

## Research Article

### IMPACTS OF E-LEARNING ON STUDENT'S MIND IN HIGH SCHOOL STUDENTS

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#### ABSTRACT

The main goal of this study is how E-Learning impact on students mind. The main purpose of this research was to identify the good and bad factor of E-Learning on students' mind. Researchers used quantitative research method for the study. Higher secondary standard students formed the population and simple random sampling technique used for data collection. The data was collected from 102 students from the XI and XII standards students' of Howrah, district of West Bengal. Few students of them taught by researcher by E-Learning procedure, it helps researchers to study in this matter. The researchers analysed the data and used the statistical techniques of frequency and percentage score to do this research. In this study XI and XII standard (N=102) students of three high schools made up the sample. The study found that E-Learning is a very efficient way of delivering courses online. As it is convenience and flexibility, the resources are available from anywhere and at any time. It was also that students are going to independent means to do their work without others help by E-Learning. It is also concluded that students feel comfort in browsing and surfing internet.

**Keywords:** convenience, E-Learning, flexibility, independent.

#### INTRODUCTION

E-Learning is making, use of digital technology to get admission to instructional curriculum. Web-based learning is commonly referred to as E-Learning or online learning which includes learning through online courses like diploma, degree, certificate those are offered on the internet. Emails, live lectures, you tube, different mobile application software and videoconferencing are all possible through the internet. E-Learning is learning utilizing electronic technology to access educational curriculum outside of a traditional classroom.

The advancement of technology is changing societal expectations dramatically. Educated and uneducated groups often use technology for fun and benefits. It's noted that in education, distinct social media such as YouTube, Face book, What'sapp and Twitter, Telegram etc play an important role. These applications have strongly attracted students and linked them by interactive mode which is very important in education system. In order to make education more interesting, flexible and broader Information and Communication Technology ( ICT ) has opened up a new sky for research on teaching learning methods. Both face to face (classroom teaching) and distance learning effectively use various E-Learning tolls to increase their effectiveness. ELearning is a blend of technology and specially Developed learning materials. The global economy has been profoundly affected by the deadly and infectious Corona Virus disease, also known as Covid-19. The educational system has also been shaken up by this disaster and this fear is expected to echo globally through the education sector. E-Learning is playing very important role in the present education scenario. The COVID-19 has resulted in schools shut all across the world. Globally, over 1.2 billion children are out of the classroom. As a result, education has changed dramatically, with a marked increase in E-Learning taking place remotely and on digital platforms. The study centered on whether technology can be used by educational systems to optimize learning and interest among students. The promotion of education by many Countries around the world By way of E-Learning. It has potential to

Change the whole education system and due to this very reason. It has become one of the most preferred subject for the researcher research work on E-Learning.

#### Objectives of the study

E-Learning has the same aims as formal learning. In eearning, too, the most common taxonomy of cognitive educational goals in face-to-face learning could be applied. This taxonomy includes as educational objectives the sequence Knowledge – Comprehension – Application - Analysis – Synthesis – Evaluation (Bloom, Engel hart, Furst, Hill & Krathwogl, 1956, pp. 201-207). Depending on our data, collected from higher secondary school we try to find the awareness of eLearning among said students. The objectives of the proposed study are :

- Find the Strengthen the standard of teaching and learning in E-Learning.
- Find the positive or negative impact to their mind.
- Improving effectiveness and performance of high school students.
- To find any difference between different stream students.
- To find out computer usage attributes among the student in relation to stream of studies.

#### Delimitations of the study

- This study was delimited to XI and XII standard of higher secondary school Howrah District of West Bengal. .
- Students from only three schools in the Howrah District of West Bengal were exposed.
- This study also confine to the specific area of E-Learning.
- Size of the sample was delimited to 102.
- The study was done among girls and boys students.
- The data is collected from different streams (Arts, Commerce, and Science) of students.
- The data is collected from only school of West Bengal under WBCHSE.

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## RESEARCH METHODS

The research investigates the impact of E-Learning on the interest and learning of students at higher secondary level. For the present analysis, the researchers used the quantitative approach. The population included all the higher secondary students of Howrah district under WBCHSE Board of west Bengal. The respondent's basic random sampling technique was used for data collection. Researchers picked 102 higher secondary students from the school during the process of sample collection. A questionnaire that is used as a data collection analysis tool. On the 3 Likert scale, the questionnaire was built from agreement to disagreement and comprised. The questionnaire was distributed among students and 102 students gathered data. The raw data collected was analyzed and the frequency and percentage score statistical techniques used were most commonly used. The aforementioned statistical approach is sufficient to achieve the purpose of the analysis. The studies for this project were conducted in Howrah sub division at Howrah, West Bengal.

### Population of the study

In the present study the target population is the XI and XII standard students of WBCHSE schools in Howrah district. The data has been collected from these school:

- Hemmnagar Hemchandra Smriti Vidyamandir (H.S)
- Sankrail Abhoy charan High school (H.S)
- Kona high school (H.S) of Howrah District of West Bengal.

### Sample of the study

In this present investigation the sample of the study consisted of 102 students. The distribution of sample given below

Table 1. Distribution of Sample

Groups	No. of students	Category stream				
		Girls	Boys	science	arts	commerce
XI	46	20	26	6	22	18
XII	56	26	30	8	24	24
Total	102	102		102		

**Research Design:** Design procedure is given below.

### Selection of data

The investigate explores the affect of E-Learning on the intrigued and learning of understudies at higher auxiliary level. Those understudies

Table No. – 2.1: ( Positive Impact on E-learning)

S.No	Questions regarding Advantages of E-Learning	Agree		Disagree		Neither Agree nor Disagree	
		Nos	%	Nos	%	Nos	%
1	E-Learning provides time flexibility	80	78%	20	20%	2	2%
2	E-Learning makes me able to get to worldwide data.	95	93%	07	7%	0	0%
3	E-Learning experiences help me engage actively in my learning	91	89%	11	11%	0	0%

majoring in financial matters and commerce are required to select in insights and quantitative-based inquire about strategy courses for degree completion. Insights get ready these understudies to get it and utilize factual information through the application of descriptive statistical concepts in their particular areas. The course covers a spread of techniques applicable to the presentation, interpretation and use of knowledge through the stress on inferential statistics with Estimation. Inferential statistics are followed by simple rectilinear regression topics, which have a stress on the utilization of Microsoft Excel for analysis and presentation. The study method used for the "Development of Digital Based Learning and Its Impact on Students" research work. . Researchers picked 102 higher secondary students from the school in Howrah during the process of sample collection. Due to the rapid growth of internet technology, digital based learning has become an increasingly common learning method in educational institutions. E-Learning is a term used to describe online education and training focused on the internet. The researcher wants to learn from this research about the growth of E-Learning and its effect on school education. The researchers have reviewed some previous papers, academic work and books on this subject for this report.

### Making Questionnaire

Researcher set a bunch of question on Impact of E-Learning. And question is written very simple language as is easy to understand for every learner. 20 MCQ questions with different dimension consisted of four groups ( XI- Boys, XI-Girls, XII- Boys, XII-Girls).

### Criticism of Data:

Having collected adequate information, the analyst plans a draft layout of the report. At this arrange, the analyst organizes information beneath diverse headings and tries to delineate a all-encompassing picture of the issue. In this investigate work, I too scrutinize the information in hand to see in case the information collected are sufficient for the investigate work or in the event that there's require for more information.

## ANALYSIS AND RESULTS

In this part, the capture data from the qualitative and quantitative research is presented, analyzed, described and interpreted in systematic manner, as the next step of the research process. The documentation and analysis process aimed to present data in an intelligible interpretable form in order to identify the positive and negative impact of E-Learning on students. A set of questionnaire was prepared to measure the mindset and attitude of student on E-Learning. The questionnaire was distributed among the 102 students. The students were selected randomly. This random selection was done only due to the convenience of research work.

4	E-Learning tools enhance our learning	93	91%	5	5%	4	4%
5	Teacher responded promptly to my requests	75	74%	25	25%	2	2%
6	The input given by the teaches was valuable	85	83%	13	13%	4	4%
7	You have no difficulties using online material	87	85%	9	9%	6	6%
8	Instructor reacted expeditiously to my demands	83	81%	11	11%	8	8%
9	Learning from own home	99	97%	02	02%	1	1%
10	Freedom in choosing teaching materials	85	83%	12	12%	5	5%
11	Teachers distribute learning material through WhatsApp , is it sufficient	86	84%	13	13%	2	2%
12	Assignments were marked promptly	72	71%	15	15%	15	15%
13	I feel comfortable when using internet	90	88%	7	7%	5	5%
14	E-Learning motivates me to do my own work without others help	84	82%	14	14%	4	4%
15	Students are enjoying E-Learning	91	89%	9	9%	2	2%
16	Online material are sufficient	83	81%	15	15%	4	4%

**Interpretation:** By observing the Table no 2.1 , The researcher can come to point that 78% students are felling flexibility in timing for E-Learning, Where 20% of students disagree. 93% students were agree that they can access global data where only 7% students are disagree . 89% students admit that they are engaged actively in there learning where 11% students disagree in this point. 97% students admitted that they can enjoy can learn from home. 81% students are happy regarding online material where 15 % unhappy and 4% students do not reply. 88% students were felling comfortable by using internet where only 7% students were feeling uncomfortable by using internet. So on the above table researcher found positive activity in E-Learning.

**Table No. – 2.2 : ( Negative Impact on E-learning)**

Questions regarding Disadvantages of E-learning							
Sl. no	Questions regarding Advantages of E-Learning	Agree in nos	Agree in %	Disagree in nos	Disagree in %	Neither Agree nor Disagree in nos	Neither Agree nor Disagree in %
1	Working long hours on the computer can be harmful	34	33%	65	64%	3	3%
2	Facing problem due to poor internet	45	44%	45	44%	12	12%
3	You feel Loneliness	50	49%	45	44%	7	7%
4	No direct communication with teachers	50	49%	45	44%	7	7%

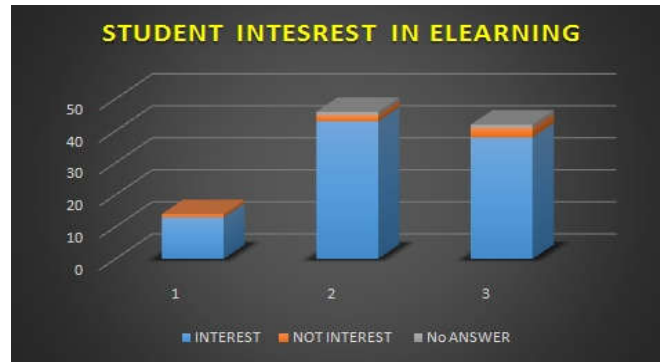
**Interpretation:** By observing the **Table No 2.2** , The researcher can come to point that 33% students are felling harmful for Working long hours on the computer, where 64% students were disagreed. 44% students were facing problem by using internet. 50% students were felling loneliness by E-Learning where 44 % students does not felling loneliness. Among the 49% students were felling unhappy due to non-interaction to teachers. So on the above table researcher found excessive use can negatively impact the physical, mental, emotional and social development of school goers.

**Table 3. Interest in E-Learning**

Student interest in E-Learning			
Stream	science	arts	commerce
INTEREST	13	43	38
NOT INTEREST	1	2	3
No ANSWER	0	1	1
TOTAL	14	46	42

**Interpretation:** In the above table:3 the researcher found that 93%students are interest in E-Learning. And93% arts,90% commerce students are interested in E-Learning. Total 92% percentage of student's interest to learn by internet and 6%not like to learn by E-Learning. And2% Students does not reply in this matter.

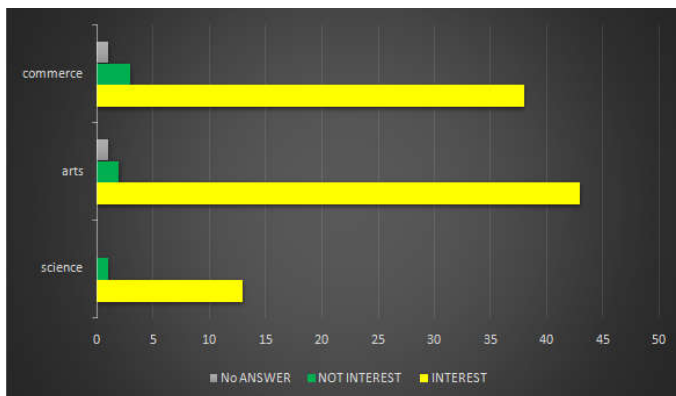
Chart no-1 (STUDENT INTEREST IN E-LEARNING)



- 1. stands for science
- 2. stands for arts
- 3. stand for commerce

**Interpretation:** In this study we found majority of students interest in E-Learning, are more likely to show positive mind in web based learning. Students were agreed that they were enjoying E-Learning.

Chart no-2 (STREAM\_WISE ANALYSIS CHART OF XI AND XII)



**Interpretation:** Here by this analysis we cannot find any major difference between stream wise students in E-Learning. All over ratio almost same. The researcher found that 93% students are interest in E-Learning. And 93% arts, 90% commerce students are interested in E-Learning.

**Psychological negative impact to student:**

We asked to students some psychological question to check their behavioral. A child who spends too much time in virtual worlds is less likely to have effective social skills to interact in the real world simply from lack of practice. Excessive use can negatively impact the physical, mental, emotional and social development of school goers.

Chart 4. Gender wise analysis

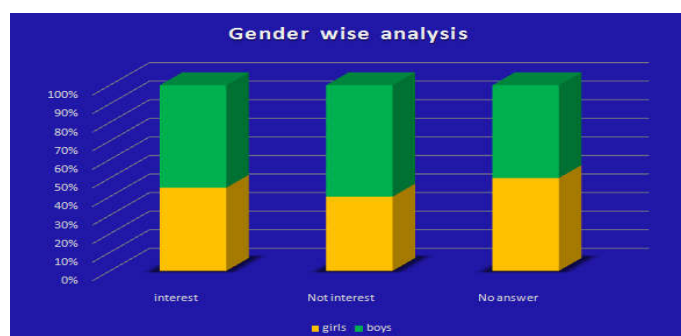
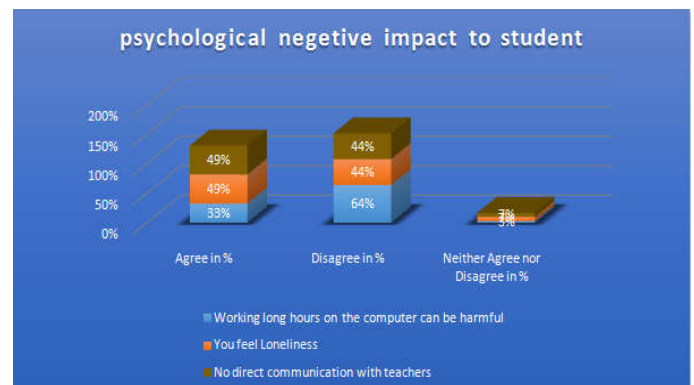


Chart 3. Psychological negative impact to student



**Gender wise analysis to student**

Table 4. Gender wise analysis

Interest/ Not Interest	Girls	Boys
interest	43	53
Not interest	2	3
No answer	1	1

**Interpretation:** The research found that there is no significance difference between boys and girls. Among the 93% girls and 95% boys students are interested in E-Learning. Only 2% students from both side does not reply.

**Interpretation:** The research found that there is no significance difference between boys and girls in E-Learning. Boys and girls must feel welcome in a safe and secure E-Learning environment. Students both boys and girls are more likely to show positive mind in web based learning.

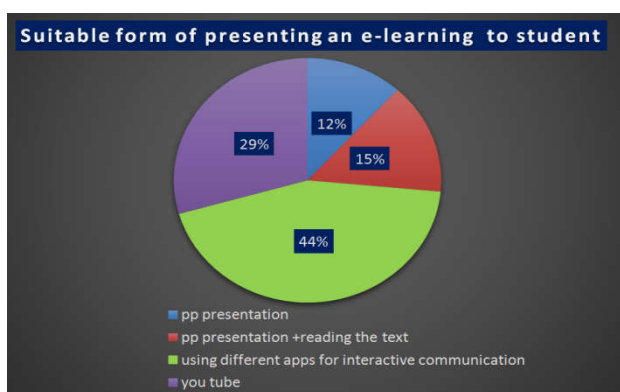
## Different media wise analysis to student

Table 5. Presentation of E-Learning

Sl no	Presentation form	Number of students
1	pp presentation	12
2	pp presentation +reading the text	15
3	using different apps for interactive communication	45
4	you tube	30
	Total	102

**Interpretation:** In the above table (Table no 5), We found majority of the students like this E-Learning by using different interactive communication app(like Zoom, Google meet etc). And 29% students love to use YouTube through which they can learn with their flexibility time and also they can reuse it.

Chart 5. Presenting an e-learning by different types of popular media



## FINDINGS

Findings of the study are in the following:

- The study found that students (78%) responded that E-Learning provides time flexibility to the students for their studies.
- E-Learning helps to students to get the global data and agree 93% students.
- 89% students agree that they actively engage to their study in E-Learning
- E-Learning Tools like you tube, different websites etc enhanced their learning system and 91% agree in this matter.
- 25% students unhappy regarding teachers responding through E-Learning.
- Only 9% students facing difficulty to access online materials.
- 99% students happy to learn from home.
- Assignments are marks properly and promptly told 71% students.
- Also students are motivating by E-Learning and agree 82% students.
- Overall 89% students are happy and enjoying by E-Learning.
- Also we found there is no gender discrimination regarding in E-Learning.

distance mode little bit disappoint to students. Major discoveries beneath this consider with the objective of finding out how web based instruction can spur understudy learning.

In conclusion we can say that.

- The fundamental components of an instruction framework learner and teachers both are profited from the net innovation by E-Learning.

- The study found 49% students felling Loneliness by E-Learning.
- Poor internet facility is also one of the issue for E-Learning and 44% students admit it.
- Also we found there is no stream (arts, science, and commerce) discrimination regarding in E-Learning.
- Different Multimedia technology is used to prepare attractive study material for different level of learners.
- It is fact that in this pandemic situation of COVID- 19, studying can now be found out on-line and information may be transferred honestly the use of more than one equipment on digitalization system.

## DISCUSSION

In this study there is a prime objective to identify E-Learning impact on higher secondary standard students. For this purpose investigator use an experimental setting between different groups. Investigator used a self-developed questionnaire in this present study. We use different group boys and girls. Also we customize the group in different stream of students like arts, commerce, science. Whether you're an E-Learning expert or beginner, there's no denying its popularity has skyrocketed over the past decade.

### Assumption and limitation of the study:

1. The study is based on comparatively smaller number of higher secondary school students (102) , so generalization of the finding is not possible .
2. The study is conducted only in Bengali Medium student in particularly one district.
3. Data collection tool is a self-developed questionnaire. So data is not always reliable.

## CONCLUSION

The study concluded that E-Learning is the prevailing system in present era for education especially for youth's education and motivates students to do their work without others help. E-Learning is a gadget that offers time flexibility to the scholars for his or her mastering and using e-mastering supply them get right of entry to international global for examine purposes. E-Learning also engages the scholars' active in learning process. Teachers play a major role in e-learning through prompt response to students' requests and this feedback is beneficial for college kids whereas students are helped to access online material through technical assistance. On contrary, students face difficulties in using online materials. But another good sign is that E-Learning provides a chance to the scholars to affix social media groups. This research study concluded that students share their learning material through different social media e.g. WhatsApp, telegram, you tube and different apps. This study found mainly positive feedback of E-Learning from student but also found psychological negative feedback from students. School goes more active and feel joy with their friends but E-Learning where act as

- Separate learners ' get fundamental thoughts of science and nature through Music/Animation which can be actualized through web based learning in a classroom environment and inevitably it makes a difference to create them learn superior.
- In conclusion we will say that web based learning certainly makes instruction more simple and flexible.

It is additionally been watched that today's individuals particularly the youthful are exceptional regularly alluded to as digital

human or indeed computerized locals an this sort of learning mode makes a difference to extend intrigued among understudies by making the learning substance more appealing.

#### **Suggestion for Further Research:**

1. The realty of using E-Learning between govt. and private school students.

2. A comparative study on the curriculum of WBCHSE and Other board regarding E-Learning.
3. The realty of using E-Learning between secondary and higher secondary school students.
4. Studies to correlate difficulties in E-Learning.
5. The realty of using E-Learning between college students and higher secondary school students.

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