students memorized the course materials and express it in the classroom situation. They thought that this practice helped them to perform better in the classroom setting.

Preparation for examination: Students organized their collected information by reading the text book. Some of the students made important questions for the examination and collected questionnaires of the previous examinations. Some of the students read whole course materials and memorized key words of the course materials and wrote these key words in the khata. If the words were hard to memorize, then they used similar easy words to learn. Teachers analyzed the key and important words of the subject matter. Students wrote important themes or key words in the class. They prepared notes to read

and memorize easily. They rehearsed the course materials. Some time they analyzed and discussed the course materials with their peers in the classroom.

Answering strategies: Students tried to answer the question without their teachers' help at first. When they couldn't answer the question, they took assistance from their teacher and peers. At first they tried to present introduction, secondly they discussed the theme and finally they concluded the answer. Some of the students answered the questions without understanding or own imagination.

Using techniques in the examination: Students retrieved answers and wrote down in the examination khata. Most of the students wrote down in the examination with their own capabilities. A few portion of the student took help from their peers, when they could not answer or solve the problems.

Class test: Most of the students felt that class test was necessary for justifying their knowledge. It helped them to perform better in the final examinations. They thought that class test was an important strategy for improving classroom academic performance of student.

(b)Self-regulation

Goal setting: Students reported that they set up a goal to learn. Some of the students study according to their routine. When they studied by following their routine, they got more benefit than unstructured way of learning. Before the examination, some of the students studied the course materials and after finishing it, they read other courses. Some of the students read the specific subject in the specific time. They felt that nobody could achieve his/her expected outcomes without determining goals. They noted that learning was not an easy thing. So they needed to select goals to facilitate the classroom activities. Most of the students indicated that if the goals were determined, they could achieve their expected learning. Some of the students prepared a lesson plan for the class preparation. They also indicated that goal setting was a systematic procedure for achieving expected outcomes.

Planning: Students reported that if they read according to plan, they learnt easily and in a short time. Students mentioned that they prepared a plan for classroom learning. If they had a plan for their classroom activities, they would accomplish their classroom work in

time. Most of the student completed their classroom activities according to their planning. They could finish their classroom activities successfully if they planned. Most of the students indicated that planning contributed to classroom academic performance.

Seeking assistance: Some students reported that they borrowed notes from their friends. They read the book in which they collected proper information. They collected books and notes from their friends and sometimes they collected from their teachers from inside and outside of class. Weak students search for helping from the brilliant and senior students. Students mentioned that they collected most of the information in the classroom. They collected information from their peers, senior students, original text book, private tutor and guide book. The students seek assistance from others they performed better in the classroom setting. This helped the students for contributing better performance in the classroom context.

Learning problems solving strategies: Students went to their teachers when they were not able to solve the classroom academic learning problems. Sometimes they went to library. Students read in the classroom and home and write down on khata for classroom preparation. They learnt the lessons by hearing main theme of the subject matters from their classmates. They prepared a routine for preparing the class work and they followed it. They expressed that the strategies use contributed to their classroom academic performance.

Practicing memorized information: They read the difficult course materials again and again. As a result they could memorize these course materials easily. Some of the students reported that they could not write properly in the examination though they practiced it again and again. Some of the students revised the previous reading materials during the holiday. They indicated that they revised the course materials twice to four times in a week. Also some of the students revised the course materials in writing. They expressed that if they practiced now and again, it was easy to write the course materials in the examinations.

Note taking: Most of the students had tendency to take notes the important aspects of the teachers' lecture in the classroom. They felt that note taking in the class helped the students to understand the course materials clearly. It was easy for a student to solve the

problems at home. Some students took notes from the teachers' lecture in the classroom. They wrote down the important portion, the mysterious and romantic issues of the lectures. It was indicated that note taking was important for the students to perform better in the classroom academic performance.

Question selection: Most of the students read the selected portion of the lessons that given in the examinations. The course materials that are seem to be important and possibility to get nearer in the examination, they emphasis on it. Some of the student read the whole course in which they answer any question gave in the examinations. But some of the students read the selected questions in which they could get as usual numbers in the examinations. They select the questions according to the suggestions of the teachers and their private tutors. They reported that selected questions helped them to perform better in the classroom examinations. It would help the students to acquire more numbers in the test.

3.2.1.2. Some motivational beliefs which facilitate classroom academic performance

(a) Self-efficacy

General beliefs related to motivation: Students gathered information from the teachers' lecture in the class. They felt that aimless life can not reach to its destination. They thought that they had to put effort for achieving their goals in future life. They felt that they had to build themselves as a person in the society. They expressed that their academic learning depended on classroom learning, parents and family guidance and private tutors. They thought that SSC was the first step to achieve first certificate. So they had to pass the examination through studying the academic text books. They thought that their willingness impact on their classroom academic performance.

Course materials and other important things: They read the course materials attentively. While the course materials were difficult to understand, they took help from others (teachers, parents, peers, private tutors etc.). Most of the students reported that before starting to learn course materials, they need extra things that would help them to learn the course materials like electricity or candle, paper, pencil, pen, geometry box etc. Course materials and related necessary things helped the students to learn and influence classroom academic performance.

External academic interest: Some of the students read story books, poetry, magazine, news papers, novels etc. out of the course materials. They had interest in new books. They read novels and news paper in the leisure time. Some of the students tried to learn foreign language. Some of the students read story books, traveling and adventure story, autobiography, romantic novel, poetry, religious books, famous poets and authors' life, primitive history, geographical conditions and impact, political situations and sports news with the preparation of classroom activities. They had interest to read new books. They felt that the additional information help exploring their knowledge which indirectly influence their academic performance. External interest increased the students' curiosity to gain knowledge in the classroom academic context.

(b) Intrinsic value

Interest to learn new things: Students reported that they were interested to know and learn new things in the classroom. They had curiosity to know about new learning materials and things. They expressed that acquiring new knowledge in the class brought their life to cope with new environmental situation effectively. The students who had interest to learn new things, they performed better in the classroom and acquired knowledge from the class teachers, class participation and school activities, they added. Some students were interested to know the traveling story and adventure of the world. This helps the students to increase curiosity and attention to know new things. Indirectly it may influence the students to learn new things in the classroom academic setting.

Study habit: Students learnt the lessons regularly. They could learn new thing alongside academic course materials. They actively learnt their lessons for upcoming the examinations. Some of the students divided their time for preparation of the examination. Study habit made the students to prepare themselves to attend in the classroom activities. This helped the students to finish their assignment routine wise.

One motivational belief which do not facilitate classroom academic performance

(c) Test anxiety

Students felt stress and anxious before the examinations. They forgot their preparation of the examinations for anxious of the examination. Some students felt fear when the

questions were not been found common questions in the examinations. They felt stress when they were in the examination. Some students had a tendency to vomit before or after the examinations. They felt that how could they write well and provided appropriate information. Students felt fatigue and pain when they didn't well in the examination. They mentioned that if they could not satisfactory answer in the examination, they could not sleep at night Students expressed that test anxiety hampered classroom examination. As a result, it played negative impact on classroom academic performance.

3.2.1.3. Factors related to attitude towards school which influence classroom academic performance

School activities: Students thought that they had a positive attitude toward their school activities. Most of the students actively participated in the various classroom activities, school activities, games and sports. They expressed that they felt proud for their school.

Teacher: Students showed respect to them inside and outside of the school. Teachers helped the students to understand the course materials. All the students expressed that teacher was an important factor for achieving better classroom academic performance.

Curriculum: Students reported that they had a positive attitude towards the school curriculum. They expressed that school curriculum were interesting to learn new things. Most of the students also expressed that communicative language was the important to learn and speak English. This helped the students to pay special attention English language.

Homework: Most of the students provided the home task in the class. Some students felt importance to provide the home task in the class regularly. Sometimes they also felt stress when the home work was loaded. They reported that the home work helped them to improve their skills of writing, reading and organizing their learning. They also reported that they provided their home tasks regularly.

Parental attitude: The students reported that their parents expected good results from their children. Their parents did not want to change school and they thought that it was very painful for a student to change his/her school. Parents sent their children to school

without any requirements from the school authority except learning. Most of the students' parent attended in the guardian meetings of the school regularly. They responded to the school invitation in the various meeting spontaneously. Students reported that parental positive attitude inspired them to perform better in classroom academic performance.

Almost the entire student expressed that they had positive attitude towards school and related factors. They also thought that school related factors influenced them to know and learn in the classroom context.

3.2.2. Teachers' Perspective

3.2.2.1. Factors related to self-regulated learning which promote classroom academic performance

(a) Cognitive strategy use

Using learning strategies: Teachers reported that some of the students didn't think to achieve a good result in the beginning of the year. They tried to invest their effort to achieve a good result in the class test and other examinations. They tried to match the teachers' lecture with the text book. They wrote answer of the questions in the class test and examinations according to the text or note book. They read and wrote again and again for preparing their class preparation.

Writing: Students were more interested to write than read in the class because they had freedom in writing. Most of the students have more writing ability than speaking. They felt that writing ability depended on understanding the subject matters and practice. Teachers reported that most of the students had good writing ability. Writing practice kept their attention to understand the course material in the classroom.

(b) Self-regulation

Presentation of the subject matters: Students answered the question in a word (Yes or No). Most of them tried to retrieve the information from memory, but some students answered the questions on the basis their own concept. They used the language of text book or guide book. They present the course materials either memorize or written way. In the course materials presentation, many of the students felt inertness and they could not pronunciation the words correctly. Some of the students present their course materials spontaneously and they tried to present their course materials in a simple way. They tried

presenting the course materials with related and practical examples. Sometimes they used the techniques of visualized presentation like picture and graph. This might regulate the student to perform better in the classroom academic context.

3.2.2.2. Factors related to Motivational Beliefs which facilitate Classroom academic Performance

(a) Self-efficacy

Expectation for better performance: Teachers indicated that about 25% students had felt high level, 50% students had average level and rest of the students had felt low level of drive to perform in the class. The students who were highly motivated to perform better in the class, they listened to the teachers' lecture, followed the teaching procedures, understood the course materials and answered the questions with interest and attentiveness. They had competitive attitude towards the achieving a good result in the class. They had interest to achieve a good result which facilitated the classroom academic performance. Teachers reported that expectation drive the students to perform in the classroom context.

Classroom performance: One of the teachers reported that performances of 50% students were good, 30% were average and 20% were not good. Another teacher said that the result of 50% students desired for good result and 25% students had very low performance in the class. They also reported that the classroom academic performance was moderately satisfactory. The students observed other students' performance and they were influenced to perform better in the classroom.

Teacher-student relationship: Students respected their teachers. Also, teachers responded to the students' attention. Those who were interested to understand and comprehend the course materials from the teachers; relationship might help the students to motivate to learn in the classroom.

Comprehension ability: Teachers reported that students understanding ability depended on teachers' presentation, teaching procedure, practical learning and their regular attendance in the class. If they maintained these, they understood the subject matters easily. They tried to understand the subject matters which were taught in the class. A few students had a tendency to understand the course materials and most of the students had a tendency to memorize it. They understood easily if they attended in the class but those

who were not regular in the class they faced difficulties to understand the course materials. Most of the teachers reported that students faced difficulties in understanding the course materials in the class for new things, absence in the previous classes, difficult meaning of the words, students making noise. They also reported that understanding the subject matter depended on presentation style of the teachers, classroom environment, sitting problem in the class. Students felt that some of the portion of the Science, Mathematics and English course are hard to understand without other help. They could not solve the problems and understand the basic concept of the subject matters. For this reason they seek help from others.

3.2.2.3. Factor related to Attitude towards school which influence classroom academic performance

Teachers reported that some students imitated the teacher's behavior and they tried to practice in their life. Some students follow their favorite teacher as a model. Most of the students were helpful to other students and a few portions of the students did not want to accept the weak students. Some of the students had a competitive attitude towards better performance in the class. Some students made a group and they discussed each others to understand the course materials in the classroom.

3.2.3. Researcher's Perspective

3.2.3.1. Factors related to self-regulated learning which promote classroom academic performance

(a) Cognitive strategy use

Response to teachers' question: Some of the students answered the question to teachers' questions spontaneously. It was also found that a few portions of the students answer the questions in the classroom when they were asked by the teachers. Response to teachers' question activated the students to attentive and regulates to learn in the classroom.

(b) Self-regulation

Asking questions to the teacher: Some of the students asked questions to the teachers to know and clarification about the course materials in the class. Many students asked question to the teachers when they got scope to ask question or the teachers give scope.

This might regulate the students to influence converse and learn new things or solving problems in the classroom.

Participation: It was observed that students participated in the various classroom activities. Some students were passive in their behaviors and they did not mix with others and also not to participate in the class work. Classroom participation facilitated the students to learn through group discussions and increase the curiosity to learn in the classroom.

3.2.3.2. Factor related to motivational beliefs which facilitate classroom academic performance

(a) self-efficacy

Distracting behaviors: It was observed that some of the students created distracting behaviors in the classroom like looking here and there, unnecessary talking with peers, waving, scratching, irrelevant drawing picture and gossiping. Some students sat on the back benches and gossip and created sitting problem in the classroom. Students quarreled with each others now and then. Sometimes they wrote down on the pieces of paper and supply to the other students. They listened to their peers talking and avoided their teachers' lecture. Distracting behaviors prohibited to concentrate to the course materials in the classroom setting.

Spontaneity: Most of the students were found to talk with other students, teachers and schools staffs without any hesitation. They were also found to discuss about the course materials freely. But approximately 10% of the students mixed and spoke with their peers and teachers a little bit. The students spontaneously interacted with their peers and teachers; they collected more information and increased their curiosity to gain knowledge in the classroom.

Sitting preference: It was observed that about 15% of students sat in the same place regularly and they had fix sitting place in the classroom. A few portion of the students had a tendency to sit in the back bench and front bench in the class. Most of the students had no sitting preference in the classroom. Some of them had an especial tendency to sit beside their close friends. Students might feel comfortable to sit with preference in the class which might facilitate to concentrate in the classroom.

Class attendance: Researcher visited the selected schools for two days. It was observed that 91.25% students were present in the class at the first observation day and 92.15% students were present at the second observation day. Regular attendances in the class helped the students to learn more information and prohibited seeking assistance from peers and teachers.

(b) Intrinsic Value

Attentiveness: It was observed that most of the students were attentive towards their classroom activities. They listened to their teachers lecture conscientiously in the classroom. A few portions of the students were inattentive in the class. Attentiveness helped them to concentrate to the course materials in the classroom

CHAPTER FOUR

DISCUSSION

DISCUSSION

The purpose of the present study was to investigate the role of self-regulated learning (cognitive strategies, self-regulation), motivational beliefs (self-efficacy, intrinsic value, and test anxiety) and attitude towards school of the secondary school students on classroom academic performance. The present study was divided into two parts: Quantitative and Qualitative. In order to attain the purpose of quantitative part, Bengali version of the Motivated Strategies for learning Questionnaire (MSLQ) and Rao Attitude School Inventory and MCQ test were used. MSLQ covered five scales such as self-efficacy, intrinsic value and test anxiety for measuring motivational beliefs and cognitive strategy use and self-regulation for measuring self-regulated learning. Rao attitude School inventory were used for measuring students' attitude towards their school. On the other hand, to attain the purpose of qualitative part of the study, Teacher's Observation Questionnaire, Researcher's Observation Checklist and Focus Group Discussion (FGD) Guideline were used. In this study 512 secondary school students and 12 teachers were selected randomly. Students' average scores of the last three academic examinations and a MCQ test were used to assess the academic performance. Using a stratified random sampling technique, the study explored the relationships between motivational beliefs, self-regulated learning, attitude towards school and academic performance. Specific components of motivational beliefs, self-regulated learning, attitude towards school and classroom academic performance and their relationships were investigated.

4.1. Quantitative Part of the Study

The study attempted to come across the effect of self-regulated learning (cognitive strategy use, self-regulation), motivational beliefs (self-efficacy, intrinsic value, test anxiety), and attitude towards school on classroom academic performance. And also the study examines the effect of sex, class and group on self-regulated learning, motivational beliefs, attitude towards school and classroom academic performance of the secondary school students. ANOVAs were calculated to understand the main and interaction effects among the variables.

Table-3.1 and 3.3 showed that the main effect of self-regulation and attitude towards school significantly influenced the classroom academic performance. It indicated that self-regulation regulated the students and attitude towards school encourage them to learn

in the classroom context which might influence the classroom academic performance of the secondary school students. Secondary education is the first step to gain a certificate in the student life. For this reason, the students feel drive to pass the examinations. Most of the students thought that they have to achieve a good result in the examination. The result impacts in their future life which may influence the classroom academic performance of the students. Cardno (1955) indicated that attitude influence to respond to social object that guides and directs the behavior of the individual.

The main effect of sex (boy and girl) on motivational beliefs, self-regulated learning, attitude towards school and classroom academic performance of the secondary school students were not significant. It indicated that there was no significant difference between boys and girls in motivational beliefs, self-regulated learning, attitude towards school and classroom academic performance. On the other hand, the interaction effect of sex and group on motivational beliefs (Table-3.4), self-regulated learning (Table-3.5), attitude towards school (Table-3.6) and classroom academic performance (Table-3.7) were significant. It indicated that the interaction effect of sex and group influenced academic motivational beliefs, self-regulated learning, attitude towards school and classroom academic performance of the secondary school students. In the recent years, government has been trying to promote girls education. Government is encouraging girls to continue their education. For this reason, government has implemented the different projects for improving girls' education. Already it has been declared for free of cost girls' education. It has taken action plan to motivate the parents and the girls through media campaign. For this reason, girls' students may be facilitated and performed in the classroom as well as boy students. This result was consistent with the study findings of Rosillo and Arias (2004). They found that boys and girls had no significant difference in the level of intrinsic motivation. They found similar levels of both boys and girls in academic self-concept. They also found the gender difference regarding cognitive-motivational nature, attribution of success and failure, academic goals, information processing strategies, self-evaluation strategies. Patrick et al. (1999) indicated that one aspect that may be influencing the relationship that exists between motivational orientation and students' gender is the type of academic discipline.

The results on the main effect of class (nine and ten) on motivational beliefs, self-regulated learning and attitude towards school, ANOVA identified significant difference

of class (Table-3.5) on self-regulated learning. It indicated that the secondary school students of class ten were more self-regulated than class nine. The interaction effect of class and group on the basis of motivational beliefs (Table-3.4) and self-regulated learning (Table-3.5) were significant. It also indicated that the secondary students of class nine and ten on the basis of science, arts and commerce were significantly different in motivational beliefs and self-regulated learning in the classroom context. The fact, the students of class ten is the candidate SSC examination. This is the first public examination for them. They try to concentrate to perform better in the examination. The students of class ten feel drive to achieve their expected result in the examination which regulate them to attain their goals. Leung and Chan (1999) found that Science and Mathematics Group students obtained highest scores in three variables, namely intrinsic goal orientation, task value and belief in the motivation domain, and one variable: elaboration in the learning strategies domain. In mathematics and science electives, students were usually regarded to own higher motivation to learn and employed more cognitive skills in learning than other electives.

The results of ANOVA identified a significant main effect of group (Science, Arts and Commerce) on the basis of motivational beliefs, self-regulated learning and attitude towards school. It indicated that the students of science, arts and commerce group were significantly different in motivational beliefs (Table-3.4), self-regulated learning (Table-3.5) and attitude towards school (Table-3.6). The findings indicated that group was one of the important factors for secondary school students' motivational beliefs, self-regulated learning and attitude towards school. In the context of our country, the high achieving students are admitted into science group and low achieving students are admitted into arts and commerce group. Gottfried (1985) found that academic motivation contribute to the classroom academic performance of the different grades of the students.

The present study explored the relationships between self-regulated learning, motivational beliefs, attitude towards school and classroom academic performance. It was examined by correlational analysis to understand the relationship between independent and dependent variables in the classroom setting. In terms of the relationships, it was found that the motivational beliefs, self-regulated learning and attitude towards school were associated with classroom academic performance of the secondary school students.

Table-3.8 showed that motivational beliefs, self-regulated learning and attitude towards schools measures used in the study were significantly related to secondary school students' classroom academic performance (academic result and MCQ test), with the attitude towards school having the correlation ($r = 0.175$ and $r = 0.202$). This result indicated that the students who had high motivational beliefs, self-regulated to learn and positive attitude towards school achieved better classroom academic performance. In the context of our society, they have to survive in the society through competition. As a result they concentrate in the classroom, use different learning strategies for achieving their goals. They positively respond to the school and classroom activities. It is observed that most of secondary school students have high expectation to perform better in the school setting. This may lead them motivated, self-regulated to achieve their expected attainment. They Pintrich & De Groot (1990) found that motivation is highly correlated to the use of cognitive strategies and academic achievement. They also revealed that cognitive and motivational variables play an important role in students' classroom learning. Students' learning strategies are motivated by their achievement goal orientations (Anderman & Young, 1994; Pintrich & Schrauben, 1992). Students with learning, task-involvement, and mastery goal orientations used deep, metacognitive, and self-regulated learning strategies; they were oriented toward improving new skills and attaining a sense of mastery by their standards. Students with performance and ego-involvement goal orientations were oriented toward achieving normatively defined goal and focused on public recognition; they were likely to use superficial learning strategies, such as memorizing and writing down quickly what they learned in the classroom (Ames, 1990).

Table-3.9 showed that self-efficacy, intrinsic value, cognitive strategy use, self-regulation and attitude towards school were positively related to academic results and MCQ test results. However, interpreting these results as the case that secondary school student had aim to acquire their first certificate in student life. They might feel inspiration to learn and regulate themselves in the class. They also felt pressure from the teachers and family member to perform better result in the class.. As in the past studies shown, Corno (1986) found that self-regulation is the best predictor of academic performance on all the outcome measures and it is essential for academic performance. He also found that self-regulation is highly correlated with cognitive strategies. Zimmerman (1986) stated that self-regulated learning share a view of students as motivationally and behaviorally active

promoters of their academic achievement. Bandura (1997) found the relationship between self-efficacy and self-regulation. Self-efficacy contributes to the self-regulation of cognitive functioning through the use and monitoring of learning strategies, structuring the environment, regulating motivational, affective and socio-cognitive skills to attain a person's goal of academic achievement. Walter and Pintrich (1998) found that efficacious students report using a greater variety of cognitive and self-regulatory strategies with greater accomplishment. A strong correlation exists high efficacy and self-regulatory strategies (cognitive and metacognitive), goal setting and successful performance (Pintrich and De Groot, 1990).

Multiple regression is a general statistical procedure used to analyze the relationship between a single dependent variable and several independent variables. The procedure was used in this study involved one dependent variable (academic result) and independent variables: motivational beliefs (self-efficacy, intrinsic value and test anxiety), self-regulated learning (cognitive strategy use and self-regulation) and attitude towards school. As in analyzing study objectives, the dependent and independent variable scores were standardized to obtain a common unit of measurement.

As indicated in the Table-3.10, when all independent variables were included in the equation, motivational beliefs were statistically significant in predicting classroom academic performance. Self-regulated learning was not found to be a significant predictor of classroom academic performance of the secondary school students. Findings of the study suggested that 6 selected variables taken together that had explained 4.5% ($R = 0.212$) of the variance of academic results and rest of the percentage of the total variance of academic results remained unexplained. A normal probability plot of the residuals was generated to provide a visual representation. The diagonal line in Figure 3.e and 3.d indicates a normal distribution of subjects. Since the plotted values fall closely along the diagonal line, the residuals are considered to represent a normal distribution; therefore, the regression model met the assumption of normality. Biggiano et al. (1992) found that academic motivation positively influenced academic performance. He also found that motivational orientation predicted students' standardization achievement scores. Specifically, students with an intrinsic motivational orientation had higher reading and math scores and higher overall achievement scores than their extrinsic counterparts.

Motivational orientation may be a determinant of attributions and perceptions of competence that contribute to students' achievement.

As indicated in the Table-3.11, only attitude towards school predicted classroom academic performance. As in the regression analysis of the study, variables that had β value less than 0.1 were excluded from the equation. The reduced set of analysis included the dependent variable which was academic results and independent variables self-efficacy, intrinsic value, test anxiety, cognitive strategy use and self-regulation. When the independent variables that had a β value of less than 0.1 were not included in the regression equation, only attitude towards school predicted classroom academic performance at the 0.01 level. Each one point increase on self-efficacy predicted an 8.024 point increase on classroom academic performance. Each one point increase on self-regulation predicted 2.977 point decrease on classroom academic performance. As in answering study findings, a normal probability plot of the residuals was presented to evaluate the assumptions of regression analysis. Unlike the normal probability plot with academic results as dependent variable, the normal probability plot for the classroom academic performance shows substantial departures from the diagonal line. Therefore, the data collected for this study meet the assumption of normality. This finding suggests that attitude towards school is important component of enjoyment in classroom setting and indicates the importance of students' investment in the school that help the students in developing academic performance. Fennema and Sherman (1995) found that students of teachers who were well-organized, achievement-oriented, and enthusiastic tended to have more positive attitude toward school. Thomas (1988) reported that the curriculum and instructional variables related to attitudes towards school play an important role in classroom academic performance

As shown in the Table-3.12, self-efficacy and attitude towards school were statistically significant among the 6 study variables and Table-3.13 showed that only attitude towards school was statistically significant. As in the regression analysis of the study variables that had β value less than 0.1 were excluded from the equation. The reduced set of analysis included the dependent variable academic results and independent variables self-efficacy, intrinsic value, test anxiety, cognitive strategy use and self-regulation for boy and girl students. When the independent variables that had a β value of less than 0.1 were

not included in the regression equation, boys' self-efficacy and attitude towards school predicted classroom academic performance at 0.05 and 0.01 level respectively and on the other hand, girls' attitude towards school predicted classroom academic performance. Each one point increase on self-efficacy predicted a 10.668 point increase on classroom academic performance of the boy students and on the other hand, each one point increase on self-regulation predicted an 8.270 point increase on classroom academic performance. In our context of our country, the students respect their teachers. They participate in the school and classroom activities. They feel proud for being student of their school. They abide by the rules and regulations of the school. They mix with their peers interactively. Also their parents participate in the guardian meeting and various program of the school. Schunk (1985) found that self-efficacy is a strong predictor of academic achievement and motivation to learn. He also found that highly efficacious students choose the learning activities. Some researches have been done on the relationship between school variable and students attitudes towards school. Several investigations have found a small but positive correlation between some school factors and attitudes (Jacobs, 1974; Fields, 1975; Evans, 1978; Paul, 1986), although these studies do not examine the influence of specific variables. McMillan (1992) provide evidence that aspects of the classroom learning environment, or climate, are positively related to school attitudes. An environment lower in intellectual demands, difficulty, and amount of friction or conflict is likely to show more students' attitude positive (Armstrong, 1985). A number of studies have indicated that the personality and behavior of the teacher is very important in the formation of students' attitudes, with one notable exception by Fennema (1995). Moore (1993) found in a national sample of high school students that impressions of the teachers as "like" or "smart" significantly predicated students' attitudes.

As indicated in the Table-3.14 and Table-3.15, self-efficacy and attitude towards school were statistically significant among the selected study variables. As in the regression analysis of the study variables that had β value less than 0.1 were excluded from the equation. The reduced set of analysis included the dependent variable academic results and independent variables self-efficacy, intrinsic value, test anxiety, cognitive strategy use and self-regulation for students of class nine and ten. When the independent variables that had a β value of less than 0.1 were not included in the regression equation, self-efficacy and attitude towards school predicted classroom academic performance at 0.02

and 0.01 level respectively for the student of class nine and on the other hand, self-efficacy and attitude towards school predicted classroom academic performance at the level of 0.01. Each one point increase on self-efficacy predicted a 19.657 point increase on classroom academic performance of the students of class nine and on the other hand, each one point increase on self-regulation predicted a 3.089 point increase on classroom academic performance. Bandura (1997) found that activities that got students to participate, to use their imagination, and to engage in problem solving declined throughout the elementary school years and in high school. There was a corresponding drop in attitudes indicating positive involvement, such as excitement about learning and initiative, as well as an increase in anxiety about grades. The only positive note in an otherwise gloomy picture was a movement toward a more positive approach in the senior year of high school. Stipek and Ryan (1997) found that students' cognitive skills were far better predictors of end-of-the-year achievement than motivation. Bandura (1997) also found that self-efficacy is a key factor in the extent to which people can bring about significant outcomes in their lives. Specifically, there is considerable evidence to support the contention that self-efficacy beliefs contribute to academic achievement by enhancing the motivation to achieve. Zimmerman, Bandura, and Martinez-Pons (1992) reported a path analysis for final grades of 9th and 10th graders. Predictor variables were prior grades, parent grade goals, student grade goals, self-efficacy for self-regulated learning, and self-efficacy for academic achievement. Their results show the influence on achievement (as measured by grades) of the attitude factor (the two self-efficacy measures; the direct effect of self-efficacy on performance has also been shown by Pajares and Miller, 1994) and the drive factor (as reflected by student grade goals and parent grade goals). The strategy factor could not appear because they did not include a measure of strategy use, only of the belief in being capable of it.

4.2. Qualitative Part of the Study

The qualitative data was analyzed to get additional information related to independent variables of the study. The findings of the qualitative part of the study were considered to interpret how motivational beliefs, self-regulated learning and attitude towards school related factors play role on classroom academic performance of the secondary school students.

Some facilitating factors related to motivational beliefs of the secondary school students play role to perform better in the classroom context. They expressed their competitiveness with their peers. They had an interest to know and learn new things in the classroom from their teachers and peers. Students expected better academic performance. They practiced writing and reading for classroom preparation. They attended in the class regularly. They had a good teacher-student relationship. The students participated in the extracurricular activities of the classroom. They learnt the lessons in the classroom attentively. They also answered the teachers' questions and participated in the classroom discussion and gave their opinion. Sometimes they asked the question to the teachers and their peers for clarifying the problems. Most of the students participated in the various activities and to solve problems in the classroom spontaneously. A few of the students showed distracting behaviors in the class. But most of the students had a tendency of mutual cooperation with their peers and teachers in the classroom context. A few portion of the student had a study habit in the classroom context. They felt that classroom was a place of conceptual clarification. These factors facilitate the classroom academic performance of the secondary school students which were expressed by the students, teachers and researchers perspective. But it was found that most of the students had test anxiety towards examinations and class tests. They felt fearful before the examinations. This factor prohibited the classroom academic performance which was stated by the students. The qualitative findings have a consistence with the various previous studies. Mitchell (1992) found that motivation is one of the most critical determinants of the success and quality of any learning outcomes in any school setting, whether it may be elementary, secondary or higher education. Deci and Ryan (1985) found that the drive play an important role of the value of a behavior in the determination of whether or not the behavior is performed. Tukman (1999) found that incentive motivation clearly effect on academic performance and act as a mediator. He also stated that enhancing the incentive value of a task, thereby a person's drive to engage in that task, increases level of achievement as a result, and shows drive or desire to be an important component of motivation that contribute academic performance. Fowler and Walberg (1991) found the positive relationships among school and pupil characteristics and school outcomes. The study revealed that optimum school size have a positive relation with student achievement, participation in school activities, satisfaction, attendance, feelings of belonging, and school climate.

All the students used some self-regulated learning strategies to learn that contribute to their classroom academic performance. Students basically used some common learning strategies like reading, writing, matching the course information with the original text book. They set up a goal and formulated a planning to achieve their expected outcomes. They collected information related to class works and examinations and they organized the information. After organizing the information they tried to learn by heart the course materials. Some of the students used some techniques for preparing the class work like library work. All of the students had a tendency to seek assistance from their parents, teachers, peers, private tutors and senior students. They took notes in the class, mainly they write down the main theme of the topics. All of the students took notes in the mathematics class. They rehearsed the memorized subject matters. Most of the students had a tendency to ask the questions to the teachers in the class when they didn't understand the subject matters. On the basis of students, teachers and researcher perspective, the self-regulated learning factors promote classroom academic performance of the secondary school students. Zimmerman (1986) found that learning strategies have a particular impact on achievement are self-observing, self-judging, and self-reacting (e.g. goal setting, planning), self-evaluation and monitoring, goal setting and strategic planning, strategy implementation and monitoring and strategic outcome monitoring. Tukman (1999) also found that the goal setting strategy yielded the best performance from low self-efficacy students, the group outcome strategy yielded the best performance from middle self-efficacy students, and the no induced strategy control yielded the best from high self-efficacy students. Ames (1983) stated that help seeking is a strategic achievement behavior. Newman (2000) has identified help seeking is a strategy of self-regulated learners (Boekaerts, Pintrich & Zeidner, 2000) who efficiently seek necessary assistance in response to a perceived lack of comprehension. Karabenick (1998) found that more motivated, active, engaged, and self-regulated learners are more likely to seek assistance when necessary. Student who prefer challenge and independent mastery are more likely to seek such help (Arbreton, 1998) and high school students who use other self-regulated strategies also seek help from peers, teachers, and adults.

Almost all the students had a positive attitude towards activities of the class and school. They participated in the various school activities like sports, debate, competition and others extra curricular activities. They completed their classroom assignment regularly and attentively listen to their teachers' lecture and advice. They provided their home

works regularly. They had a positive attitude towards the curriculum. They also reported that their parents also had a positive attitude towards school activities and their teachers. Their parents participated in the guardian meeting and different festivals of the school. The research on student attitudes toward schools had been found positive relation between academic results and attitude (Fowler and Walberg 1991). As with achievement, the research indicates that the attitudes of students are positive toward school activities. Eichenstein (1994) identified the structures, practices, and outcomes of "house units" operating high schools. The units had positive effects on student attendance, responsiveness, and grades, and students expressed satisfaction with the "house" arrangement. He also found that school experience, including policy, teachers, administrators, and involvement in school activities impact on academic performance. He also found that the students had positive attitude toward school among 120 variables of the study.

It may be said that the present study did not find the sex difference in motivational beliefs, self-regulated learning and attitude towards school of secondary school students. Motivational beliefs, self-regulated learning, attitude towards school were related to classroom academic performance. Only test anxiety component of motivational beliefs was negatively related to classroom academic performance. Test anxiety prohibited the classroom academic performance. Motivational beliefs and attitude towards school facilitated classroom academic performance. But self-regulated learning statistically did not predict the classroom academic performance. In addition, the present study also revealed that some factor related to motivational beliefs facilitated classroom academic performance of the secondary school students. Self-regulated learning related factors promoted the students performance in the classroom context. It was also found that attitude towards school influence the students' classroom performance. The students who were positive attitude towards school, they performed better in the classroom context.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

CONCLUSION AND RECOMMENDATIONS

5.1. Conclusion

The present study has conducted to examine the role of motivational beliefs, self-regulated learning and attitude towards school of the secondary school students on classroom academic performance. Both quantitative and qualitative methods were used to collect data from 512 secondary school students in Dhaka City.

The present study revealed that there was no significant sex (boy and girl) difference in motivational beliefs, self-regulated learning and attitude towards school of secondary school students but group (science, arts and commerce) difference was exist in these components. Motivational beliefs (self-efficacy and intrinsic value), self-regulated learning (cognitive strategy use and self-regulation) and attitude towards school were significantly related to classroom academic performance. Only test anxiety component of motivational beliefs was negatively related to classroom academic performance. Motivational beliefs and attitude towards school predicted the classroom academic performance of the secondary school students. In addition, the present study explored that students had a driving force to acquire knowledge in the classroom. They had an interest to know and learn new things in the classroom from the teachers and their peers. Students expect better classroom academic performance. They practice writing and reading for classroom preparation. They attended in the class regularly. When they face difficulties they remain absent in the class. They had a good teacher-student relationship inside and outside of the school. All the teacher reported that the students participated in the extracurricular activities of the. They learnt the lessons in the classroom attentively. A few of the students show unwanted behaviors in the classroom. On the contrary, a few portion of the student had a study habit in the classroom. Students felt that classroom is a place of conceptual clarification. They felt fearful before the examinations. Students used some learning strategies to learn in the classroom that contributed to their classroom academic performance. They set up a goal and formulate a planning to achieve their outcomes. They collect information and organize it to learn. Most of the students have a tendency to seek help from their parents, teachers, peers, private tutors and senior students. Students had a positive attitude towards activities of the class and school.

5.2. Recommendations:

Based on findings of the present study, the following recommendations may be suggested for improving the classroom academic performance of the secondary school students:

The present study revealed that the self regulated learning of the student did not predict the classroom academic performance. So it is necessary for the students to improve their self-regulated learning and practice it in their daily life. In this regards, teachers can play vital role to use self-regulated learning strategies in the academic context.

1. It is observed that students are rarely reinforced in their activities of the class situation by the teachers and education system. So it may be provided reinforcement by the teachers in the classroom setting. Teachers determine a reward that is likely to motivate a student at a particular time.
2. The present study indicates that most of the students feel test anxiety. Test anxiety prohibits the classroom academic performance. Students must be able to identify anxiety and understand its effect on learning. So it is necessary to deliver proper information of negative impact of anxiety on classroom academic performance of the students.

It is found that distracting behaviors of the students prohibit their classroom academic performance. So teachers should control the distracting behaviors by implementing rules and regulations. Classroom may be student friendly environment. Learning method may be applied with interesting to the children. Interesting materials and variety in mode of presentation may be applied. Many students use note to make themselves prepare for class test or examinations. Not books obstacle the student to be self-regulated and it provides limited information on the specific issues. So it should be inspire the student to avoid the note books and to use the original text book.

3. Most of the teachers have a tendency to read the students as a private tutor in the school setting, at his/her home or students' residence. The parent s of the students feels that if the student read to the private tutors, they will perform better in the class and examination. Many teachers use this opportunity and earn money from their students. Many schools arrange model test for the students and collect money

from their students in the school. This is one kind of private tuition. That's why most of the students depend on the teachers' tuition and they do not try to solve the academic problem by using their own competence, self-regulation and cognitive strategy use. As a result they can not explore their ability in the academic setting. Most of the problems are solved by their private tutor. So this tendency should be stopped and other alternative options will be introduced to the students. School management committee will take initiative to stop the tendency of dependency on private tutors. So it should be aware of the teachers and guardians of the students to explore their abilities, self-regulated learning strategies, and cognitive functioning.

4. In the present study, it has found that teachers of the secondary school have recommended excellence suggestion to improve the classroom performance. They thought the recruitment policy would be fare and neutral, the curriculum would be realistic and practical and child development oriented, students of the each class in the secondary level would be ranged 30 and 35 and class test would be introduced after finishing each topic in each subject. They also have suggested that the physical structure of the classroom would be improve and the classroom teaching method might be moderated and if it possible to use audio-visual equipments , the emotional bondage between teachers and students would be developed and the qualities of the teacher have to improve through ongoing and regular trainings.
5. It can be said that teachers and parents' consciousness are more important for the classroom academic performance of the secondary school student. They have to aware of students' needs, attitude, problems etc. It is needed to take necessary steps to fulfill their realistic demands for better performance of the classroom context.

From the above discussion and conclusion of the present research, some recommendations and suggesting can be made for further studies which are given in the below

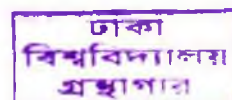
6. The present study has taken some predictors of classroom performance, however, in order to broaden the spectrum of cognitive predictors important variables of cognitive domain of classroom performance need to be studied in future research.

7. Much more non-cognitive predictors from the area of personality, motivation, ecology or environmental may be included to increase the likelihood of predicting much more variance of classroom performance.
8. Similarly many other variables, approaches of studying, learning style, and much more cognitive style may be incorporated in the predictor battery to explain the variance of classroom performance in future studies.
9. Taking family structure, peer-group cohesion, and community related variables, etc. in predicting contributions of these variables to the variance of classroom performance may be broaden the spectrum of environmental predators.
10. This study may be replicated over students of other grades, stages, of education, other geographical or cultural sets-up, ability levels, etc. to examine possible contributions of school motivation, perceived social climate, study habits, intelligence across such groups of pupils.
11. More validation studies such as the tools used in the study are suggested to reduce errors of measurement involving these tools.
12. Further study may be undertaken to explore relations of teacher and parent variables with school motivation, study habits, and perceived social climate.

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5.3. Limitations of the present study

There are limitations to this study that should be considered before applying the results. The sample selection was limited to 12 schools from Dhaka city which reduce the generalizability of the results. Only Bengali medium government and non-government secondary schools of the students were included as sample. Further research with the inclusion of English medium secondary schools on rotation is needed to understand factors that may affect academic performance. The indicators used for academic performance in the classroom were not standardized that was collected from their last three examinations performance and self-reported MCQ test. If the students were response with help of their peer or probably that may constitute bias in this study.



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APPENDIXES

Motivated Strategies for Learning Questionnaire (MSLQ) (শিক্ষণের প্রেষিত কৌশল বিষয়ক প্রশ্নমালা)

ব্যক্তিগত তথ্যাবলী

শ্রেণীঃ

শ্রেণী রোল নংঃ

বিভাগ (মানবিক/বিজ্ঞান/বাণিজ্য)ঃ

বয়সঃ

লিঙ্গ (ছাত্র/ছাত্রী)ঃ

পরিবারের মাসিক আয়ঃ

নির্দেশনা

নিম্নে কতগুলো উক্তি রয়েছে যা শুধুমাত্র গবেষণার কাজে ব্যবহার করা হবে। উক্তি গুলোর সাথে তুমি কতটুকু একমত বা ভিন্নমত পোষণ কর তা টিক (✓) চিহ্ন দিয়ে প্রকাশ কর। মনে রাখবে, এখানে সত্য বা মিথ্যা বলে কিছু নেই। অনুগ্রহ করে সতর্কতা ও সততার সাথে উত্তর দাও। তোমার সঠিক মতামত প্রকাশের উপরই গবেষণার সাফল্য নির্ভর করবে। তাই তোমার সহযোগিতা একান্তভাবে কাম্য। তোমার দেওয়া তথ্যসমূহের গোপনীয়তা রক্ষা করা হবে।

উক্তি

১. এ ক্লাসের অন্য ছাত্র-ছাত্রীদের তুলনায় আমি ভাল করার প্রত্যাশা করি।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মাঝেমধ্যে	একমত	সম্পূর্ণ একমত
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২. আমি এ ব্যাপারে নিশ্চিত যে, এ কোর্সের শিক্ষণীয় বিষয়সমূহ আমি নির্ভুলভাবে বুঝতে পারি।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মাঝেমধ্যে	একমত	সম্পূর্ণ একমত
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৩. এ ক্লাসে আমি খুব ভাল করার প্রত্যাশা করি।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মাঝেমধ্যে	একমত	সম্পূর্ণ একমত
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৪. এ ক্লাসের অন্যদের তুলনায় আমি নিজেকে একজন ভাল ছাত্র/ছাত্রী মনে করি।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মাঝেমধ্যে	একমত	সম্পূর্ণ একমত
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৫. আমি এ ব্যাপারে নিশ্চিত যে, এ ক্লাসে যে সমস্ত কাজ ও সমস্যা দেয়া হয় সেগুলো আমি চমৎকারভাবে সম্পন্ন করতে পারি।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মাঝেমধ্যে	একমত	সম্পূর্ণ একমত
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৬. এ ক্লাসে ভাল ফলাফল অর্জন করতে পারব বলে আমি মনে করি।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মাঝেমধ্যে	একমত	সম্পূর্ণ একমত
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৭. এ ক্লাসের অন্যদের তুলনায় আমার পড়াশুনার দক্ষতা ভাল।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মাঝেমধ্যে	একমত	সম্পূর্ণ একমত
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৮. এ ক্লাসের অন্য ছাত্র-ছাত্রীদের তুলনায় আমি পাঠ্যক্রমের বিষয়বস্তু সম্পর্কে অনেক বেশী জানি বলে মনে করি।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মাঝেমধ্যে	একমত	সম্পূর্ণ একমত
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৯. আমার মনে হয় যে, এ ক্লাসের শিক্ষা উপকরণের বিষয়সমূহ আমি শিখতে পারব।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মাঝেমধ্যে	একমত	সম্পূর্ণ একমত
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১০. ক্লাসের জটিল/দুরূহ কাজকে আমি বেশী পছন্দ করি, কারণ তাতে নতুন কিছু শেখার সুযোগ থাকে।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মাঝেমধ্যে	একমত	সম্পূর্ণ একমত
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১১. এ ক্লাসে যা শেখানো হচ্ছে তা শেখা আমার জন্য গুরুত্বপূর্ণ।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মারোমারো	একমত	সম্পূর্ণ একমত
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১২. এ ক্লাসে যা শিখছি তা আমার পছন্দ।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মারোমারো	একমত	সম্পূর্ণ একমত
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১৩. এ ক্লাসে যা শিখছি তা অন্য ক্লাসগুলোতে প্রয়োগ করতে পারব বলে মনে করি।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মারোমারো	একমত	সম্পূর্ণ একমত
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১৪. আমি প্রায়ই কিছু বিষয় বাছাই করি যাতে সেখান থেকে কিছু শিখতে পারি, যদিও সেগুলোর জন্য অনেক পরিশ্রম করতে হয়।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মারোমারো	একমত	সম্পূর্ণ একমত
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১৫. যদি কখনও আমি কোন পরীক্ষায় খারাপ করি তখন আমার ভুল গুলো থেকে শেখার চেষ্টা করি।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মারোমারো	একমত	সম্পূর্ণ একমত
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১৬. এ ক্লাসে যা শিখছি তা জানা আমার জন্য দরকারী বলে মনে করি।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মারোমারো	একমত	সম্পূর্ণ একমত
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১৭. এ ক্লাসে আমরা যা শিখছি তা আকর্ষণীয় বলে আমি মনে করি।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মারোমারো	একমত	সম্পূর্ণ একমত
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১৮. এ বিষয়টি বোঝা আমার জন্য গুরুত্বপূর্ণ।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মারোমারো	একমত	সম্পূর্ণ একমত
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১৯. পরীক্ষার সময় এতই ঘাবড়ে যাই যে, আমি যা শিখছি তা মনে করতে পারি না।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মারোমারো	একমত	সম্পূর্ণ একমত
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২০. যখন পরীক্ষা দেই তখন আমি অস্বস্তি, বিমর্ষ অনুভব করি।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মারোমারো	একমত	সম্পূর্ণ একমত
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২১. পরীক্ষা নিয়ে আমি খুব উদ্বিগ্ন থাকি।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মারোমারো	একমত	সম্পূর্ণ একমত
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২২. যখন পরীক্ষা দেই তখন কতটুকু খারাপ করছি সে সম্পর্কে আমি চিন্তা করি।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মারোমারো	একমত	সম্পূর্ণ একমত
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২৩. যখন পরীক্ষার জন্য পড়াশুনা করি তখন আমি ক্লাসের পড়া ও বই থেকে তথ্য একত্র করতে চেষ্টা করি।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মারোমারো	একমত	সম্পূর্ণ একমত
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২৪. যখন আমি বাড়ির কাজ করি তখন প্রশ্নের উত্তর সঠিক ভাবে দেওয়ার জন্য ক্লাসে শিক্ষক যা বলেছিলেন তা মনে করতে চেষ্টা করি।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মারোমারো	একমত	সম্পূর্ণ একমত
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২৫. আমি যা পড়ি তার মূল ধারণাসমূহ কি সেটা নির্ণয় করা আমার পক্ষে কঠিন হয়।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মারোমারো	একমত	সম্পূর্ণ একমত
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২৬. যখন আমি পড়াশুনা করি তখন গুরুত্বপূর্ণ ধারণা গুলোকে আমার নিজের ভাষায় আয়ত্ত্ব করি।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মারোমারো	একমত	সম্পূর্ণ একমত
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২৭. শিক্ষক যা বলছেন তা যদি বোধগম্য নাও হয় তবুও সর্বদাই আমি সেটা বোঝার চেষ্টা করি।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মারোমারো	একমত	সম্পূর্ণ একমত
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২৮. যখন পরীক্ষার জন্য পড়াশুনা করি তখন আমি যত পারি তত তথ্য মনে করার চেষ্টা করি।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মারোমারো	একমত	সম্পূর্ণ একমত
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২৯. যখন পড়াশুনা করি তখন বিষয়সমূহ খাতায় লিখে রাখি যাতে সে গুলো আমার মনে রাখতে সুবিধা হয়।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মারোমারো	একমত	সম্পূর্ণ একমত
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৩০. যখন পরীক্ষার জন্য আমি পড়াশুনা করি তখন গুরুত্বপূর্ণ বিষয়গুলো বার বার নিজেকে বলে অনুশীলন করি।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মারোমারো	একমত	সম্পূর্ণ একমত
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৩১. পুরাতন বাড়ির কাজ ও পাঠ্যপুস্তক হতে যা শিখেছি তা নতুন কাজে প্রয়োগ করি।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মারোমারো	একমত	সম্পূর্ণ একমত
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৩২. যখন আমি একটি বিষয়ের উপর পড়াশুনা করি তখন সবকিছুকেই একত্রে সমন্বয় করার চেষ্টা করি।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মারোমারো	একমত	সম্পূর্ণ একমত
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৩৩. যখন এ ক্লাসের বিষয় গুলো পড়ি তখন আমি সেগুলো বার বার নিজেকে বলি যাতে আমার মনে রাখতে সুবিধা হয়।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মারোমারো	একমত	সম্পূর্ণ একমত
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৩৪. বইয়ের অধ্যায় গুলোর খসড়া তৈরি করি যাতে সেগুলো আমার পড়াশুনার সহায়ক হয়।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মারোমারো	একমত	সম্পূর্ণ একমত
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৩৫. যখন আমি পড়াশুনা করি তখন ইতিপূর্বে যা শিখেছি তার সাথে বর্তমানে যা পড়ছি তার সম্পর্ক দেখার চেষ্টা করি।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মারোমারো	একমত	সম্পূর্ণ একমত
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৩৬. আমি যে সব বিষয়গুলো পড়ছি সে গুলো সম্পর্কে জানি কি না তা নিশ্চিত হবার জন্য নিজেকে প্রশ্ন করি।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মারোমারো	একমত	সম্পূর্ণ একমত
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৩৭. যখন কোন পড়াশুনা কঠিন মনে হয় তখন সেটা হয় পরিহার করি অথবা শুধুমাত্র সহজ অংশটুকু পড়ি।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মারোমারো	একমত	সম্পূর্ণ একমত
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৩৮. আমি অনুশীলনী ও অধ্যায়ের শেষ প্রশ্নমালার উত্তরগুলো অনুশীলন করি, যদিও জানি আমার সেগুলো না করলেও চলবে।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মারোমারো	একমত	সম্পূর্ণ একমত
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৩৯. যদি কখনও পড়াশুনার বিষয়বস্তুসমূহ একঘেঁয়ে ও আকর্ষণহীন হয়, তখনও আমি পড়া শেষ না করা পর্যন্ত চালিয়ে যাই।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মারোমারো	একমত	সম্পূর্ণ একমত
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৪০. কোন বিষয়সমূহ সম্পর্কে পড়াশুনা শুরুর পূর্বে কিছু শেখার জন্য আমার কি কি করা প্রয়োজন তা নিয়ে চিন্তা করি।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মারোমারো	একমত	সম্পূর্ণ একমত
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৪১. প্রায়ই দেখি যে, ক্লাসের জন্য আমি যা পড়ে আসছি সে সম্পর্কে আমি প্রায় কিছুই জানি না।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মারোমারো	একমত	সম্পূর্ণ একমত
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৪২. আমি দেখতে পাই যে, শিক্ষক যখন কথা বলছেন তখন অন্য বিষয় নিয়ে চিন্তা করছি এবং যা বলা হচ্ছে তা শুনছি না।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মারোমারো	একমত	সম্পূর্ণ একমত
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৪৩. যখন আমি পড়াশুনা করি তখন অনেক সময় পড়া বন্ধ করে দেই এবং আগে যা পড়েছি তা পুনরায় পড়ি।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মারোমারো	একমত	সম্পূর্ণ একমত
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৪৪. কোন ক্লাস পছন্দ না হলেও আমি ভাল ফলাফল অর্জনের জন্য কঠোর পরিশ্রম করি।

সম্পূর্ণ ভিন্নমত	ভিন্নমত	মারোমারো	একমত	সম্পূর্ণ একমত
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Rao School Attitude Inventory (রাও স্কুল মনোভাব ইনভেন্টরি)

ব্যক্তিগত তথ্যাবলী

শ্রেণীঃ বয়সঃ
শ্রেণী রোল নংঃ লিঙ্গ(ছাত্র/ছাত্রী):
বিভাগ (মানবিক/বিজ্ঞান/বাণিজ্য): পরিবারের মাসিক আয়ঃ

নির্দেশনা

নিম্নে কতকগুলো উক্তি রয়েছে যা শুধুমাত্র গবেষণার কাজে ব্যবহার করা হবে। উক্তি গুলোর সাথে তুমি কতটুকু একমত বা ভিন্নমত পোষণ কর তা টিক (✓) চিহ্ন দিয়ে প্রকাশ কর। মনে রাখবে, এখানে সত্য বা মিথ্যা বলে কিছু নেই। অনুগ্রহ করে সতর্কতা ও সততার সাথে উত্তর দাও। তোমার সঠিক মতামত প্রকাশের উপরই গবেষণার সাফল্য নির্ভর করবে। তাই তোমার সহযোগিতা একান্তভাবে কাম্য। তোমার দেওয়া তথ্যসমূহের গোপনীয়তা রক্ষা করা হবে।

প্রশ্ন

১. তুমি কি মনে কর যে, অধিকাংশ শিক্ষকই তোমার প্রতি সদাশয়?

কখনও না	কদাচিৎ	মঝেমঝে	প্রায়ই	সর্বদাই
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২. তোমার অধিকাংশ শিক্ষকই কি শিক্ষণীয় আকর্ষণীয়ভাবে পাঠদান করেন?

কখনও না	কদাচিৎ	মঝেমঝে	প্রায়ই	সর্বদাই
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৩. তুমি কি মনে কর যে, তোমার শিক্ষকেরা বাড়ির কাজ খুব বেশী কাজ দেন?

কখনও না	কদাচিৎ	মঝেমঝে	প্রায়ই	সর্বদাই
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৪. তুমি কি মনে কর যে, এই স্কুলের প্রধান শিক্ষক ছাত্রছাত্রীদের প্রতি খুব বেশী কঠোর?

কখনও না	কদাচিৎ	মঝেমঝে	প্রায়ই	সর্বদাই
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৫. তুমি কি তোমার শিক্ষকদের ভয় পাও?

কখনও না	কদাচিৎ	মঝেমঝে	প্রায়ই	সর্বদাই
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৬. এই স্কুলের কোন কোন শিক্ষককে তুমি কি অপছন্দ কর?

কখনও না	কদাচিৎ	মঝেমঝে	প্রায়ই	সর্বদাই
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৭. তোমার অধিকাংশ শিক্ষকই কি ছাত্রছাত্রীদের কাছে সম্মানের পাত্র?

কখনও না	কদাচিৎ	মঝেমঝে	প্রায়ই	সর্বদাই
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৮. তুমি কি মনে কর যে, তোমার শিক্ষকেরা তোমাকে বুঝতে পারে না?

কখনও না	কদাচিৎ	মঝেমঝে	প্রায়ই	সর্বদাই
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৯. এই স্কুলের একজন শিক্ষার্থী হওয়ায় তুমি কি গর্বিত?

কখনও না	কদাচিৎ	মঝেমঝে	প্রায়ই	সর্বদাই
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১০. তোমার কি কখনও স্কুলে না যাওয়ার ইচ্ছা হয়েছে?

কখনও না	কদাচিৎ	মঝেমঝে	প্রায়ই	সর্বদাই
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১১. তুমি কি মনে কর যে, স্কুল জীবনের সফলতার উপরই তোমার জীবনের সফলতা নির্ভর করছে?

কখনও না	কদাচিৎ	মারোমারো	প্রায়ই	সর্বদাই
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১২. তুমি কি মনে কর যে, তোমার স্কুলে খুব বেশী নিয়ম-কানুন রয়েছে?

কখনও না	কদাচিৎ	মারোমারো	প্রায়ই	সর্বদাই
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১৩. তুমি কি মনে কর যে, তোমার স্কুল তোমাকে ভবিষ্যত পেশার জন্য তৈরি করছে?

কখনও না	কদাচিৎ	মারোমারো	প্রায়ই	সর্বদাই
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১৪. তুমি কি মনে কর যে, স্কুলে যা তুমি শিখছ তা স্কুল ত্যাগ করার পরেও উপকারে আসবে?

কখনও না	কদাচিৎ	মারোমারো	প্রায়ই	সর্বদাই
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১৫. এই স্কুলে যে সব বিষয় পড়াশুনা করছ সব গুলোই কি তুমি পছন্দ কর?

কখনও না	কদাচিৎ	মারোমারো	প্রায়ই	সর্বদাই
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১৬. লেখাপড়ার বিষয়বস্তু কি তোমার কাছে একঘেঁয়ে ও আকর্ষণহীন মনে হয়?

কখনও না	কদাচিৎ	মারোমারো	প্রায়ই	সর্বদাই
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১৭. তোমার লেখাপড়ায় ভালভাবে কৃতিত্ব অর্জন করাকে তুমি কি গর্বের বিষয় বলে মনে কর?

কখনও না	কদাচিৎ	মারোমারো	প্রায়ই	সর্বদাই
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১৮. তোমার স্কুল কি খেলাধুলা, ক্রীড়া-প্রতিযোগিতা ও বিনোদনে ভাল সুযোগ-সুবিধা প্রদান করে?

কখনও না	কদাচিৎ	মারোমারো	প্রায়ই	সর্বদাই
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১৯. তুমি কি মনে কর যে, খেলাধুলা, ক্রীড়া-প্রতিযোগিতা ও বিনোদনে অংশগ্রহণ করতে তা শিক্ষার্থীদের সাহায্য করার তুলনায় বাধাই বেশী সৃষ্টি করে?

কখনও না	কদাচিৎ	মারোমারো	প্রায়ই	সর্বদাই
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২০. তুমি কি মনে কর যে, 'বাড়ির কাজ' তোমার জন্য বোঝাব্যবস্থা?

কখনও না	কদাচিৎ	মারোমারো	প্রায়ই	সর্বদাই
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২১. এই স্কুলের ছাত্রছাত্রীদের তুমি কি বন্ধুত্বপূর্ণ আচরণ সম্পন্ন মনে হয়?

কখনও না	কদাচিৎ	মারোমারো	প্রায়ই	সর্বদাই
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২২. তুমি কি এই স্কুলের অধিকাংশ সহপাঠীকে পছন্দ কর?

কখনও না	কদাচিৎ	মারোমারো	প্রায়ই	সর্বদাই
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২৩. যখন তোমার সহপাঠীরা পাঠ্য বিষয়গুলোয় সাহায্য চায় তখন কি তুমি তাদের সাহায্য কর?

কখনও না	কদাচিৎ	মারোমারো	প্রায়ই	সর্বদাই
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২৪. তুমি কি মনে কর যে, তোমার স্কুলের কিছু ছাত্রছাত্রী তোমাকে পছন্দ করে না?

কখনও না	কদাচিৎ	মারোমারো	প্রায়ই	সর্বদাই
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২৫. তোমার পিতামাতা কি বাড়িতে তোমার পড়াশুনা দেখাশুনা করে?

কখনও না	কদাচিৎ	মারোমারো	প্রায়ই	সর্বদাই
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২৬. তোমার পিতামাতা কি মনে করে যে, তোমাকে স্কুলে পাঠানোর ফলে অর্থের অপচয় হচ্ছে?

কখনও না	কদাচিৎ	মারোমারো	প্রায়ই	সর্বদাই
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২৭. তোমার পিতামাতার কি তোমার শিক্ষা সম্পর্কে উচ্চাশা পোষণ করে?

কখনও না	কদাচিৎ	মাঝেমাঝে	প্রায়ই	সর্বদাই
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২৮. তুমি কি মনে কর যে, শুধু বাড়িতে তোমার উপস্থিতি থেকে মুক্তি পাওয়ার জন্যই কি তোমার পিতামাতা তোমাকে স্কুলে পাঠায়?

কখনও না	কদাচিৎ	মাঝেমাঝে	প্রায়ই	সর্বদাই
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২৯. তোমার পিতামাতার বাধ্যবাধকতার জন্যই কি তুমি স্কুলে যাও?

কখনও না	কদাচিৎ	মাঝেমাঝে	প্রায়ই	সর্বদাই
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৩০. তোমার পিতামাতা কি তোমাকে স্কুল পরিবর্তন করাতে চায়?

কখনও না	কদাচিৎ	মাঝেমাঝে	প্রায়ই	সর্বদাই
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Teachers' Observation Questionnaire (শিক্ষকের মূল্যায়ণ প্রশ্নপত্র)

নির্দেশনা

আপনার দৃষ্টিতে ক্লাসে শিক্ষার্থীদের কর্মসম্পাদন কেমন তা নিম্নের প্রশ্নগুলোর আলোকে মূল্যায়ণ করুন। আপনার মতামত প্রকাশের জন্য প্রশ্নপত্রের সাথে সংযুক্ত কাগজ ব্যবহার করুন। উল্লেখ্য যে, প্রতিটি প্রশ্নের উত্তর বিস্তারিত বর্ণনা করুন।

১. ক্লাসে ছাত্রছাত্রীদের ভাল ফলাফল করার প্রতি আগ্রহ কেমন?
২. নিজেকে ভাল ছাত্র বা ছাত্রী হিসাবে গড়ে তোলার জন্য কিকি কাজ করে?
৩. ক্লাসে ছাত্রছাত্রীদের প্রশ্নের উত্তর দেবার ক্ষেত্রে কি কি পদ্ধতি ও কৌশল ব্যবহার করে?
৪. ক্লাসের পরীক্ষায় ছাত্রছাত্রীদের সার্বিক ফলাফল কেমন?
৫. ছাত্রছাত্রীদের ক্লাসে পঠিত বিষয়সমূহ উপস্থাপনের ধরণ কেমন?
৬. বিষয়বস্তু উপস্থাপনের ক্ষেত্রে কি কি কৌশল ব্যবহার করে?
৭. ছাত্রছাত্রীদের ক্লাসে লেখার ক্ষমতা কেমন?
৮. ছাত্রছাত্রীদের ক্লাসে বিষয়বস্তু বোঝার ক্ষমতা কেমন?
৯. বুঝতে কোন অসুবিধা হয় কি না? হলে কিকি অসুবিধা হয়?
১০. ছাত্রছাত্রীদের ক্লাসে উপস্থিতির পরিমাণ কেমন?
১১. কিছু কিছু ছাত্রছাত্রীদের ক্লাসে উপস্থিতির পরিমাণ কম হওয়ার কারণ কি কি?
১২. ক্লাসে শিক্ষকদের সাথে ছাত্রছাত্রীদের সম্পর্ক কেমন?
১৩. ছাত্রছাত্রীদেরকে ক্লাসে দেয়া 'বাড়ির কাজ' সরবরাহের পরিমাণ কেমন?
১৪. ক্লাসে ছাত্রছাত্রীদের পাঠ্য বিষয়ের বাহিরে নতুন কিছু জানার বা শেখার আগ্রহ কতটুকু?
১৫. ক্লাসে ছাত্রছাত্রীদের শিক্ষকের সাথে সহযোগিতামূলক অংশগ্রহণের পরিমাণ কেমন?
১৬. অংশগ্রহণের ক্ষেত্রে কোন বাধা আছে কি না? থাকলে কি কি?
১৭. ক্লাসে ভাল ফলাফল করার জন্য ছাত্রছাত্রীরা কেমন তাগিদ অনুভব করে?
১৮. ছাত্রছাত্রীরা ক্লাসে কেমন মনোযোগ দেয়?
১৯. ছাত্রছাত্রীরা ক্লাসে কি কি ধরনের সমস্যামূলক আচরণ করে?
২০. নিম্নোক্ত বিষয়ের প্রতি ছাত্রছাত্রীদের মনোভাব সম্পর্কে আপনার মতামত ব্যক্ত করুন
 - ক) স্কুলের শিক্ষক
 - খ) ক্লাসের সঙ্গী
 - গ) স্কুলের পাঠ্যবিষয়বস্তু
 - ঘ) বাড়ির কাজ
 - ঙ) স্কুলের প্রতি ছাত্রছাত্রীদের পিতামাতার মনোভাব ও
 - চ) কারিকুলাম কার্যক্রম
২১. ছাত্রছাত্রীদের একাডেমিক ক্লাসরুম কর্মসম্পাদনকে আরও জোরদার করতে কি কি পদক্ষেপ গ্রহণ করা প্রয়োজন বলে আপনি মনে করেন সে সম্পর্কে আপনার নিজস্ব মতামত ব্যক্ত করুন যা গবেষণার মান উন্নয়নে সহায়তা করবে?

Researcher's Observation Checklist (গবেষকের পর্যবেক্ষণ চেকলিষ্ট)

নির্দেশনা

আপনার দৃষ্টিতে ক্লাসে শিক্ষার্থীদের কর্মসম্পাদন কেমন তা নিম্নের প্রশ্নগুলোর আলোকে মূল্যায়ন করুন। প্রয়োজনে আলাদা কাগজ ব্যবহার করা যাবে।

১. ক্লাসে ছাত্রছাত্রীরা কেমন মনোযোগ দেয়?
 - ❑ শিক্ষকের পড়াশুনা সম্পর্কিত বিষয়বস্তু শোনা
 - ❑ ক্লাসের কাজের প্রতি মনোযোগ
 - ❑ সহপাঠীদের কথা শোনা
 - ❑ শিক্ষকের উপদেশ
 - ❑ বিষয়বস্তু বহির্ভূত তথ্যের প্রতি মনোযোগ
২. শিক্ষকের প্রশ্নের প্রতি ছাত্রছাত্রীদের প্রতিক্রিয়ার ধরণ কেমন?
 - ❑ শিক্ষক জিজ্ঞাসা করলে তবেই
 - ❑ নিজের ইচ্ছায়
 - ❑ সহপাঠীদের প্ররোচনায়
৩. শিক্ষককে ছাত্রছাত্রীদের প্রশ্ন করার ধরণ কেমন?
 - ❑ নিজের ইচ্ছায়
 - ❑ সহপাঠীদের প্ররোচনায়
 - ❑ শিক্ষক কর্তৃক প্রশ্ন করার সুযোগ দেওয়ায়
৪. ছাত্রছাত্রীরা ক্লাসে নোট নেয় কি না?
 - ❑ শিক্ষক ক্লাসে বলার সময়
 - ❑ সহপাঠীদের কাছে থেকে
৫. ক্লাসে ছাত্রছাত্রীদের স্বতঃস্ফূর্ততা কেমন?
 - ❑ কম কথা বলে
 - ❑ বেশী কথা বলে
 - ❑ প্রয়োজন হলে বলে
 - ❑ সহপাঠীদের সাথে হাসি খুশী থাকে
 - ❑ বেশী মিশে না
৬. ছাত্রছাত্রীরা শিক্ষক/সমবয়সীদের সাহায্য নেয় কি না?
 - ❑ বই
 - ❑ খাতা
 - ❑ কলম
 - ❑ পড়াশুনা দেখিয়ে নেওয়া
 - ❑ অন্যান্য প্রয়োজনীয় জিনিস
৭. ছাত্রছাত্রীরা ক্লাসে কি ধরণের সমস্যামূলক আচরণ করে?
 - ❑ অপ্রয়োজনীয় কথা বলা
 - ❑ চুপচাপ বসে থাকা
 - ❑ পাশের জনের সাথে কথা বলা
 - ❑ মারামারি করা
 - ❑ অপ্রয়োজনীয় নালিশ করা
 - ❑ অপ্রয়োজনীয় ক্লাসের বাহিরে যাওয়া
 - ❑ পিছন থেকে ঝোঁচা দেওয়া
 - ❑ কাগজে কোন কিছু লিখে অন্যজনকে দেওয়া

৮. ক্লাসে বসার ক্ষেত্রে ছাত্রছাত্রীদের পছন্দ আছে কি না?
- সামনের সিটগুলোতে
 - পিছনের সিটগুলোতে
 - মাঝের সিটগুলোতে
 - অন্য কোন পছন্দের সিটে
৯. ছাত্রছাত্রীরা ক্লাসে অবাচনিক সংকেত ব্যবহার করে কি না?
- চোখের ইশারা
 - হাতের ইশারা
 - মুখভঙ্গি
 - দেহভঙ্গি
১০. আগ্রহ কেমন?
- জানার জন্য সহপাঠীদের সাহায্য নেয়
 - কোন বিষয় বুঝতে না পারলে শিক্ষকের কাছে যায়
 - ক্লাসে শিক্ষককে জিজ্ঞাসা করে
১১. উপস্থিতি কত?
- আগের দিন কত ছিল
 - পরের দিন কত
১২. অংশগ্রহণ কেমন?
- স্কুলের বিভিন্ন কাজে অংশগ্রহণ
 - ক্লাসের কাজে
 - সহপাঠীদের সহযোগিতা করা

Multiple Choice Question (MCQ) Test (নৈবর্তিক অভীক্ষা)

ব্যক্তিগত তথ্যাবলী

শ্রেণীঃ

শ্রেণী রোল নংঃ

বিভাগ (মানবিক/বিজ্ঞান/বাণিজ্য)ঃ

নির্দেশনা

নিম্নে কতকগুলো প্রশ্ন রয়েছে যা শুধুমাত্র গবেষণার কাজে ব্যবহার করা হবে। অনুগ্রহ করে সতর্কতা সাথে উত্তর দাও। তোমার কাছে যেটা সঠিক উত্তর বলে মনে হয় তাই প্রশ্নের পাশে লিখ। কারণ তোমার নিজস্ব সঠিক মতামত প্রকাশের উপরই গবেষণার সাফল্য নির্ভর করবে। তাই তোমার সহযোগিতা একান্তভাবে কাম্য।

বাংলা

১. রবীন্দ্রনাথ ঠাকুর কোন গ্রন্থেও জন্য নোবেল পুরস্কার লাভ করেন?

- (ক) মানসী
- (খ) সোনার তরী
- (গ) বলাকা
- (ঘ) গীতাঞ্জলি

২. তায়্যেফ সৌদি আরবের কোন দিকে অবস্থিত?

- (ক) উত্তর
- (খ) দক্ষিণ
- (গ) পূর্ব
- (ঘ) পশ্চিম

৩. নারী জাগরণের মূলমন্ত্র কি?

- (ক) পরিশ্রম
- (খ) বই পাঠ
- (গ) উদ্যম ও পরিশ্রম
- (ঘ) সঠিক শিক্ষা অর্জন

৪. PROLETARIAT সাহিত্য কি?

- (ক) বিদেশী বিপ্লবের সাহিত্য
- (খ) অবস্থা সম্পন্ন পল্লীবাসীর সাহিত্য
- (গ) নির্ধারিত শ্রমজীবীদের সাহিত্য
- (ঘ) এক ধরনের রস সাহিত্য

৫. রচনার প্রধান শিল্পগুণগুলো কি কি?

- (ক) আড়ম্বরতা ও প্রাঞ্জলতা
- (খ) প্রাঞ্জলতা ও সহজলভ্যতা
- (গ) অর্থব্যক্তি ও গ্রহনযোগ্যতা
- (ঘ) অর্থব্যক্তি ও প্রাঞ্জলতা

৬. দেশী ভাষায় কাব্য রচনা করার পিছনে কবির যুক্তি কি?

- (ক) সাধারণ মানুষের উপকার করা

- (খ) দেশী ভাষাকে তিনি ভালবাসেন
(গ) দেশী ভাষায় তিনি পারদর্শী
(ঘ) অন্য ভাষা তিনি জানেন না

ইংরেজি

Read the passage carefully and choose the best answer from the alternatives:

Thousands of people in Bangladesh are suffering from arsenic poisonings and more are being affected everyday. Arsenicosis is caused by drinking tube-well water containing arsenic. People who drink uncontaminated water do not catch arsenicosis from affected people. The main recommendation for the people who are affected by arsenic is to drink water from source that contains no arsenic.

The effects of arsenicosis are less severe among people who eat a healthy, balanced diet, ideally containing fish and vegetables. This is an initial treatment for arsenicosis and may be part of the reason why the number of arsenicosis patients in Bangladesh is still relatively low. It is believed that vitamin A, C and F are effective for treatment of arsenicosis.

Poisoning by arsenic is a slow process. It is due to a gradual buildup of the poison in the human body. Eventually people start to show symptoms and become unwell. Deaths due to long term poisoning make it even more important to address the problem as soon as possible.

This is in effect a race against time to safe water for everyone. Many people currently drinking arsenic contaminated ground water may develop problems soon. They must attempt to find safe source of water.

The majority of the tube-wells in Bangladesh are free from arsenic, but they need to be tested to separate the safe from the unsafe and in many areas, this has not yet been done. Tube-wells, which have been tested for arsenic, should be pointed green if they are safe or red if they are unsafe. Deep tube-wells are free from arsenic and bacteria although they will need testing in the future to ensure that it is still the case. Surface water in ponds and rivers is a potential source of arsenic free water. However, most surface water in Bangladesh is heavily polluted with dangerous bacteria. No surface water should be used without some form of treatment. If a latrine empties into ponds, if a pond is used for fish cultivation with the use of cowdung, if it receives run off water from nearby fields where pesticides or fertilizer have been applied, if it is used for washing livestock, the water should definitely not be used for drinking even after treatment. Care should be taken when using river down-stream of large cities such as Dhaka, as it may contain industrial pollutants.

Rainwater can be collected. This water is free from arsenic and bacteria although care must be taken to ensure that the container is clean.

If there is no source of water other than a red tube-well make sure you do the following: Leave the water to stand in a pitcher containing overnight and filter the upper portion through pitcher containing sand which will remove the arsenic. Boiling tube-well water will not remove the arsenic.

- a) Arsenicosis is ---
 (i) poisoning caused by drinking tube-well water
 (ii) the name of an infectious disease
 (iii) the effect of arsenic poison in the human body
 (iv) a highly poisonous chemical
- b) Tube-wells free from arsenic can be-----by green signs.
 (i) separated
 (ii) evaluated
 (iii) experienced
 (iv) identified
- c) A balanced diet is the -----treatment of arsenicosis.
 (i) last
 (ii) secondary
 (iii) primary
 (iv) final
- d) People drinking water free from arsenic ---
 (i) may be infected from arsenic patients
 (ii) have no possibility of being caught by arsenicosis
 (iii) can also catch arsenicosis
 (iv) can remain free from the risk of arsenic poisoning
- e) The symptoms of arsenic poisoning -----
 (i) take very little time to come out
 (ii) start coming out in a hurry
 (iii) take time to come out
 (iv) come out suddenly
- f) Boiling tube-well water will ----- the arsenic.
 (i) remove
 (ii) not remove
 (iii) partially eliminate
 (iv) add

অংক

১. $A = \{-1, 0, 2, 3\}$, $B = \{-3, 3, 4, 5\}$ হলে $A \cup B$ নির্ণয় করুন।

- (ক) $\{-1, -3, 0, 4, 5\}$
 (খ) $\{-3, -1, 0, 2, 3, 4, 5\}$
 (গ) $\{-1, -3, 0, 2, 4, 5\}$
 (ঘ) $\{3\}$

২. যদি $a+b=7$ এবং $ab=12$ হয়, তবে $a-b$ এর মান কত?

- (ক) 1
 (খ) -1
 (গ) ± 1
 (ঘ) 2

৩. $x^4 + 27x$ এর উৎপাদক কত?

(ক) $(x+3)(x^2-3x+9)$

(খ) $x(x+3)(x^2+3x+9)$

(গ) $x(x+3)(x^2-3x+9)$

(ঘ) $x(x+3)(x^2+3x+9)$

৪. শতকরা বার্ষিক ৫ টাকা হার মুনাফায় ৭৫০ টাকার ৪ বছরের মুনাফা কত?

(ক) ২০০ টাকা

(খ) ২৫০ টাকা

(গ) ১৮০ টাকা

(ঘ) ১৫০ টাকা

৫. একটি আয়তাকার ঘরের দৈর্ঘ্য বিস্তারের দ্বিগুন। এর ক্ষেত্রফল ৫১২ বর্গমিটার হলে পরিসীমা কত?

(ক) ১২৮ মিটার

(খ) ৯৬ মিটার

(গ) ৪৮ মিটার

(ঘ) ১১২ মিটার

৬. $\sin 60^\circ \cos 30^\circ + \cos 60^\circ \sin 30^\circ$

(ক) -১

(খ) ১

(গ) $-1/2$

(ঘ) $1/2$

৭. $x - 1/x = a$ হলে $x^2 + 1/x^2$ এর মান কত?

(ক) a^2+2

(খ) a^2-2

(গ) $a+2$

(ঘ) $a-2$

৮. $a+b=3$ এবং $ab=2$ হলে a^3+b^3 এর মান কত?

(ক) ৩

(খ) ২৭

(গ) ৯

(ঘ) ১৮

Focus Group Discussion (FGD) Guideline (এফজিডি গাইড লাইন)

১. ক্লাসে নতুন কিছু জানার বা শেখার জন্য আপনার নিজের কাছে কোন তাগিদ অনুভব করেন? কেন তাগিদ অনুভব করেন?
২. ক্লাসে পড়ার জন্য লক্ষ্য নির্ধারণ করেন কি? কেন লক্ষ্য নির্ধারণ করেন?
৩. ক্লাসে পড়ার জন্য লক্ষ্য অনুযায়ী পরিকল্পনা করেন কি? কেন পরিকল্পনা করেন?
৪. ক্লাসের পড়া তথ্য সংগ্রহের জন্য কি কি কাজ করেন?
৫. ক্লাসের তথ্যগুলো সংগঠিত করেন কি? করলে, কিভাবে করেন এবং তাতে কি লাভ হয়?
৬. প্রাপ্ত তথ্যগুলো বার বার অনুশীলন ও মুখস্ত করেন কি?
৭. ক্লাসের পড়া তৈরী করার জন্য কি কি কৌশল ব্যবহার করেন?
৮. পূর্বের মুখস্থ করা বিষয়বস্তুগুলোকে কি মাঝে মাঝে অনুশীলন করেন? করলে, কি কি পদ্ধতিতে অনুশীলন করেন?
৯. পড়াশুনার জন্য বন্ধু/সমবয়সী, বয়স্ক ব্যক্তি ও শিক্ষকদের সাহায্য নেন কি? নিলে, কি কি ধরনের সাহায্য নেন?
১০. ক্লাসে নিয়মিত নোট নেন কি? নিলে, কেন নেন? নোট নেয়ার পর সেগুলো কি মূল বইয়ের সাথে মিলিয়ে দেখেন?
১১. যখন ক্লাসরুমে থাকেন তখন আপনার কেমন লাগে?
১২. ক্লাসে পরীক্ষা দেওয়ার কি কোন যৌক্তিকতা আছে?
১৩. পাঠের অভ্যাস করতে আপনার কাছে কেমন অনুভব হয়?
১৪. ক্লাসের বাইরে আর কি কি ধরনের বই পড়েন?
১৫. ক্লাসের অন্য ছাত্র-ছাত্রীদের তুলনায় আপনি কি ভাল করার প্রত্যাশা করেন?
১৬. ক্লাসে যে সমস্ত কাজ ও সমস্যা দেয়া হয় সেগুলো আপনি কি সেগুলো সম্পন্ন করেন?
১৭. ক্লাসে জটিল/দুরূহ কাজ দেওয়া হলে আপনি সেগুলোর সমাধান কিভাবে করেন?
১৮. আপনি কি কিছু কিছু বিষয় বাছাই করে পড়াশুনা করেন? তাতে কি কি সুবিধা মনে করেন?
১৯. যদি কখনও কোন পরীক্ষায় খারাপ করেন তখন আপনার কি মনে হয়?
২০. পরীক্ষার সময় বা পূর্ব মুহূর্তে আপনার কেমন মনে হয়?
২১. ক্লাসের পরীক্ষার সময় আপনার কেমন লাগে?
২২. যখন পরীক্ষার জন্য পড়াশুনা করেন তখন কি আপনি ক্লাসের পড়া ও বই থেকে তথ্য একত্র করেন?
২৩. আপনি যা পড়েন তার মূল ধারণাসমূহ কি সেটা নির্ণয় করা কি আপনার জন্য কঠিন হয়? কঠিন মনে হলে তখন কি করেন?
২৪. যখন পরীক্ষার জন্য পড়াশুনা করেন তখন কি কি ভাবে আপনি তথ্যসমূহ সংগ্রহ করেন?
২৫. যখন আপনি পড়াশুনা করেন তখন ইতিপূর্বে যা শিখেছেন তার সাথে বর্তমানে যা পড়ছেন তার সম্পর্ক মিলিয়ে দেখার চেষ্টা করেন?
২৬. কোন বিষয়সমূহ সম্পর্কে পড়াশুনা শুরু পূর্বে কিছু শেখার জন্য আপনার কি কি করা প্রয়োজন সে সম্পর্কে কি চিন্তা করেন?
২৭. কোন ক্লাস যদি আপনার পছন্দ নাও হয় তাহলে কি আপনি ভাল ফলাফল অর্জনের জন্য চেষ্টা করেন?
২৮. স্কুলের (শিক্ষক, ক্লাসের সঙ্গী, স্কুলের বিষয়বস্তু, বাড়ির কাজ, স্কুলের প্রতি পিতামাতার মনোভাব, কারিকুলাম কার্যক্রম) প্রতি আপনার মনোভাব কেমন? এ ধরনের মনে হবার কারণ কি?
২৯. ক্লাসে ভাল ফলাফল করার জন্য কি কি করা প্রয়োজন বলে আপনি মনে করেন?