

Study On Problems Of Critical Thinking Ability In The Subject History Among Class Ix Students Of Dharapur Higher Secondary School

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Abstract

As we know critical thinking can inspire the students to become a problem solvers but sometimes it was seen that subject like history students used to opt for rote learning. This method of learning suppress their way of creative writing and their own presentation on answer script. So the study conducted in this paper is to examine the problems of critical thinking in history subject that is lacking among the students of 9th standard of Dharapur High School. In this study the researcher had used 34 samples and various methods like questionnaire, observation, interview for collecting data. After finding the result based on objectives and hypotheses the researcher in conclusion put some suggestions to bridge the gap on dearth of critical thinking and rote learning.

Keywords: problem, dearth, critical thinking, history

INTRODUCTION

Critical thinking is a necessary skill to all students to develop the fullest understanding of various information. According to the study made in 2008 by Quitadamo, Faiola, Johnson, & Kurtz, Students that fail to develop critical thinking skills suffer with lower academic grades. Understanding the connection between the information presented and the information already acquired develop the thinking ability of the students. Critical thinking skills are a necessary in the classroom to bring about higher-level cognitive thinking.

Critical thinking is not a new topic with which sociologists and educationists suddenly became aware of. It has a long history both in the Western and Eastern worlds as an integral part of education. For ancient Greeks, improving the intellect was the prime aim of education. Socratic dialogue (questioning) was adopted as the major method of teaching. Eastern and Indian history in particular has evidences of teaching critical and logical thinking in the 5th and 4th century BC itself.

Critical thinking is the ability to use cognitive skills to understand, to learn and to judge. Walker (2003) breaks down critical thinking into four different, yet equally similar definitions:

(1) Purposeful thinking in which individuals systematically and habitually impose criteria and intellectual standards upon their thought. (2) A composition of skills and attitudes that involve the ability to recognize the existence of problems and to support the truthfulness of the problems. (3) The propensity and sill to engage in an activity with reflective skepticism. (4) The process of purposeful, self-regulatory judgment.

Definition of the Key words:

Problem: a matter or situation regarded as unwelcome or harmful and needing to be dealt with and overcome.

Dearth: a scarcity or lack of something.

Critical thinking: the objectives analysis and evaluation of an issue in order to form a judgement.

History: a field to study the past of every event connected with present and future.

Delimitation of the Study:

- **1.** The study is restricted to Kamrup (M) district of Assam.
- **2.** The study is confined to class IX students of Dharapur Higher Secondary School.
- **3.** The study is restricted to secondary section of educational level.
- **4.** The study is confined to the problem of critical thinking process among class IX students.

Research Question

The research question that the researcher has investigated in this study is "study on problems of critical thinking ability in the subject history among class IX students of Dharapur Higher Secondary School, Dharapur."

RATIONAL OR SIGNIFICANCE OF THE STUDY:

As history is the queen of Social Science or other subject, therefore it is gaining worthful in day-to-day life. To know the matrix of social forces, movements and events we need to be in the midst of all which in turn we live in a friendly relationship.

Thus, History help to make aware about the great person born on earth who have spread the message of love, charity, justice among the people. Through the medium of History one can learn and emphasized on unity of ideas, cultures and peaceful co-existence. So, History is the subject where one can analyze and evaluate the pros and con of the facts and events critically.

Many students are bound or confined to their thinking ability within the bookish knowledge only. They are not able to think the content critically. As we know learning without thought is labor lost, so one should be critical in their thinking process. Thinking skills are viewed to be crucial part of education to make education relevant to the rapidly changing world.

It can be seen that History is a subject that has been disparaged because students merely memorize the bookish information or historical without critically examining the subject matter. The goal of education is to achieve enduring understanding and gain meaningful understanding of history not just to memorize regurgitate memorized facts.

The mere traditional lecture by the teacher only cover the syllabus of the subject which make students cripple. To make students mind nimble critical thinking should be encouraged and developed while teaching History in the class-room. This will help the students to think for themselves and examine multiple perspectives. Not only students, developing the thinking process will also help the teacher to adopt with various method of teaching that will broaden their teaching style.

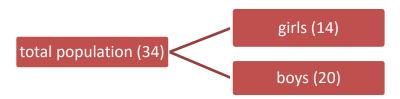
If students starts thinking critically it will bridge the lacuna between rote learning and creative learning. The school should give adequate training to the students so that after schooling the students become the productive thinker of the society and it will accolade the school with honor.

DESCRIPTION OF POPULATION AND SAMPLE:

In this study, the researcher employed non-probability sampling method for selecting appropriate sample from the defined population. Under this sampling method the researcher choose purposive sampling method. In this method, while selecting the sample, the researcher only thinks where he will get the required data to serve his purpose. This is the most useful method since data review and analysis are done in conjunction with data collection.

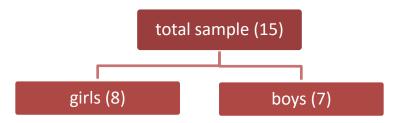
Population of the study:

This research study involved class IX students of Dharapur Higher Secondary School, Dharapur. The population of this study constituted the total number of students i.e. 34 in a single section. Out of which 14 are girls and 20 are boys of 14⁺ years.



Sample of the study :

For this present study 15 samples were taken from the selected population of Dharapur Higher Secondary School of Kamrup District. Among them 7 were boys and 8 were girls.



TOOLS OF DATA COLLECTION:

The selection or construction of the tool is the vital part in the research study. The instrument through which the researcher collect data and conduct the research work is called tool. The selection of the tools depend upon the nature of the selected problem. Based on the problem the researcher can use a wide range of tools for collecting data but it may be advisable to limit this to a manageable number. In this study the researcher has used the following tools for collecting and organizing data needed for the study. They are as follows –

- a) Observation (Test, Oral etc)
- b) Questionnaire
- c) Interview

PROCEDURE OF DATA COLLECTION

In this research study, the following tools are used to gather the necessary data:

- Observation
- Questionnaire
- Interview

In this present study, the investigator had visited the school after seeking proper permission from the Principal of the school to collect the necessary data from the students through observation, questionnaire and photograph. After selecting the sample from class IX in the particular school, i.e., Dharapur Higher Secondary School. The investigator created calm atmosphere and tried to put as at ease as possible. The students were instructed to ready with writing materials. While gathering the data, the investigator has made the best effort to make the students understand about the questions to collect reliable, valid and accurate data.

Before developing the questionnaire, the researcher observed the students interest and thinking level during their classroom environment. After that the researcher prepared a questionnaire for conducting a study on the topic among the students of class IX of the school. The researcher tried to motivate the students towards the subject matter and request them to co-operate. The researcher explains about the reason behind the research work to the students. The questionnaire were distributed among the students. The researcher gives instructions to the sample students about how to fill up the questionnaire.

The questionnaire consists of list of questions related to psychological, social, and educational topic and photograph shows the students writing style and composing of answer. These help the recharge to find out the students critical thinking ability.

In this research study, the researcher carried out an interactional session with the concerned students to determine the causes of the problem dearth of critical thinking ability in the subject History. A questionnaire was given to the students to be filled up.

ANALYSIS AND INTERPRETATION OF DATA

Analysis of data is a process of inspecting, cleansing, transforming and modelling data with the goal of discovering useful information, suggesting conclusion and supporting decision making. In the beginning of this action research study, a pre-test regarding the dearth of critical thinking ability on the subject history was administered to the students of class IX. The questionnaire containing 10 items were distributed among the students of class IX. The data collected from the samples were analysed and interpreted. Observation was also made to understand students' interest and their memory level. After analysing, the collected data were classified, tabulated and checked under the main objectives of this action research study. The results of data collection and analysis and findings in relation to this study are represented with the help of tables, pie chart and bar diagrams.

TABLE NO.1: General Information about the Students of Class IX of Dharapur Higher Secondary School

No. Total		Percentage		No. of Sample		Percentage	
Students							
34		M=	F= 41.2	15		44.1	
M-20	F-14	58.9		M= 7	F=8	M=	F= 53.3
						46.7	

The above table shows that the investigator has selected class IX students for the study. The total no. of students in the class are 34 out of which girls student are 14 (41.2%) and boys student 20 (58.8%). The investigator took 15 students as sample of the study out of which 9 were girls student and 6 were boy student.

ANALYSIS RELATED TO FIRST OBJECTIVES AND FIRST HYPOTHESIS:

Considering the first objectives the researcher formulated the first hypothesis.

H₁**:** It is assumed that there are various causes after the lacuna of critical thinking on the subject history among class IX students.

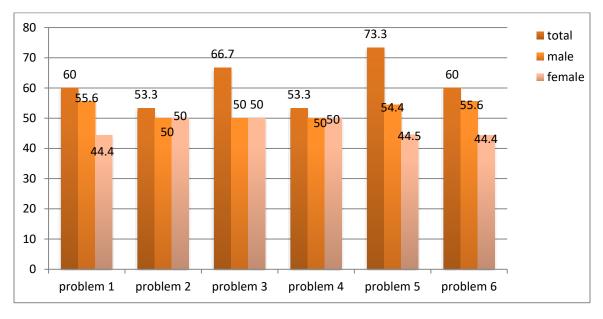
The causes behind the first hypothesis are explained in the following table:

Sl. No.	Causes	Total	Boys (%)	Girls
		percentage		(%)
1	Lack of interest and attention	60%	33.3%	26.6%
2	Problem of understanding	53.3%	50%	50%
3	Confined to bookish knowledge	66.7%	50%	50%
4	Lack of analyzing and evaluating	73.3%	54.4%	44.5%
	the questions			
5	Unawareness about historical fact	53.3%	50%	50%
6	Lack of composing answer of their	60%	33.3%	26.6%
	own			

TABLE NO.2: Issues/Problems behind the Dearth of Critical Thinking Ability

The above table shows various issues/problems which are responsible for the dearth of critical thinking ability. The table shows the total percentage of students both girls and boys, who have difficulty in respective issues.

Fig1: Column Chart Showing the Issues/Problems Related to the Lack of Critical Thinking Ability



A graph is plotted between the problems and the no. of students of class IX.

In the above graph, it can be observed that among all the problems behind the dearth of critical thinking ability, problem3- confined to bookish knowledge and problem5- lack of awareness about the historical fact was quite high among the students. The percentage of both the problem seemed to be 66.7% and 73.3%. The problem lack of understanding i.e. problem2 and problem4 lack of analyzing and evaluating questions is seemed to be same i.e. 53.3%. Problem6- lack of framing answer of their own seemed to 60% and problem1- lack of interest and attention towards history is seemed to be 60%. So both the problem have same level of percentage.

Thus, from the graphical representation it can be examined the percentage of problem among girls is less than the boys. The observation of the graph reveals that Hypothesis1 has been accepted as there were various causes behind the dearth of critical thinking ability among class IX students.

ANALYSIS RELATED TO THE SECOND OBJECTIVES AND SECOND HYPOTHESIS

According to the second objectives the researcher formulated the second hypothesis

H₂: It is assumed that students will develop the ability of critical thinking to enhance their writing skill.

After analyzing the data obtained from table no. 1 the researcher adopted remedial measures and other interventions enabling the students to see overall structure of information, understanding, awareness and other elements that make up the whole problem.

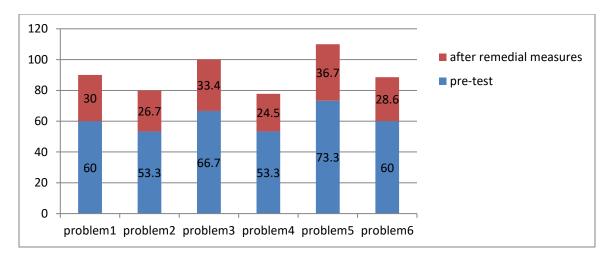
From table 2 and fig 1 it is observed that, there were various causes which bring dearth in critical thinking ability among the students. After implementing necessary remedial measures, the significant progress of the students can be seen in all areas. The remedial measures were implemented after conducting the pre-test and this help the students to learn about the tips and techniques of learning and reading the subject history. The students were able to think critically while framing their answer.

Sl. No.	Problems	Pre-test Results	After applying remedial measures
1	Lack of Interest and attention	60%	30%
2	Lack of understanding	53.3%	26.7%
3	Confined to bookish knowledge	66.7%	33.4%
4	Lack of analyzing and evaluating the question	53.3%	24.5%
5	Lack of awareness about historical fact	73.3%	36.7%
6	Lack of framing answer of their own	60%	28.6%

Table No. 3: Performance of the Students after Applying Remedial Measures

The data shown is table no.3 is graphically represented below:

Fig 2 Showing performance of the students after applying remedial measure



In the above fig2 and table no.3 the overall performance of the students in the subject history is shown. Here the score of the students in pre-test and after applying remedial measures were shown. The improvement of students after giving them remedial measures were detected by observing their writing style and responses.

The above graphical representation showed that earlier 73.3% of students unaware about the historical facts and after provide them remedial measures it reduces to 36.7%. Hence 36.6% of students aware about the various historical facts that gave a positive sign. Again 66.7% of students confined to the bookish knowledge and information but after guiding them it reduced to 33.4% i.e. 33.3% of students begun to follow other materials on history.

Similarly, the percentage was reduced after applying the remedial measures. Thus the observation of the graph showed that hypothesis2 has been accepted i.e. students will develop the ability of critical thinking and enhance their writing skill.

ANALYSIS RELATED TO THE THIRD OBJECTIVES AND THIRD HYPOTHESIS

Considering the third objectives the researcher formulated the third hypothesis

H₃**:** It is assumed that students will acquire the knowledge on various skills to be able to think critically.

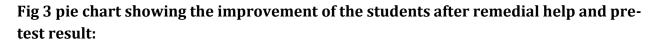
Pre-test results showed that the students perform very poor in the subject history. After providing remedial measures to them, they started thinking critically about the facts and analyzed and evaluate the question. They learn about various skills on critical thinking and applied them while composing an answer. These improvements of the students were detected through observation and by questionnaire. Post-test results showed that students understand the historical facts and the need of critical thinking ability while composing an answer. The analysis is shown below:

TABLE NO.4

PRE-TEST RESULTS	AFTER APPLYING REMEDEIAL	
	MEASURES	
66.7 % (M-50%, F- 50%) and 73.3% (M-	33.4% and 36.7% i.e. 35.1% students were	
54.4%, F- 42.8%) i.e. 70% of students are	still followed bookish information and	
confined to the bookish information which	unaware about the different facts after	
make them unaware about the other	applying remedial measures. 64.9%	
historical facts. 30% students are with	students improve their habits of following	
fewer difficulties and aware about the	other books and make themselves aware	
various historical facts.	about the other facts in history.	

The above table no.4 showed that after providing remedial measures, students were able to gathered information from other learning materials and developed awareness towards different facts in history. It also shows that students developed interest on studying the subject history.

The above mentioned data were graphically represented below:



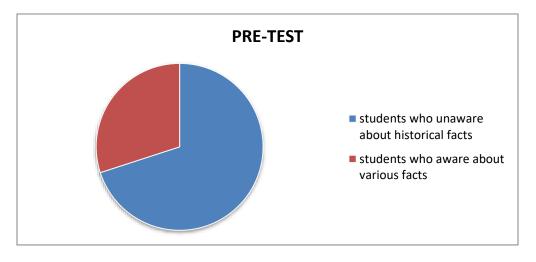
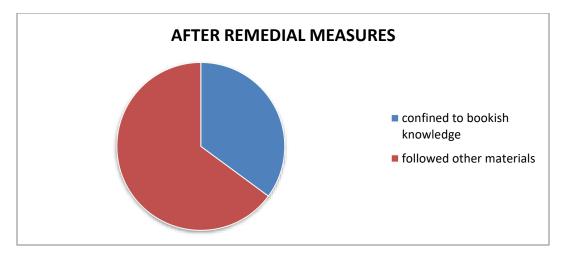


Fig 3.1



COMPARISION BETWEEN PRE-TEST AND POST-TEST:

In the beginning of the study, a pre-test on critical thinking ability in the subject history was conducted among the students of class IX. The record of their writings and responses were examined by the researcher which help to the researcher to know about various difficulties or causes that bring lacuna in thinking ability of the students.

Considering the table no. 2 and fig1 used in previous chapter, the pre-test result showed that students have below average and poor critical thinking level in the subject history. The following is the result of students' performance which showed their abilities of thinking:

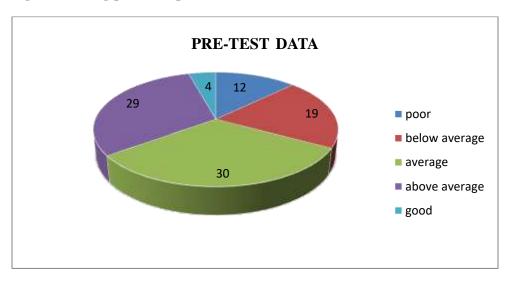


Fig 5 showing pre-test performance of the students:

However, after providing them remedial measures, the score of the students seemed to be improved. Here, students' progression gave positive sign to the study. The following data showed the improvement in critical thinking represented by pie-chart:

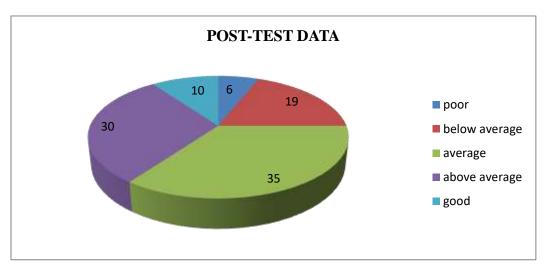


Fig 6 shows post-test performance of the students

In the above pie-chart 24% students are rated as above average and35% is rated as average students which shows a tremendous changes. 10% students are still rated as poor and 19% of students are below average. 12% of students are rated as good as they don't have any difficulties in their thinking level.

Post-test scores reveals that, students understand the subject history and begin to think critically all the presented facts before them. They also learn about various skills related to critical thinking and showing their logical thinking ability by analyzing and evaluating the facts.

FINDING OF THE RESULT:

In this research the study dealt with the issues "problem of critical thinking ability" among class IX students of secondary level. The goal of this study is related to develop the high level of thinking ability of the students that will effect on their academic field. The following are the findings of the result in the present study:

• The study employed to identify the main reasons behind the problem in lacuna of critical thinking ability in the subject history. It can be observed that among all the problems behind the dearth of critical thinking ability, problem3- confined to bookish knowledge and problem5- lack of awareness about the historical fact was quite high

among the students. The percentage of both the problem seemed to be 60% and 73.3%. The problem lack of understanding i.e. problem2 and problem4 lack of analyzing and evaluating the question is seemed to be same i.e. 53.3%. Problem6-lack of framing answer of their own and problem1-lack of interest and attention towards history have same level of percentage i.e. 60%. Therefore, the alternative hypothesis is accepted, in other words, there are various causes behind the dearth of critical thinking ability.

- It is observed that, there were various causes which bring dearth in critical thinking ability among the students. After implementing necessary remedial measures, the significant progress of the students can be seen in all areas. Earlier 73.3% students were unaware about the historical facts and after providing them remedial measures it reduces to 36.7%. Hence 36.6% students aware about the various historical facts that gave a positive sign. Again 64.7% students confined to the bookish knowledge and information but after guiding them it reduced to 32.3% i.e. 32.4% students begun to follow other materials on history. Gradually, all the causes related to the problem were reduced after applying remedial measures. Therefore, the alternative hypothesis is accepted i.e. the students able to develop their critical thinking ability and enhance their writing skill.
- 66.7 % (M-50%, F- 50%) and 73.3% (M-54.4%, F- 44.5%) i.e. 70% of students are confined to the bookish information which make them unaware about the other historical facts. 30% students are with fewer difficulties and aware about the various historical facts. 33.4% and 36.7% i.e. 35.1% students were still followed bookish information and unaware about the different facts after applying remedial measures. 64.9% students improve their habits of following other books and make themselves aware about the other facts in history. The alternative hypothesis is accepted i.e. students will acquire various knowledge on critical thinking skills by broadening their knowledge. After providing remedial measures to them, they started thinking critically about the facts and analyzed and evaluate the question.

SUGGESTIONS AND RECOMMENDATIONS:

There are some limitations in the study as already mentioned and following those limitations there are certain suggestions for further study.

SUGGESTIONS:

- 1. Students should read novels or other reference books on history to gathered more information and learn about various facts.
- 2. Student should broaden their knowledge and shouldn't rigid themselves to the bookish knowledge.

- 3. Students should write frequently the essay type answer to develop their creative thinking and enhance their writing style.
- 4. Teacher should provide opportunity for the students to compose answer of their own by assigning them critical questions.
- 5. Teacher should put the question 'why' so that students can analyze and evaluate the question.

Keeping in view the problem of the study, the researcher put certain recommendation 0n the selected subject.

RECOMMENDATIONS:

- 1. The students should be able to understand the necessity of the subject history to know the time, space and past of their life.
- 2. Students should enable to have awareness about the problems of their surroundings.
- 3. The syllabus should include all the types of historical facts i.e. world historical facts, regional facts and local facts so that students can learn various facts of every corner.
- 4. Curriculum should include activity base learning where students can able to prepare model or other aids besides the rote learning in history.
- 5. To develop the intellect of the study, teacher should co-relate the past with present to the today's world during his/her teaching.

CONCLUSION:

"A good writing written in good handwriting is pleasure of its own".

Present study tries to focus the problem on critical thinking ability and the causes after the dearth of critical thinking. This study afforded real insight into the development of critical thinking skills. The research shows that students have various causes for which they are lacking behind the skills to think critically the subject matter. Giving students the opportunity to write answers of their own will develop critical thinking skills almost immediately.

In the final step of action research, the data were interpreted and summarized the findings of the study. After implementation of remedial measures, the students' progress rise positively that brings positive attitude towards the subject history.

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