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A STUDY OF METACOGNITIVE AWARENESS AMONG SECONDARY LEVEL STUDENTS OF NORTH LAKHIMPUR DISTRICT, ASSAM.

Bidisha Konwar
(MA, NET, B.Ed., Guest Faculty, North Lakhimpur College (Autonomous) Department of Education)

Hena Nandi
(MA, B.Ed.), Punakan Loing, Assistant Professor, Namrup College

ABSTRACT
Metacognition refers to a learner's capacity to take the required actions to design adequate methods for tackling the challenges they confront, to assess repercussions and results and to adjust the approach as necessary, depending on the application of past knowledge.Effective metacognitive abilities can influence student learning and performance. Although effort and experience can help, many students find it difficult to effectively participate in metacognitive processes.Academic success and academic motivation, as well as academic success and academic intrinsic motivation and academic extrinsic motivation, all have a highly significant link. The ability to assess one's academic achievement through metacognitive awareness is a very effective strategy for learning success.
KEYWORDS: Academic, Achievement, Motivation, Metacognitive Awareness

INTRODUCTION

1.0 MEANING:

The term metacognitive comes from the Greek root word ‘Meta ‘meaning ‘beyond ‘and the Latin word ‘Cognosere’ meaning ‘getting to know’. In simple termsMetacognitive means ‘thinking beyond thinking’ or ‘knowing about knowing’. Metacognitive helps to understand oneself that is it makes aware of one own identity. ‘How much he she knows’ or ‘how much he she doesn’t know’. This concept was developed by American Developmental Psychologist Jho Flavell in (1979) according to him ‘metacognition is the knowledge you have of your own cognitive process (your thinking). The idea of metacognition is one that is gaining popularity in the field of education. It's entirely an internal drive. It can take place during any phase of the lesson and works best when students are regularly exposed to this way of thinking. It is significant for both students and teachers and plays a crucial part in effective learning.

Metacognition is the process which helps the students to know their own weaknesses and strength which is beneficial for them. It develops critical thinking and create critical awareness among them. For effective and successful learning metacognition helps a lot. Through this process one can solve their own problems. It is being aware of your own thinking.

Metacognition is self-regulating process as it considered as highest form of thinking. One should use metacognition while studying then only they can learn easily and their learning remain permanent and from this they can use their own thinking’s. Metacognition is totally a internal process

Metacognition is a mind mapping process as it develops students' self-confidence and develop their intellectual side. Through metacognition one can challenge current new learning by their own self-made questioning. Research says that one who is skilled in metacognition they can use more strategic and show their performance better than those who are unaware. Metacognition helps the students to accept the new challenges and enable the student to think by their own way. Through metacognition one can use their own brain. Metacognition awareness means being aware of 'how you think'. Good metacognition thinker is also good intentional learners. That is they able to learn the think in a proper way by understanding all the thinks and it also help the learning permanent. It has a active control over the cognitive process engaged in learning. It helps the students to do their work independently and in a flexible manner. Metacognitive play's significant role in successful learning. Metacognition also improves with appropriate instruction with empire evidence supporting the notion that students can be taught to reflect on their own thinking. Metacognition is not directly observable.

1.1 DEFINITION OF METACOGNITION

Hennessey ''awareness of one`s own thinking awareness of the content of one`s conception an active monitoring of one`s cognitive process and attempt to regulate one`s cognitive process in a relationship to future learning and an application of a set of heuristic as an effective device for helping people organize their method of attack on problems in general''.

Hacker 2009''Metacognition involves awareness of how they learn an evaluation of their learning needs, generating strategies to meet these needs and then implementing their strategies''

Harries and Hodges 1995 ''the awareness and knowledge of one's mental process such that one can monitor, regulate and direct them to a desired goal''

Pressley,1998 "Knowledge and beliefs about thinking and the factors affecting thinking" which regulates the 'articulation of strategy and knowledge'.

1.2 COMPONENTS OF METACOGNITION

Self-Assessment: - It is also known as metacognition knowledge which means to know oneself as a learner or we can say knowledge about oneself as a learner. It is a process to utilize the knowledge in a systematic way.

Self-Management: -It is also known as metacognition regulation and it is related to cognitive level which includes planning, organization, awareness of own task performance and also to evaluate all the strategy.

1.3 ESSENTIAL SKILLS FOR METACOGNITION

Planning: -It is the first skill in metacognition which in simple term means decision making process. It allows to take appropriate decision on various aspects for selection of strategies and the collect allocation of resources that affect task performance.

Monitoring: -Monitoring means having a special duty to be responsible of one's awareness of comprehension and task performance.

Evaluating: -It refers to developing a sound judgement about the process and outcome of thinking.

1.4 HOW TO DEVELOP METACOGNITIVE AWARNESS

- Ask yourself good question: By asking yourself psychologically smart question help to force to think deeply about both the task at hand and the best way to proceed e.g., what should Ido first? is this similar to previous knowledge etc.

- Prepare properly: A few minutes spent in preparation can lead to hours saved later on. E.g.: A woodsman once asked, what would you do if you had just 5 minutes to chop down a tree? he answer, ‘‘I would spend some time for sharpening my axe’’

- Monitor your own performance: Don’t wait until the end to see how you are doing? This is a common mistake done by many people. Be able to monitor your own task as you go along and ‘‘checking in’’ on how you are doing is an important metacognitive skill.

- Proper record: By keeping proper record of what you did, what you were thinking and how you felt, students will begin to build their self-awareness and develop their metacognitive skill.

  In this way metacognitive awareness can develop among students which help them to progress in their life.

1.5 DIFFERENCE BETWEEN COGNITION AND METACOGNITION

The study of Cognition and metacognition is very interesting and trending topic most people find that these two disciplines are same and many people’s get confused while dealing with these topics, one can have an interest to find the difference between cognition and metacognition. So now we will discuss the difference between cognition and metacognition and they are as given below:

Cognition is a process which deals with mental activity such as memory, learning, solving problem, attention, decision making and many other problems related with mental problems. It is a simple form of learning.

Metacognition deal with individual’s high order cognitive process. It is a process in which a person has active control over his cognition. It is a complex and complicated forms of learning. So, from the above it is clear that metacognition usually precedes a cognitive activity. Metacognition is the process which helps to verify and to build self-confident of the child it also helps the child for successful learning. It is the most powerful prediction of learning

1.6 RATIONALE OF THE STUDY

Education prepares the child to grow and it helps them to socialize with each and every member of the society. Also, it prepares child as a lifelong learns so it is very essential to developed skill education so that they can know their own weakness and strength and able to fight by them from removing all the weakness from them. It increases self-confidence as they can control their own activities. Metacognitive learning/knowledge is an independent learning strategy in every age group as it develops self-reflection among them. It improves learning abilities, remembering things easily and achieving their own goals. To know oneself metacognition is very essential and it help the child to develop in a critical manner and it also help to develop personality of a child and develop creativity among them. Learners often show

an increase in self-confidence when they build metacognition skills. Personal effectiveness enhances both motivation and academic performance. Metacognition improves the learning ability, retention as well as the achievement of the students. The regular activities of a classroom should be made in such a way that it encourages a reflective and strategic stance towards learning.

1.7 STATMENT OF THE PROBLEMS

The statement of the problem is "**A Study of Metacognitive Awareness among Secondary Level Students of North Lakhimpur District, Assam."**

1.8 OPERATIONAL TERM USED

- Metacognitive Awareness: - It is known as the 'thinking about thinking', here in this particular study it is assume as the secondary level student's awareness about their learning strategy.
- Secondary Schools: - It refers to the schools having Class IX and X standards.
- North Lakhimpur: - North Lakhimpur is the state of Assam in north eastern part of India

1.9. OBJECTIVES OF THE STUDY

- To study the level of metacognitive awareness among the secondary level students of North Lakhimpur district in relation to gender, location, and management.
- To compare the metacognitive awareness among the secondary level students of North Lakhimpur district in relation to gender, location, and management.

1.10. HYPOTHESES OF THE STUDY

H01.There is no significant difference between the level of metacognition awareness among the secondary level students of North Lakhimpur district in relation to gender (Male and Female).

H02. There is no significant difference between the level of metacognitive awareness among secondary level students of North Lakhimpur district of Assam in relation to Locality (Urban Private and Rural private).

H03. There is no significant difference between the level of metacognitive awareness among secondary level students of North Lakhimpur district of Assam in relation to Locality (Urban Government and Rural Government).

H04. There is no significant difference between the level of metacognitive awareness among secondary level students of North Lakhimpur district of Assam in relation to Management (private and Government).

1.11 DELIMITATIONS OF THE STUDY

The present study is limited to the following points:

1. To check the awareness of metacognition level of secondary school students
2. Only class 9, 10 students will be taken.
3. The study is limited to North Lakhimpur District of Assam

REVIEW OF RELATED LITERATURE

2.0 INTRODUCTION

The foundation of all the future works in any field will be built upon the previous literature (Borg, 1976). The advantage of related literature is also to provide insight into statistical methods through which the validity of results is to be established (Hart,2005)

A search of review of the literature is very important part in research as it is a prerequisite to actual planning and execution of any research work. It provides valuable information of defining, framing and designing research topic or problem. It is like surveying the area and judging the distance first and then to formulate a plan. Review of related literature consist of analysis and synthesis off idea, arguments, concept, definition and theories from literature. It helps the researcher to understand different research methodology and also help them to know various tools and technique which is useful and promising in the previous studies. Although, many studies have been already conducted on metacognitive ability of the students at different stages of education. So, some of the studies that is related to metacognition are given below and they are;

Al-Zoubi (2013) tried to investigate the level of metacognitive thinking among special education students. The objective of the study was to identify the level of metacognitive thinking among special education students at Najran University, Saudi Arabia. The results found that there was a high level of metacognitive thinking in favor of students with a high academic achievement; however, there were no statistically significant differences that could be attributed to gender or level of study.

Arslan And Akin (2014) conducted a study on metacognition: as a predictor of one's academic locus of control. The objective of the study was to examine the effect of metacognition on one's academic locus of control. The major findings of the path analysis revealed that as internal academic locus of control had a positive relation with metacognition, an external academic locus of control had a negative relation. Metacognition affects the academic locus of control in those students whose internal academic locus of control was high. They were more likely to adopt metacognition than the students whose external academic locus of control was low.

Bozkurt (2013) has done a study on the relation between the history teacher candidates' learning styles and metacognitive levels. The study aimed to determine learning styles and the metacognitive levels of the history teacher candidates, and at examine the relation between these two variations. The study was carried out with 163pre-service teachers in history teaching at the faculty of education at a state university in Turkey. Correlation analysis technique was used to analyze the data. Results showed that there was a positive relation between metacognitive levels of the teacher candidates and independent, collaborative, dependent and participant learning styles and a negative relation between avoidant learning styles.

Dhyani And Maikhuri [2018] Conducted study on the metacognitive awareness of primary school students. The main objectives of the study were to find out metacognitive awareness of primary school students, locality and gender. And the major finding of the study was that there is no significant difference in the locality, gender and the students of primary school.

Erickson And Heit (2015) investigated and done a study on metacognition and confidence comparing math to other academic subjects. The main objective was to compare calibration of estimates about math to the other two subjects' science and language and also to post-dictions, allowing to determine if metacognitive judgements improved after completing a test, as would be expected from previous research. The findings showed that there was a significant effect of predicted mean versus actual mean scores. The academic subject variables did not reach

statistical significance indicating over confidence in predictions. No statistically significant in academic subject variable.

Hassan And Ahmed (2015) conducted a study on the impact of metacognitive strategies on academic achievement among special education students in Jazan university. The objective of the study was to verify the impact of metacognitive strategies on academic among special education students- university of Jazan. The major findings of the study were: a) the availability of metacognitive strategies among special education students was positive. b) the availability of metacognitive strategies connecting planning strategy among special education students was positive, c) the availability of metacognitive strategies connecting monitoring strategy among special education students was positive, d) the availability of metacognitive strategies connecting evaluating strategy among special education students was normal and e) the metacognitive strategies had a significant influence on academic achievement.

Himghaempanah, Karimi AndMahmoodnajafi (2014) in their study on the relationship between metacognitive skills and internet addiction with academic achievement in students of Islamic Azad University examined the relationship between internet addiction and metacognitive skills with academic achievement in students of Islamic Azad University. The major findings showed that there was no significant relationship between metacognition and internet addiction. There was a significant relationship between metacognition and academic achievement of students. Also, a significant inverse relationship was found between internet addiction and academic achievement. There was a significant difference in terms of metacognition among the groups of different fields of studies.

Jaleel And Premachandran [2016]. Tried to conducted ``a study of metacognitive awareness of secondary school students`` and the main objectives of their study is to find out significant difference in metacognitive awareness of secondary school students based on locality , gender and the type of management in their school. In their study it was found that there is no significant difference in the metacognitive awareness of secondary school students based on their locality, gender and type of management of the school.

Jayapraba And Kanmani (2013)has done a study on metacognitive awareness in science classroom of higher secondary students. The objective of the study was to examine the effects of inquiry based learning and cooperative learning on metacognitive awareness in science classroom. Higher secondary students from municipal girls' higher secondary school, Tirunelveli town, Tamil Nādu, were taken as the sample of the study .The major findings of the study were: a) there was no significant difference between metacognitive awareness pre-test mean scores achieved by experimental groups with control group, b) there was a significant improvement in metacognitive awareness in inquiry based learning, c) there was a significant improvement in metacognitive awareness in cooperative learning, d) there was no significant improvement in metacognitive awareness of low ability students in inquiry based learning, e) the low metacognitive ability students in cooperative learning group received higher metacognitive awareness and they could also answer higher level of cognitive questions compared to inquiry group and control group, and f) Students in cooperative learning had a higher metacognitive awareness compared to other groups.

Jayapraba And Kanmani (2014) conducted a study on the effect of metacognitive strategy on jigsaw cooperative learning method to enhance biology achievement. The objectives of the study were: a) to determine how the adoption of metacognitive strategy in jigsaw cooperative

learning method influences students' achievement in biology, b) to find whether there was any significant difference between control group and experimental group in gain scores of higher secondary students, and c) to find whether there was any significant difference between control group and experimental group in gain scores on attainment of objectives knowledge understanding and application of higher secondary students. The findings showed that the control group and the experiential group students differ significantly in gain scores. Control group and experimental group students differ significantly in mean differ significantly in mean gain scores of application objective. Metacognitive awareness and gain score of control group were not correlated significantly. But metacognitive awareness and gain score of experiential groups were correlated significantly. Thus, it was suggested that instruction in the metacognitive strategy improve the students 'achievement in biology.

Jena And Ahmad (2014) conducted an explorative study on metacognitive strategy usage and epistemological beliefs of primary school teacher trainees. The objectives of the study were to explore the levels of metacognition and epistemological beliefs of primary school teacher trainees, and to find out the relationship between metacognition and epistemological beliefs of primary school teacher trainees. Descriptive survey method was used. There major results signify a positive relationship between metacognition and epistemological beliefs of primary school teacher trainees.

Kapadia And Garg (2012) has investigated on relating metacognition of secondary school students with their perceived teacher competencies. The objective of the study was to investigate metacognition and perceived teacher competencies of secondary school students. The major findings were: a) female students possess higher metacognition than male students. b) no significant difference was obtained for the sub-task monitoring scores between male and female students, c) female students perceive total teacher competencies better than male students, d) female students perceive social competency, technical competency and affective competency better than male students, and e) the correlation between total metacognition and total teacher competencies was stronger for male students than female students.

Khan And Khan (2013) conducted a study on metacognitive reading strategies in relationship with scholastic achievement in science of ix standard students of English medium schools in Aurangabad city. The objectives of the study were: a) to study the relationship between metacognitive reading strategies, global reading strategy, problem solving strategy, support reading strategy and metacognitive reading strategy and scholastic achievement in science of boys and girls of IX standard students of English medium schools. The findings showed a moderate and positive correlation between global reading strategy and scholastic achievement in science, between problem solving strategy and scholastic achievement in science, and between support reading strategy and scholastic achievement in science. There was significant difference between male and female IX standard students in English medium schools in their metacognitive reading. There was positive and moderate relationship between metacognitive reading strategies and scholastic achievement in science.

Magno [2015]. In his study on topic ``a study on the role of metacognitive skill in developing critical thinking``. The main aim of the study was to find out how critical thinking skills influences on metacognition. The major finding proved that critical thinking provides remarkable path on metacognition skill.

Minikutty And Gopinath (2014) tried to study on metacognitive awareness in teaching among student teachers at secondary level. The objectives of the study were: a) to identify the existing level of metacognitive awareness in teaching among student teachers at secondary level, and b) to compare the existing level of metacognitive awareness in teaching among student teachers at secondary level based on type of management, locale of institution, educational qualification and subject of study. Survey method was used. The sample consisted of 500 student teachers randomly selected from four districts of Kerala. Mean, median, standard deviation, skewness and kurtosis were used as statistical techniques. The findings were: a) the metacognitive awareness in teaching of student teachers at secondary level was less, b) student teachers studying in government aided and unaided teacher education colleges.

Narang And Saini (2013) conducted a study on metacognition and academic performance of rural adolescents. The objectives of the study were to examine the association between metacognition and academic performance of rural adolescents, and to analyze the impact of different components of metacognition on academic performance of rural adolescents. The findings showed that there was a significant association between metacognition and academic achievement performance of rural students. Metacognitive components, namely knowledge of cognition and regulation of cognition, significantly contributed to academic achievement of rural students.

Nasab And Motlagh (2015) conducted a study on a complete review for metacognitive, cognitive, and social/affective strategies as essential components of learning strategies and their relationships with self learners' reading comprehension promotion. The objective of the study was to investigate the relationship of metacognitive, cognitive, and social/affective strategies with EFL learners' reading comprehension in terms of their reading promotion. The major findings indicated no significant differences in the reading scores of male and female learners in cognitive group. There was no significant relationship between different age groups. There were no differences in male and female learners' reading scores in metacognitive group. The female learners were more efficient in that they made the class atmosphere full ofsocio-affective strategies.

Rani and Govil (2013) investigated on metacognition and its correlates. The main aim of the study was: a) to investigate correlates of metacognition of undergraduate students, and b) to find out the relationship of metacognition of undergraduate students with demographic variables like gender, place of living, academic achievement and parents' education. The results showed that gender had no significant impact on the metacognition of undergraduate students. On the other hand, the metacognitive level of urban students differed significantly from their rural counterparts. The high and low achieving undergraduate students differed significantly on their metacognitive level. Fathers' educational qualification had no significant impact on metacognition of the students while mothers' education had a significant impact on it.

Sadeghi, Hassani and Rahmatkhah (2014) conducted a study on the relationship betweenself-learners' metacognitive strategies and their critical thinking. The objective of the study was to find out the relationship between metacognition and critical thinking in language learning. One hundred and two intermediate students from two language institutions in Rasht were selected. Data were analyzed by using Pearson correlation procedures. The major results indicated that there was a positive correlation between metacognition and critical thinking.

Salehe Et Al. (2015) done a study on relationship between metacognition and self-efficacy with academic achievement in high school students of bandar abbas. The objective of the study was to find out relationship between metacognition, self-efficacy and academic performance among high school students of Bandar Abbas, Iran. The major results showed that there was a strong relationship between metacognition and self-efficacy and academic achievement but a moderate relation was found between metacognition and achievement.

Sendurur Et Al. (2011) conducted a study on metacognitive awareness of pre-service teachers. The objectives of the study were: a) to investigate the pre-service teachers 'levels of metacognitive awareness and comparison of sub-awareness scores, and b) to explore relationship among metacognitive awareness factors and other independent variables including gender, GPA, course grades, and graduated high school type. The findings showed that pre-service teachers got slightly better scores in knowledge of cognition. Differences were found between the mean scores of knowledges of cognition and regulation of cognition factors. Knowledge of cognition scores of pre-service teachers was significantly higher than regulation of cognition scores.

Shetty (2014) tried to investigate the metacognition levels of student teachers on the basis of their learning styles. The objective of the study was to find out the learning styles and higher levels of metacognition. The descriptive survey method was adopted for the study. The major findings show that the student teachers with the learning styles-introversion and thinking were found to be significantly higher in metacognition than the student teachers with the learning styles-extroversion and feeling.

Talekar And Ferandes [2016]. conducted a study on the topic ``a study on metacognitive awareness among secondary school students in Mumbai``. The main objectives were to study about the awareness of metacognition of secondary school students based on their gender. The major finding was that most of the students have average metacognitive awareness and difference was seen in the metacognitive awareness among gender. This study found that girls are having more metacognitive awareness than boys.

Tali and Dar (2014) conducted a study on metacognitive strategy usage of primary school teacher trainees in relation to their gender. The objectives of the study were: a) to study the levels of metacognition of primary school teacher trainees, to find out the differences in the use of knowledge of cognition among primary school teacher trainees in terms of gender, and to find out the differences in the use of regulation of cognition among primary school teacher trainees in terms of gender. Results showed that the teacher trainees differ significantly in the use of knowledge of cognition. Male teacher trainees were found to be better than female teacher trainees in the use of knowledge of cognition. No significant differences were found in regulation of cognition among primary school teacher trainees in terms of gender.

Titus and Annaraja (2011) conducted a study on teaching competency of secondary teacher education students in relation to their metacognition. The objectives of the study are: to find out whether there was any significant difference between male and female, rural and urban, relationship between metacognition and teaching competency of secondary teacher education students. The findings of the study were: a) female students were better than the male students in their metacognition, b) urban college students were better than the rural college students in their metacognition, and c) there was a significant relationship between metacognition and teaching competency of secondary teacher education students.

Titus and Annaraja (2012) has done research on metacognitive awareness of secondary teacher education students. The objectives of the study were: a) to assess the metacognitive awareness of the secondary teacher education students in Kanyakumari district, and b) to study whether there was any significant difference in metacognitive awareness of students with respect to gender, type of college and locality of college. Results showed a significant difference between male and female secondary teacher education students in their knowledge of cognition and metacognition. Significance difference was found between aided and unaided college secondary teacher education students in their regulation of cognition. Significance difference was found between rural and urban college secondary teacher education students in their regulation of cognition.

Yogaraj and Selvaraju (2014) conducted a study on a gender-wise analysis on metacognition and learning styles on problem solving skill of B.Ed., trainees. The objectives of the study were: to find out whether there was any significant difference between male and female B.Ed., trainees in their metacognition, in their learning styles, trainees in their problem-solving skill, and to see whether there was any significant influence of metacognition, learning styles and problem-solving skill of B.Ed., trainees. Data were collected from the colleges of education in Tirunelveli, Thoothukudi and Kanyakumari Districts. The results found were: a) there was no significant difference between male and female B.Ed., trainees in their metacognition, b) there was no significant difference between male and female B.Ed., trainees in their visual, kinesthetic learning styles and learning style in toto. But there was a significant difference between male and female., trainees in their auditory learning styles, c) there was no significant difference between male and female B.Ed., trainees in their problem-solving skill, and d) there was a significant influence of metacognition, learning styles on problem solving skill of B.Ed., trainees.

Yogaraj and Selvaraju (2014) conducted a study on metacognition and learning styleofB.Ed. students. The objectives of the study were: a) to find out the difference between male and female secondary education students in their metacognition, in their learning style, and to find out the relationship between metacognition and learning style of secondary education students. The findings of the study were: a) there was no significant difference between male and female students in their metacognition, b) there was no significant difference between male and female B.Ed. students in their kinesthetic style of learning, but there was significant difference between male and female B.Ed. students in their auditory, visual and learning styles, and c) there was a significant relationship between metacognition and learning styles of B.Ed. students.

METHODOLOGY

3.0 INTRODUCTION

Research is always directed towards the solution of a problem. The purpose of scientific research is to discover and developed an organized body of knowledge. Research methodology is the specific procedures or techniques used to identify select, process and analyze information about a topic. The role of methodology is to carry out the research work in a scientific and valid manner. This chapter deals with the methodology followed in this research work. A systematic methodology is very much necessary for any research investigation as it analyze the problems properly but also to arrive at dependable and reliable conclusion.

A clear-cut methodology will guide the investigation in the right direction without any deviation or distraction and haphazardness (Best and Khan 2007).

The success of any research work depends on tools, techniques and the proper methods adopts in the research process. Therefore, this chapter deals with methods, population, sample, tools, description of the final study. It is a systematic plan and contains all the details that are needed to accomplish the projected study.

The main purpose of this research is to study the Metacognitive Awareness Among Secondary Level Students of North Lakhimpur District of Assam. Because metacognitive is an inner derive and it is the process which helps the students to know their own weakness and strength which is every much needed in the present situation as it helps the student to solve their own problems and also helps the student to think in a critical manner.

In the present study metacognitive awareness of the secondary school students have been measured and comparatively analyzed. In this chapter the investigator adopted the following steps for the completion of the present study:

•Method of the study
•Population of the study
•Sample and Sample Procedure
•Tools used in the study
•Variables Of the Study
•Analysis And Interpretation of Data

3.1 METHOD OF THE STUDY

According to the nature of the present research work investigator adopted descriptive cum normative survey method to conduct this piece of research work. In this method the investigator studies the present metacognitive awareness among secondary level students of North Lakhimpur District of Assam.

3.2 POPULATION OF THE STUDY

Any group of people or observation which includes all possible members to that category is known as population. It is the full set of individual or object having some common characteristics. It is for the benefit of the population that researches are done. So all the students of secondary class of north Lakhimpur is comprise the population of the study.

3.3 SAMPLE AND SAMPLING PROCEDURE

A sample is a group of people, objects, or items that are taken from a larger population for measurement. According to A.K.Singh," The selected number of persons or objects is known as sample is any number of persons selected to represent the population according to some rules or plans".

The researcher used simple random sampling technique to select the sample of the present study. The sample of the study consist of 4 Secondary schools in which 2 private schools and 2 Government schools from the North Lakhimpur district. Along with this the investigator select 231 students (111 boys and 120 girls) to conduct this research work. Due representation was given to the students studying in private and government school as well as rural and urban students.

Serial Number	Name of School	Number of Students	Locality	Management

1	Sangam Academy	60(30+30)	Urban	Private
2	Girls Higher Secondary School	51(25+26)	Urban	Government
3	PanigaonHigher Secondary School	60(30+30)	Rural	Government
4	Sankardev Sisu Niketan Haripur Bochagaon	60(30+30)	Rural	Private
Total = 231				

Table-1: Showing the Sample Distributions of the Study.

3.4 TOOLS USED:

The investigator has used self-constructed 'Metacognitive Awareness Inventory' to study the metacognitive awareness of the secondary school students. The researcher administered a Metacognitive Awareness Inventory' to measure the metacognitive awareness of secondary level students. The researcher adopted the following steps for the construction and standardization of this Metacognitive Awareness Inventory'.

Step-I: Collection and Editing of Statements:

The first step of Metacognitive Awareness Inventory' is to collect the statement relating to the metacognitive awareness of students from different sources like- Books, Magazines, Periodical, Journal and other literatures on metacognitive awareness of students at secondary stage Education. Therefore, the researcher consulted the literature and discussed the matter with some experts. There was a collection of 35 statements from the different sources and these statements were collected by keeping in mind the criteria suggested by Thurstone and Chave (1929), Wung (1932), Bird (1940), Edward and Kilpatrick (1948). After collection of these 35 statements the scholar got this statement typed and Xeroxed. This rough draft of 35 statements was handed over to four content experts and four language experts for the editing purpose. These content and language experts did the editing work in view of suggested criteria. The experts rejected five statements because of their irrelevancy and some grammatical error. Now there were 30 statements which remained in the preliminary draft of the scale after editing the statement from the content and language points of view.

Step-II: Try Out

After getting the statements edited, try out of the preliminary draft of the Metacognitive Awareness Inventory' is an important step. For this purpose, the researcher selected a sample of 30 secondary level students from the two secondary schools of Assam. The preliminary draft of 30 statements was administered on the selected sample of 30 secondary level students. The students responded to each statement of the scale in view of the five points stated against each statement such as SA, A, ND, D and SD. An illustration of these points is put as under:

SA = Strong Agree
A = Agree
ND = Not decided

D = Disagree
SD = Strongly Disagree

Hence, it is worth mentioning to be noted that this Metacognitive Awareness Inventory' possessed positive statements, hence, the weightage for each response of the statement was given 5,4,3,2,1 points to SA, A ND, D and SD for every statement. The researcher did the scoring work of each Metacognitive Awareness Inventory' by adopting these weightages for the responses of the respondents.

Step-III: Analysis of Statements

The scoring work was done with utmost care and the score of the respondents were recorded. For the purpose of analysis of each statement of the scale, the sample of 30 secondary level students and their scores on the Metacognitive Awareness Inventory' were systematized in ascending order. After this, 25% cases from the upper in terms on performance of the scale were taken out to make two groups, i.e., a group of higher performance and a group of lower performance on the item of Metacognitive Awareness Inventory'. By taking the scores of these two groups relating to each statement, t-values were computed for all the statements of the preliminary draft of the Metacognitive Awareness Inventory'. After the computation of t-values of each statement it was found that the t- values of three statements happened to be lesser than 1.75 because of which those five statements got rejected and rest of the 25 statements were having the t- values more than 1.75 on account of which those 25 statements were kept in the final draft of this Metacognitive Awareness Inventory'.

Step-IV:

The authenticity of any tool of research depends upon its reliability and validity. These are the two significant features of any tool of a research work. The scholar found out the reliability of this Metacognitive Awareness Inventory' by adopting test re-test method and the co-efficient of reliability came out to be .84 which was considered satisfactory. The validity of the scale was ensured by taking the opinions of the content experts. The final draft of 25 statement of this Metacognitive Awareness Inventory' has been placed as an appendix. -I.

3.5 ADMINISTRATION OF THE TOOLS:

The investigator visited the secondary schools selected as a sample to conduct this piece of research work in advance and prior permission was taken from the concern authority to administer the tools. Before administration of the tools the investigator brief all the necessary information's to the students to fill up and respond the tools in proper way.

3.6 VARIABLE OF THE STUDY:

Variable is the term frequently used in research projects. A variable is an entity that taken on different values. In research the term variable refers to the measurable characteristics, attitude, traits, quality of a particular individual or object or situation which can be control and manipulated by the researcher for the study.

There are two types of variables:

a)Independent Variable.

b)Dependent Variable.

Independent Variable are the variable which can be manipulated or controlled or changed.

Dependent Variable are the outcome variables and the variable which are used to calculated statistic.

In the present study researcher used following variables as research variable:

1. Independent variable -gender, location, and management.
2. Dependent variable- awareness level of metacognition.

3.7 ANALYSIS AND INTERPRETATION OF DATA:

After the collection of requisite data from the respective sample researcher used statistical techniques like Mean, Standard Deviation and "t" test to analyses and interpret the result and to draw the conclusion.

ANALYSIS AND INTERPRETATION

4.0 INTRODUCTION

Analysis of data means the collected data are organized and tabulated systematically in order to determine inherent facts. Data analysis includes various composite factors into simpler parts and putting them in new arrangements for the purpose of interpretation. It is also deals with qualitative and quantitative characteristics of the variable. Statistics plays an important role in analysis of data as it is an indispensable tool on research work. It is a body of mathematical techniques and processes used for organizing, analysis and interpreting the available data.

Interpretation means deriving meaning from the analyzed data. It is a process of careful, logical and critical examination of results obtained after analysis of any research work. With the help of interpretation investigator can draw the answers to the selected problems and it also helps investigator to give suggestions for future work on the basis of findings. Data analysis and interpretation is the process of assigning meaning to the collected information and determining the conclusion, significant and implications of the findings.

According to C.R. Kothari (1989)," The term analysis refers to the computation of measures along with searching for patterns of relationship that exist among data groups".

The aim of the present study is to find out the "Metacognitive Awareness among Secondary Level Students of North Lakhimpur District of Assam". For analyzing and computing the result the investigator used central tendency i.e., Mean, Standard deviation and t-test for computing the results. The t –test is used to determine whether a true difference exists between means of two sample. In order to test the significance of an obtained difference we must first for the present study analysis of data was done objectives wise. The analysis and computation along with interpretations have been placed objective wise in this section.

4.1 OBJECTIVES WISE ANALYSIS AND INPRETATION OF DATA

Objective-1: To study the level of metacognitive awareness among the secondary level students of North Lakhimpur district in relation to gender, locality, and management.

For realizing the objective 1 of the study the researcher used the collected level of metacognitive awareness among secondary level students of North Lakhimpur District of Assam. The data collected are tabulated and analysis below:

Table No.4.1: Frequency Distribution Table of Raw Scores of overall level of Metacognitive Awareness among secondary level of students of North Lakhimpur District of Assam

C.I	F	X	X'	FX'	F(X')2
121-125	7	123	5	35	175
116-120	21	118	4	84	336
111-115	56	113	3	168	504
106-110	36	108	2	72	144
101-105	41	103	1	41	41
96-100	22	98	0	0	0
91-95	20	93	1	-20	20
86-90	13	88	2	-26	52
81-85	5	83	3	-15	45
76-80	7	78	4	-28	112
71-75	3	73	5	-15	75
	231			€fx`=296	€fx`^{2}=1504

Computation of Mean

MEAN= $AM + \left(\frac{\sum fx`}{N}\right) \times i$

=104.405

Computation of SD

SD= $\left\{\sqrt{\frac{\sum fx^2}{N} - \left(\frac{\sum fx}{N}\right)^2}\right\} x$ i

=11.03

INTERPRETATION: It is seen from Table 4.1 that the computed mean score of metacognitive awareness among secondary level of students of north Lakhimpur District of assam come out to be 104.405 out of total 125 marks which is a good and may be treated as satisfactory. It shows that the metacognitive awareness of the students at secondary level of school in the North Lakhimpur district of Assam is high irrespective of gender, location, and management of school. The computation of Standard deviation come out to be 11.03 which indicates that there is no much variation in the scores of students in metacognitive awareness inventory.

Sub- objectives-1.1: To study the level of metacognitive awareness among the secondary level of students of North Lakhimpur district of Assam in relation to gender (Male and Female).

Hypothesis-(1.1) There is no significant difference between the level of metacognition awareness among the secondary level students of North Lakhimpur district in relation to gender.

Table No.4.2: Frequency Distribution Table of Raw Scorers of metacognitive awareness of Male in secondary level of North Lakhimpur district of Assam

C.I	F	X	X'	FX'	F(X')2
121-125	4	123	5	20	100
116-120	7	118	4	28	112
111-115	23	113	3	69	207
106-110	21	108	2	42	84
101-105	17	103	1	17	17

96-100	11	98	0	0	0
91-95	9	93	1	9	9
86-90	8	88	2	16	32
81-85	4	83	3	12	36
76-80	5	78	4	20	80
71-75	2	73	5	10	50
	111			€fx=109	€fx=727

Computation of mean

Mean= = $AM + \left(\frac{\sum fx`}{N}\right) \times i$

=102.9

Computation of SD

SD= $\left\{\sqrt{\frac{\sum fx^2}{N} - \left(\frac{\sum fx}{N}\right)^2}\right\} x$ i

=11.805

Table No. 4.3. Frequency Distribution Table of Raw Scores of Metacognitive Awareness of Female in Secondary Level of North Lakhimpur District of Assam

C.I	F	X	X'	FX'	F(X')2
125-129	2	127	5	10	50
120-124	6	122	4	24	96
115-114	20	117	3	60	180
110-114	29	112	2	58	116
105-109	16	107	1	16	16
100-104	19	102	0	0	0
95-99	12	97	-1	-12	12
90-94	9	92	-2	-18	36
85-89	3	87	-3	-9	27
80-84	2	82	-4	-8	32
75-79	2	77	-5	-10	50
120			∑fx`=111	∑fx`^{2}=615	

Computation of mean

Mean= $AM + \left(\frac{\sum fx`}{N}\right) \times i$

=107.44

Computation of SD

SD= $\left\{\sqrt{\frac{\sum fx^2}{N} - \left(\frac{\sum fx}{N}\right)^2}\right\} x$ i

=10.34

Computation of SE_D

SE= = $\sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}}$

=1.4650

Computation of "t" value

t= $\frac{M_1 - M_2}{SE_d}$

=3.0989

Where,

$d_f = N_1 + N_2 - 2$
=229

The table value of "t" with d_f(229)-
At 0.05 level of significance = 1.94

At 0.01 level of significance=2.60

Table No.4.4: Summary of comparison Between Metacognitive Awareness Level of Gender (Male and Female) of Secondary Level Students of North Lakhimpur District of Assam

Groups	N	Mean Scores	SD	SE_D	t-value
Male	111	102.9	11.805	1.4650	3.0989
Female	120	107.44	10.34		

Interpretation:
The above table 4.4 reveal that computed t-value come out to be 3.0989 which is greater than the criterion t-value (1.94) at 0.05 level of confidence and (2.60) at 0.01 level of confidence for df 229.Therefore computed t- value (3.0989) is significant at both 0.05 and 0.01 level of significance.
Therefore, the formulated hypothesis "There is no significant difference between the level of metacognition awareness among the secondary level students of North Lakhimpur district of Assam in relation to gender" get rejected.
From this it is understood that there is a significant difference in the level of metacognition awareness among the secondary level students of North Lakhimpur district of Assam in relation to gender. Also, the computation signifies that the female learner (M-120) perform better than the male learner(M-111) according to their respective mean scores which have been shown in the above table no.4.4
Sub- Objective 1.2. To study the metacognitive awareness among secondary level students in relation to locality of North Lakhimpur District of Assam.
Hypothesis-(1.2(a)): There is no significant difference between the level of metacognitive awareness among secondary level students in relation of Urban Private and Rural private of North Lakhimpur district of Assam.

Table No.4.5: Frequency Distribution Table of Raw Scorers of metacognitive awareness of secondary level students of Urban Private of North Lakhimpur district of Assam

C.I	**F**	**X**	**FX'**	**F(X')2**
121-125	5	123	25	125
116-120	5	118	20	80
111-115	7	113	21	63
106-110	2	108	4	8
101-105	4	103	4	4
96-100	10	98	0	0
91-95	11	93	-11	11
86-90	8	88	-16	32
81-85	3	83	-9	27
76-80	5	78	-20	80
71-75	2	73	-10	50
	62		€fx=8	€fx=480

Computation of mean

Mean= $AM + \left(\frac{\sum fx`}{N}\right) \times i$

=98.64

Computation of SD

SD= $\left\{\sqrt{\frac{\sum fx^2}{N} - \left(\frac{\sum fx}{N}\right)^2}\right\} x$ i

=13.75

Table No.4.6: Frequency Distribution Table of Raw Scorers of metacognitive awareness of secondary level students of Rural Private of North Lakhimpur district of Assam

C.I	F	X	X'	FX'	F(X')2
125-129	1	127	5	5	25
120-124	5	122	4	20	80
115-119	20	177	3	60	180
110-114	12	112	2	24	48
105-109	10	107	1	10	10
100-104	9	102	0	0	0
95-99	6	97	-1	-6	6
90-94	2	92	-2	-4	8
85-89	1	87	-3	-3	9
80-84	1	82	-4	-4	16

67 ∑fx`=102 ∑fx`^{2}=382

Computation of mean

Mean= $AM + \left(\frac{\sum fx`}{N}\right) \times i$

=109.6

Computation of SD

SD=$\left\{\sqrt{\frac{\sum fx^2}{N} - \left(\frac{\sum fx}{N}\right)^2}\right\} x$ i

=9.2

Computation of SE_D

$$SE= \sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}}$$

=2.073

Computation of "t" value

$$t= \frac{M_1 - M_2}{SE_d}$$

=5.287

Where,

$d_f = N_1 + N_2 - 2$

=127

The table value of "t" with d_f(127)-

At 0.05 level of significance = 1.66

At 0.01 level of significance=2.62

Table No.4.7: Summary of comparison Between Metacognitive Awareness Level of Locality (Urban Private and Rural private) of Secondary Level Students of North Lakhimpur District of Assam

Groups	N	Mean Scores	SD	SE_D	t-value
Urban Private	62	98.64	13.75	2.073	5.287
Rural private	67	109.6	9.2		

Interpretation:

The above table 4.7 reveal that computed t-value come out to be 5.287 which is greater than the criterion t-value (1.66) at 0.05 level of confidence and (2.62) at 0.01 level of confidence for df 127.Therefore computed t- value (5.287) is significant at both 0.05 and 0.01 level of significance.

Therefore, the formulated hypothesis "There is no significant difference between the level of metacognition awareness among the secondary level students of North Lakhimpur district of Assam in relation to Locality" get rejected.

From this it is understood that there is a significant difference in the level of metacognition awareness among the secondary level students of North Lakhimpur district of Assam in relation to Locality. Also, the computation signifies that the Rural private students (M-109.6) Perform better than the Urban private students(M-98.64) according to their respective mean scores which have shown in the above table no.4.7

Sub- Objective 1.2. To study the metacognitive awareness among secondary level students in relation to locality of North Lakhimpur District of Assam

Hypothesis-(1.2(b)): There is no significant difference between the level of metacognitive awareness among secondary level students of Urban government and Rural government of North Lakhimpur district of Assam**.**

Table No.4.8: Frequency Distribution Table of Raw Scorers of metacognitive awareness of secondary level students of Urban government of North Lakhimpur district of Assam

C.I	F	X	X'	FX'	Fx`$^{2}$`
115-119	1	117	4	4	16
110-114	12	112	3	36	108
105-109	12	107	2	24	48
100-104	12	102	1	12	12
95-99	3	97	0	0	0
90-94	4	92	-1	-4	4
85-89	3	87	-2	-6	12
80-84	1	82	-3	-3	9
75-79	2	77	-4	-8	32
	50			∑fx`=55	∑fx`^{2}=241

Computation of mean

Mean= $AM + \left(\frac{\sum fx`}{N}\right) \times i$

=102.5

Computation of SD

SD= $\left\{\sqrt{\frac{\sum fx^2}{N} - \left(\frac{\sum fx}{N}\right)^2}\right\} x$ i

= 9.5

Table No.4.9: Frequency Distribution Table of Raw Scorers of metacognitive awareness of secondary level students of Rural government of North Lakhimpur district of Assam

C.I	F	X	X'	FX'	Fx`$^{2}$`
111-115	24	113	2	48	96
106-110	13	108	1	13	13
101-105	9	103	0	0	0
96-100	4	98	-1	-4	4
91-95	5	93	-2	10	20

55 ∑fx`=47 ∑fx`^{2}=133

Computation of mean

Mean=$AM + \left(\frac{\sum fx`}{N}\right) \times i$

=107.27

Computation of SD

SD= $\left\{\sqrt{\frac{\sum fx^2}{N} - \left(\frac{\sum fx}{N}\right)^2}\right\} x$ i

=6.48

Computation of SE_D

$\sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}}$

=1.602

Computation of "t" value SE=

t= $\frac{M_{1-M_2}}{SE_d}$

=2.9775

Where,

$d_f = N_1 + N_2 - 2$

=103

The table value of "t" with d_f(103)-

At 0.05 level of significance = 1.66

At 0.01 level of significance=2.63

Table No.4.10: Summary of comparison Between Metacognitive Awareness Level of Locality (Urban Government and Rural Government) of Secondary Level Students of North Lakhimpur District of Assam

Groups	N	Mean Scores	SD	SE_D	t-value
Urban Government	50	102.5	9.5	1.602	2.9775
Rural Government	55	107.27	6.48		

Interpretation:
The above table 4.10 reveal that computed t-value come out to be 2.9775 which is greater than the criterion t-value (1.66) at 0.05 level of confidence and (2.63) at 0.01 level of confidence for df 103.Therefore computed t- value (2.9775) is significant at both 0.05 and 0.01 level of significance.
Therefore, the formulated hypothesis "There is no significant difference between the level of metacognition awareness among the secondary level students of North Lakhimpur district of Assam in relation to Locality" get rejected.
From this it is understood that there is a significant difference in the level of metacognition awareness among the secondary level students of North Lakhimpur district of Assam in relation to Locality. Also, the computation signifies that the Rural Government students (M-107.27) Perform better than the Urban Government students(M-102.5) according to their respective mean scores which have shown in the above table no.4.10

Sub- Objective 1.3. To study the metacognitive awareness among secondary level students in relation to Management of North Lakhimpur District of Assam
Hypothesis-(1.3): There is no significant difference between the level of metacognitive awareness among Private and Government secondary level students of North Lakhimpur district of Assam

Table No.4.11: Frequency Distribution Table of Raw Scorers of metacognitive awareness level of Private secondary students of North Lakhimpur district of Assam.

C.I	F	X	X'	FX'	$Fx`^{2}`$
121-125	9	123	5	45	225
116-120	22	118	4	88	352
111-115	21	113	3	63	189
106-110	14	108	2	28	56
101-105	17	103	1	17	17
96-100	15	98	0	0	0
91-95	12	93	-1	-12	12
86-90	8	88	-2	-16	32
81-85	4	83	-3	-12	36
76-80	5	78	-4	-20	80

71-75	2	73	-5	-10	50

129∑fx`=171 ∑fx`^{2}=1049

Computation of mean

Mean= $AM + \left(\frac{\sum fx`}{N}\right) \times i$

=104.625

Computation of SD

SD= $\left\{\sqrt{\frac{\sum fx^2}{N} - \left(\frac{\sum fx}{N}\right)^2}\right\} x$ i

=12.62

Table No.4.12: Frequency Distribution Table of Raw Scorers of metacognitive awareness level of Government secondary students of North Lakhimpur district of Assam.

C.I	**F**	**X**	**X'**	**FX'**	**Fx`$^2$`**
115-119	6	117	4	24	96
110-114	35	112	3	105	315
105-109	22	107	2	44	88
100-104	21	102	1	21	21
95-99	6	97	0	0	0
90-94	9	92	-1	-9	9
85-89	3	87	-2	-6	12
80-84	1	82	-3	-3	9
75-79	2	77	-4	-8	32

105 ∑fx`=168 ∑fx`^{2}=582

Computation of mean

Mean= $AM + \left(\frac{\sum fx`}{N}\right) \times i$

=8.634

Computation of SD

SD= $\left\{\sqrt{\frac{\sum fx^2}{N} - \left(\frac{\sum fx}{N}\right)^2}\right\} \times i$ =105

Computation of SE_D

SE= $\sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}}$

=1.3939

Computation of "t" value

t= $\frac{M_{1-M_2}}{SE_d}$

=0.269

Where,

$d_f = N_1 + N_2 - 2$

=232

The table value of "t" with d_f(232)-

At 0.05 level of significance = 1.97

At 0.01 level of significance=2.60

Table No.4.13: Summary of comparison Between Metacognitive Awareness Level of Management (Privateand Government) of Secondary Level Students of North Lakhimpur District of Assam.

Groups	N	Mean Scores	SD	SE_D	t-value
Private	129	104.625	12.62	1.3939	0.269
Government	105	105	8.634		

Interpretation:
The above table 4.13 reveal that computed t-value come out to be 0.269 which is less than the criterion t-value (1.97) at 0.05 level of confidence. But calculated t - value (2.60) is greater at 0.01 level of confidence for df 232.The calculated t-value (0.269) is not significant at 0.05 level but at 0.01 level, the calculated t-value (0.269) is significant.
Therefore, the formulated hypothesis "There is no significant difference between the level of metacognition awareness among the secondary level students of North Lakhimpur district of Assam in relation to Management" get rejected at 0.01 level but it is accepted at 0.05 level of confidence. Also, the computation signifies that the Private Secondary school(M-129) Perform better than the Government secondary students(M-105) according to their respective mean scores which have shown in the above table no.4.1

FINDINGS

1. There is a significant difference in the level of metacognition awareness among the secondary level students of North Lakhimpur district of Assam in relation to gender

2. There is significant difference in the level of metacognitive awareness among secondary level students of Urban government and Rural government of North Lakhimpur district of Assam

3.There is significant difference in the level of metacognitive awareness among secondary level students of Urban Private and Rural Private of North Lakhimpur district of Assam

4. There is no significant difference between the level of metacognition awareness among the secondary level students of North Lakhimpur district of Assam in relation to Management" get rejected at 0.01 level but it is accepted at 0.05 level of confidence

5.0 SUMMARY AND CONCLUSION

North Lakhimpur is one of the districts of Assam. The name Lakhimpur is believed to be originated from the word Lakshmi, the goddess of prosperity. Agriculture and paddy are the district's primary economic drivers. Paddy is regarded locally as Lakhimi. The word "Pur" means full Lakhimpur therefore means full of paddy or the place where paddies are grown abundantly. As per Lakhimpur District Gazette (1976:4) the district was notified as Lakhimpur district through a proclamation issued by the Governor general on July 1839. On 2ndOctober 1971 the district was reorganized with two sub division viz Dhemaji and North Lakhimpur. Later it was again reorganized in the year 1989 with two subdivisions viz Dhakhuakhana and North Lakhimpur leaving Dhemaji as separate district. The district was earlier regarded as koliapani because there was practically no road communication to this district till 1950. In the year 1954 the temporary aerodrome was started Lakhimpur is an administrative district in the state of Assam. The district headquarter is located at North Lakhimpur. The district is bounded on the North by Siang and papumpare district of Arunachal Pradesh and on the East by Dhemaji

and Subansiri River.Majuli District stands on the Southern side and Biswanath district is on the West. The people of different Assamese tribes, sub –tribes, non-assamese and many others are dwelling in this district which makes it most suitable for the study.

School Education in Assam follows uniform structure of 10+2 system. The primary stage of schooling consists of standard I to V. The middle stage from standard VI to VII and the secondary stage from standard IX to X and class XI and XII falls under the higher secondary education stage.

Secondary stage is the important stage as after this stage higher secondary stage comes so in secondary stage development of metacognitive awareness is an essential thing. Some individuals are unaware about their own thinking processes such individual cannot explain the strategies they used while solving problem. Teachers should know the individual difference among students in the level of metacognitive awareness in a classroom and give instruction according to the individual difference so that every student can enhance well and can develop in an effective manner. Metacognitive awareness should reflect in the thinking of secondary stage of learning as after the secondary stage students have to face the real world so for this every student should must have the ability to take their own decision and their thinking should be high and it should be practical. The secondary education is the main education as after this the students have to faces real word. The above study reveals that there is significant difference between the metacognitive awareness of secondary level male and female students. Secondary level female is having the higher level of metacognitive awareness. Also, rural secondary students are having higher level of metacognitive awareness. It could be understood from finding that significant relationship is existed between metacognitive awareness among secondary level of students. In this 21st century world is changing very rapidly the main work of the teachers and parents is to develop skills which is beneficial for them and that skill will not become obsolete. Metacognitive awareness is very much needed in this 21st century as it helps the students to take their own decision and also their thinking process will become high and they can easily cooperate with this changing world. Metacognitive awareness fosters the development of good thinkers who are successful problem solves and lifelong learners. Teachers should develop some project where students have to find their solution in this way the students can identify their own strength and strategies and also help the student to remain their study for long period of time.

5.1 EDUCATIONAL IMPLICATION OF THE STUDY:

1. The study would helpful for the secondary level students **in** understanding the importance of metacognitive awareness.

2. The study would help the teachers to identify the appropriate teaching method and techniques in developing metacognitive awareness which is suitable for secondary students.

3.The study would help the students to know their own weakness and strength and also develops their thinking capabilities and make them independent in thinking process at the present time.

4. The study would help the school authorities to know about the importance of metacognitive skills in the academic performance of the students.

5.The study would help the education department and school administration in adopting teacher rationalization procedure so that there should not be difference in level of awareness in

metacognitive skill of rural and urban learners as it has been seen that there are differences in the level of awareness in metacognitive skill of rural and urban learners.

6. The study would help the teacher to know the individual difference in the level of metacognitive awareness in a classroom and should be given instruction according to the individual difference.

7. As per as major finding of this study it has been observed that the female has high level of metacognitive awareness than males' learners, rural students' performance is high in the level of metacognitive awareness than urban students, private students have high level of metacognitive awareness than government students. This will help the teachers and authorities to take the matter in a serious way. Educational administration and teachers should find out the remedies for improving the level of metacognitive awareness of male students. Educational administration should organize learning by doing method so that the metacognitive skills can be develop among urban students also. Teachers of government school should give more attention towards students and according to the individual difference teachers should provide various activities which help the students to think in a deep way and that activity should be related to develop the awareness skill of metacognitive.

5.2 SUGGESTION FOR FUTURE STUDY

The following are the suggestion for future study:

1. The study can be conducted in others part of Assam to check the level of metacognitive awareness among school going students.
2. The study can be conducted by comparing the metacognitive awareness of primary and secondary school going students.
3. The study can be conducted on special students and see how their metacognitive strategies on academic achievement.
4. The study can be conducted in problem solving style of students.
5. The study can also be conducted in B.ED trainees regarding their learning strategies.
6. The study can be conducted in the level of metacognitive thinking of rural adolescents.
7. The study can be conducted on metacognitive skills in developing critical thinking.

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