



A Study On Attitude Of Higher Secondary School Students Towards E-Learning

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Abstract:

This study explores the attitudes of higher secondary school students towards e-learning, focusing on their gender and school management. Utilizing a descriptive methods approach, data were collected through surveys from a sample of 160 students across various Provincialised and private schools of Guwahati. The results indicate more than 70% of higher secondary school students' level of attitude toward e-learning is average and above and the maximum (38.8%) higher secondary school students have average level of attitude towards e-learning. Gender plays an important role in attitude towards e-learning. That means higher secondary boys and girls differ significantly in this regard. Attitudes of higher secondary girls are more toward e-learning than higher secondary boys. Management of the school is not a contributory factor for developing the attitude of higher secondary students towards e-learning. The attitude of higher secondary students from private institutions is more than Provincialised higher secondary students towards e-learning. The findings suggest the need for improved e-learning infrastructure and support systems to enhance the effectiveness of digital education. This research provides insights for educators and policymakers to understand better and address the needs and expectations of students in the evolving landscape of e-learning.

Keywords: E-learning, Attitude, Higher Secondary School Students, Gender, Type of Management of School

Introduction:

The urge to live and develop for excellence and better perfection in life makes man more inventive and creative. This spirit of inventiveness makes man adopt new methods and techniques of science and technology for a better life, efficiency, and improvement. Every aspect of modern education is inspired and influenced by technological means, methods, and principles. The increasing use of technology in modern education has thrown a challenging responsibility on the teacher and the taught. It is in a position to remove the old traditional views and outlook of education and develop a scientific attitude towards the mechanism of human learning. Modern education is not only based on psychology but also on the technology of learning. There are various technological means and modes of education and information being used in our personal and social lives. One such means is e-learning.

E-learning is an innovative contribution to the modern education system. Using information and communication technology tools in education means using such tools through electronic media. Electronic media such as the Internet, and computers are essential everywhere. As these tools are conducted through electronic media, they are called e-tools and the learning provided using these tools is called e-learning. E-learning is learning delivered specifically through an internet connection, i.e. online. This learning is driven by a large network of students and teachers and teaching tools and technology. It is not just an interaction between a small number of students and a teacher. Rather, e-learning is a much more extensive systematic process.

In e-learning, many students can access the same facilities at the same time. E-learning methods are important determinants of the academic achievement of students. E-learning is a call of the times nowadays. The success of an education system is largely determined by the perception, attitude, role, and involvement of all the stakeholders. One important stakeholder of any education system is the students. Hence, for successful implementation of e-learning in the teaching-learning process of the present time is largely determined by the attitude of the students.

Literature Review:

There is extensive research already done in the area of technology in education. Few researchers have also conducted studies on e-learning. Some of them are mentioned below:

Adewole-Odeshi (2014) studied the attitude of students towards e-learning in South-West Nigerian Universities. Findings of the study showed that students have a positive attitude towards e-learning and attitude influences the intention to use an e-learning system.

Konwar (2017) studied the attitude of college students towards e-learning with special reference to the North Lakhimpur district of Assam. The sample consists of 200 college students from North Lakhimpur district. Attitude towards E-learning Scale constructed and standardized by Dimple Rani was used to collect the data. It was found from the study that college students have a positive attitude towards e-learning and gender as well as locality is not the contributory factor regarding the attitude of college students towards e-learning.

Singh and Riza (2022) conducted a study on the attitude of Rajiv Gandhi University students towards e-learning. The main findings of this study are (i) there was a significant difference between the attitude of male and female students towards e-learning and no difference was found based on tribal status, settlement, and subject background.

Need of the Study:

21st-century education promotes the expansion of the definition of literacy beyond the reading, writing, and arithmetic that may have guided what we learned in school. Literacy now includes topics such as finances, media, social or emotional development, physical fitness, ecology, and creativity. The need for information and knowledge before was provided by books, print media, radio, and later television. In recent times, much advancement has been made in the field of technology. E-learning is one of the products of advanced technology in the field of education.

There is an explosion of knowledge nowadays. Innovative and new concepts are knocking on the door of every individual. E-learning is a helping hand in this regard. E-learning allows students to practice at their own pace if they cannot master the information at once. The successful implementation of e-learning largely depends on the attitude of the students because e-learning courses are more student-centered and therefore, more effective. Without positive attitudes of students, they have little chance of learning proficiently.

To carry out any kind of educational work smoothly, the mental preparation of students is required. One of the important factors contributing to this mental preparation is attitude. Attitude is a special type of mental organization through which the students show a special and permanent type of behaviour towards a particular object such as e-learning. Understanding the attitudes of higher secondary school students towards e-learning is essential for several reasons:

1. The shift from traditional classroom-based instruction to digital learning environments necessitates an understanding of students' attitudes to ensure a smooth transition and effective learning experiences.
2. Positive attitudes towards e-learning can significantly impact student engagement, motivation, and academic performance. Identifying factors that influence these attitudes can help educators develop strategies to enhance learning outcomes.
3. Investigating students' attitudes can reveal challenges and barriers they face in e-learning, such as technical difficulties, lack of interaction, or inadequate support. Addressing these issues is crucial for improving the quality and accessibility of e-learning.
4. Insights from this study can inform policymakers and educational institutions in developing policies and curricula that are responsive to the needs and preferences of students, ensuring that e-learning is inclusive and effective.
5. As the reliance on e-learning continues to grow, especially in the wake of global disruptions like the COVID-19 pandemic, understanding student attitudes is vital for preparing educational systems for future uncertainties and ensuring continuity in education.

Overall, this study aims to fill the gap in existing research by providing comprehensive insights into the attitudes of higher secondary school students towards e-learning, thereby contributing to the enhancement of digital education practices and policies.

Statement of the Problem:

The problem of the study has been titled "A Study on Attitude of Higher Secondary School Students towards E-Learning."

Operational Definition of Key Terms:

- **E-learning:** The term refers to the use of electronic media, educational technology, and information and communication technologies in education. In this study, the term covered four aspects namely e-learning interest, usefulness, ease of e-learning, and e-learning confidence.
- **Attitude:** The term refers to a psychological construct representing an individual's degree of liking or dislike for different aspects of e-learning.
- **Higher Secondary School Students:** The term refers to students enrolled in classes XI and XII in Provincialised and Private higher secondary schools of Guwahati Metropolitan City.
- **Gender:** In this study, the term refers to Boys and Girls who are pursuing Higher Secondary education from Provincialised and Private educational institutions of Guwahati Metropolitan City.
- **Types of Management of School:** Higher secondary schools are managed by different managerial bodies, such as Government, Provincialised, and Private. In this study, the term meant to Provincialised and privately managed higher secondary schools of Guwahati Metropolitan City.

Objectives of the Study:

The following are the objectives of this study:

1. To study the level of attitude of higher secondary school students towards e-learning.
2. To compare mean scores of the attitude of higher secondary boys and girls towards e-learning.
3. To compare mean scores of attitude towards e-learning of Provincialised and Private higher secondary schools.

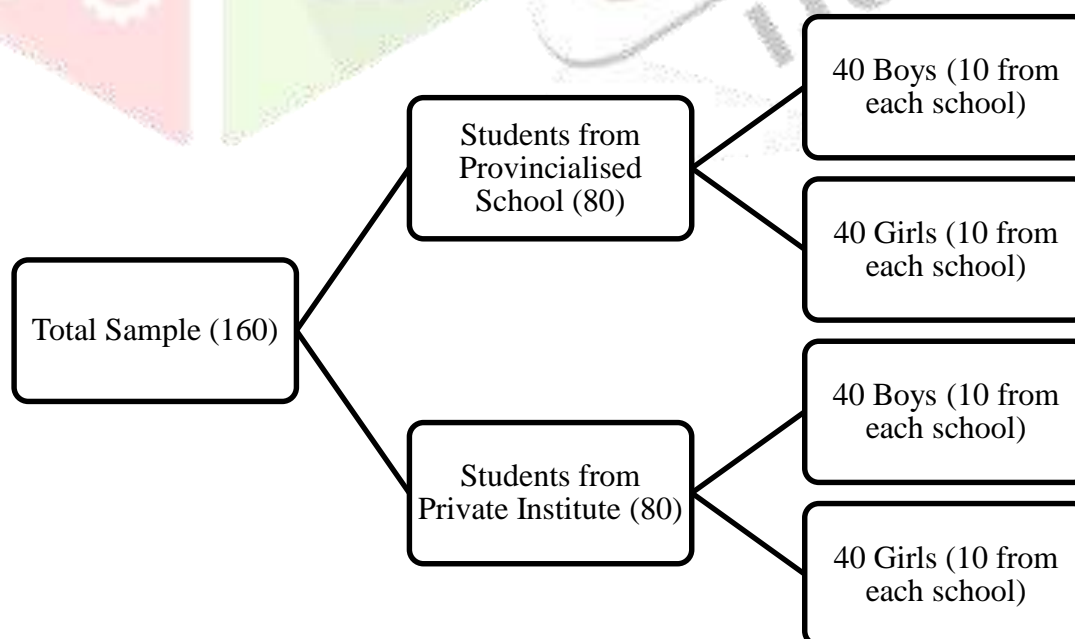
Hypotheses of the Study:

The following are the hypotheses of this study:

- H1** There is no significant difference between mean scores of attitude towards e-learning of higher secondary boys and girls.
- H2** There is no significant difference between mean scores of attitude towards e-learning of Provincialised and Private higher secondary schools.

Research Methodology:

- a) **Selection of Research Method:** The present study tries to explore the attitude of higher secondary school students towards e-learning; hence it studies the present phenomena. Thus, the Descriptive survey method is applied in this study.
- b) **Population and Sample:** All the Class XI and XII students of the Higher Secondary Stage of Guwahati Metropolitan City of Kamrup (Metro) district constitute the population of the present study. Out of the total higher secondary schools (Provincialised and Private), eight (08) schools are selected as a sample out of which 4 schools are Provincialised and 4 are privately managed. From each school, 20 students (10 boys and 10 girls) are selected by applying the Stratified random sample technique. Hence, the total sample size is 160 students. The flow chart of sample is shown below:



- c) **Tool Used:** In the present study, a standardized research tool namely 'Attitude Scale towards E-Learning' is used. This tool was developed by Dimple Rani in the year 2015. There are four major areas in this scale, viz. e-learning interest, usefulness, ease of e-learning, and e-learning confidence.

There are 65 statements in this scale out of which 38 statements are positive and 27 statements are negative. Each statement has five alternatives namely 'Strongly Agree', 'Agree', 'Undecided', 'Disagree' and 'Strongly Disagree'. Scores 5, 4, 3, 2, and 1 are assigned for positive statements against the alternatives respectively, and for the negative statements, scores are reversed. The reliability of the scale is 0.87 which is significant at 0.01 level of significance and has content and construct validity.

- d) **Statistical Techniques:** For analysis of raw data, z-score, descriptive statistics, and t-tests are used in this study. The bar graph is also applied to show the level of attitude of higher secondary school students towards e-learning.

Analysis and Interpretation:

The collected data are analyzed and interpreted objective-wise in the following manner:

Table 1: Level of Attitude Towards E-learning of Higher Secondary School Students

Level of Attitude	Range of z-scores	f	%
Extremely High	+2.01 and above	0	0
High	+1.26 to +2.00	26	16.3
Above Average	+0.51 to +1.25	31	19.3
Average	-0.50 to +0.50	62	38.8
Below Average	-1.25 to -0.51	19	11.8
Low	-2.00 to -1.26	22	13.8
Extreme Low	-2.01 and below	0	0

Table 1 reveals that 16.3% of higher secondary school students' attitude towards e-learning is high. Again, 19.3%, 38.8%, 11.8%, and 13.8% of higher secondary school students' attitudes toward e-learning are above average, average, below average, and low respectively. Not a single student's attitude towards e-learning is extremely high or extremely low. The following bar graph also clearly reflects the levels of the attitude of higher secondary school students towards e-learning.

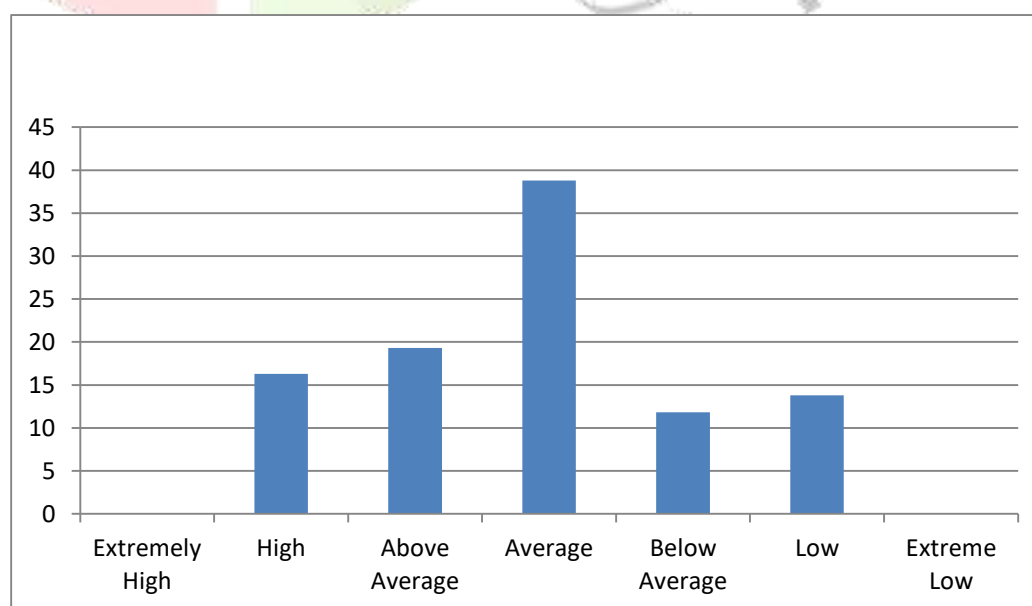


Table 2: Descriptive Statistics of Higher Secondary School Students' Attitude towards e-learning

Mean	Median	Mode	Standard Deviation	Kurtosis	Skewness
205.86	205	205	60.13	-0.48	-0.14

The data of Table 2 reveals that the Mean, Median, and Mode values of the raw data are almost symmetrical. It exposed the normality of the data. Again standard deviation is 60.13 which shows the data have moderate variability. The kurtosis value of the data is -0.48 which is slightly lower. Again, the skewness value i.e. -0.14 shows that the data are slightly negatively skewed. As a whole, it is seen that the data are almost normally distributed.

Table 3: Gender-wise Mean, Standard Deviation (SD), and t-test of Higher Secondary School Students' Attitudes towards e-learning

Gender	N	Mean	SD	t-test	Remarks
Boys	80	197.175	53.67	2.72	Significant at 0.01 level
Girls		222.55	63.80		

Table 3 shows that the mean scores for boys and girls are 197.175 and 222.55 respectively with standard deviations 53.67 and 63.80. The t-value is 2.72 which is significant at 0.01 level of significance. Hence, it can be said that there are significant differences between mean scores of attitude towards e-learning of higher secondary boys and girls.

Table 4: Management of School wise Mean, Standard Deviation (SD), and t-test of Higher Secondary School Students' Attitude toward e-learning

Management of School	N	Mean	SD	t-test	Remarks
Provincialized	80	202.38	61.31	1.57	Not Significance
Private		217.33	58.35		

The above table reveals that the mean and standard deviation for the higher secondary students of Provincialised schools are 202.38 and 61.31 respectively. Similarly, the same for private institutes are 217.33 and 58.35 respectively. While comparing the mean value of both groups, it is found that the t-value is 1.57. This value is not significant at any level of significance. Hence, it can be said that there is no significant difference between mean scores of attitude towards e-learning of Provincialised and Private higher secondary schools.

Results and Discussion:

After analysis and interpretation of collected data, the following findings emerged in the present research study.

1. More than 70% of higher secondary school students' level of attitude towards e-learning is average and above.
2. Maximum (38.8%) higher secondary school students have an average level of attitude towards e-learning.
3. Not a single student's level of attitude toward e-learning is extremely high or extremely low.
4. Gender plays an important role in attitude towards e-learning. That means higher secondary boys and girls differ significantly in this regard.
5. Attitudes of higher secondary girls are more toward e-learning than higher secondary boys.
6. Management of the school is not a contributory factor for developing the attitude of higher secondary students towards e-learning.

7. The attitude of higher secondary students from private institutions is more than Provincialised higher secondary students towards e-learning.

As few students' levels of attitude towards e-learning are below average, hence it is suggested that students should be encouraged to attain various e-learning programmes organized by different educational institutions, NCERT, and Central and State Governments to have better e-learning experiences. Again, male students should be more encouraged and motivated to use e-learning materials.

Teachers should give more importance to the use of educational technology in teaching-learning transactions. To keep students up-to-date, the e-learning process should be adopted by all the teachers of all Provincialised and private educational institutes.

Conclusion:

This study has provided valuable insights into the attitudes of higher secondary school students towards e-learning. The findings indicate that students generally hold a positive view of e-learning due to its flexibility and accessibility. The positive attitude towards e-learning suggests that students are open to and ready for digital learning environments. However, to maximize the effectiveness of e-learning, it is essential to enhance the infrastructure, provide adequate technical support, and ensure that students and teachers are well-equipped with the necessary digital skills. Educational institutions and policymakers must consider these factors when designing and implementing e-learning programmes. By addressing the identified barriers and leveraging the positive aspects of e-learning, stakeholders can create a more engaging, inclusive, and effective learning environment for students.

In conclusion, this study underscores the importance of understanding student attitudes toward e-learning as a critical component in the successful integration of digital education. Future research should continue to explore this area, focusing on long-term impacts and the development of strategies to overcome the challenges identified in this study.

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