

ATTITUDE OF HIGHER SECONDARY SCHOOL STUDENTS TOWARDS ONLINE EDUCATION IN THE DISTRICT OF DAKSHIN DINAJPUR, WEST BENGAL

Sujan Sarkar

Ph.D. Research Scholar, Department of Education, Raiganj University, W.B., 733134

Email- sujanrkmsm@gmail.com

ORCID: <https://orcid.org/0000-0003-1325-8716>

Dr. Pranab Barman

Assistant Professor, Department of Education, Raiganj University, W.B. 733134

Email- pbarmanskbu@yahoo.com

ORCID: <https://orcid.org/0000-0002-3783-0097>

ABSTRACT:

In the present study an attempt has been composed by the investigators to investigate the attitude level of higher secondary level school students towards online education in Dakshin Dinajpur district, West Bengal. To fulfil this study the researcher adopted descriptive survey research method. The researcher collected the data from 250 samples selected through simple random sampling based on the self-made five-point Likert scale. Mean, SD and t-test have used for data analysis with the help of SPSS 2.0. Finally, the results have been seen that, the overall attitude level of higher secondary level students in Dakshin Dinajpur district towards online education is moderate. Male-female, rural-urban and arts-science students have shown their same level attitude towards online education, they did not significantly different from each other. But obtained by the mean scores of students it has found that, female students have comparatively more favourable attitude towards online education than the male students, urban students have comparatively more favourable attitude towards online education than the rural students and arts students have comparatively more favourable attitude towards online education than the science students.

Keywords: Attitude, Online Education, Higher Secondary School Students.

1. Introduction:

Online education is a form platform where teaching and learning both are taking place with the help of internet and technology. It creates a flexible transactional teaching-learning environment. Students can easily participate to the online classes from anywhere. Online education can be defined as “learning that takes place partially or entirely over the Internet” (U.S. Department of Education, 2010). Online learning as the delivery of instruction to a remote audience using the web as an intermediary. Khan (1997). Online education: A domain of learning that delivers various kind of instructions and course materials over the Internet connectivity and other computer-mediated communication tools. (Abramenka, 2015). “I cringe at the thought of online education for these students. We don’t have the appropriate scaffolding in place for these folds” (Oswal & Meloncon, 2014, p. 283). Online education, according to Harasim (1989), is a new domain of learning that combines distance education with the practice of face-to-face instruction utilizing computer-mediated communication.

The word online education is often amalgamated with virtual education, cyber-learning, internet education, and asynchronous learning (Office of Sustainable Development, 2000). Kearsly (2000, p. 4-10), listed the following major components which shape online education: connectivity, community, authenticity, exploration, student-centeredness, shared knowledge, collaboration, unboundedness and multisensory experience. (Pasha and Gorya, 2019), Online education is a type of educational instruction that is delivered via the internet to students using their home computers. (Basilaia and Kvavadze, 2020), Online education, where the information technologies and communications are used to help in the development and acquisition of knowledge from the different remote locations. It uses the internet and video/audio and text communication and software to create the learning environment. “Students are taking online courses for content not for social interaction” (Thomson, 2010, p. 37). In the research literature, online education is variously termed as “distance education” “e-learning,” “online learning,” “blended learning,” “computer-based learning,” “web-based learning,” “virtual learning,” “tele-education,” “cyber learning,” “Internet-based learning,” “distributed learning,” etc. (Sun and Chen, 2016). Online education has the following features: (i) it provides a learning experience different than in the traditional classroom because learners are different. (ii) participation in classroom by learners are different. (iii) discrimination and prejudice are minimized. (iv) the social dynamic of the learning environment is changed, and (v) the communication is via computer and World Wide Web. (Ascough, 2002).

2. Need and Significance of the Study:

This present study will help to know the attitude level of the student towards online education. Research tool that has been developed by the investigator will help many researchers further conducting in the field of online education. The paper will inform us what opinion or how students think about online education in Dakshin Dinajpur district with regards gender, locality and their stream of education.

3. Review of Related Literature:

According to Best (2008)- A familiarity with the literature in any problem area helps the student to discover what other have attempted to find out, what method had been promising and what problems remained to be solved. Anderson and Arsenault (2002), "Successful research is based on all the thinking, knowledge and research that preceded it, and that's why review of literature is very essential step in the process of research.

Butnaru, Nit, Anichiti and Brinza, (2021), have tried to explore the perceptions of high school students and academic students towards online education in Romania and also highlight the effectiveness of online education during covid-19 pandemic. After completed the study they have showed the results that there is negative relationship between perception of online courses and face-to-face courses regarding their effectiveness. They also react differently based on their proficiency towards online education. **Baczek, Zaganczyk, Czek, Szpringer, Jaroszynski & zakowska-Kap, (2021)**, have conducted a survey on polish medical students during covid-19 pandemic regarding their perceptions towards online learning. From the study the results outcome that they were less active of online classes ($M=2.72$) compare with traditional classes ($M=3.82$) ($P<.001$). The respondents also stated that e-learning not only increases the knowledge but also clinical and social skills and it is highly accepted. **Pasha & Gorya (2019)**, have examined a study on students' perception and preference towards online education in Hyderabad City. The results indicate that most of the people are aware about online education and still a small portion of people in this study are unaware about online education. Only 26% people preferred offline education and 74% people preferred the mode of e-learning/virtual learning/ online learning and they think it is an effective way of learning. **Jindal & Chahal (2018)**, have identified some key factors towards the growth of online education, i) ease of doing course, ii) initiated by government, iii) low cost of online education, iv) self-pace, v) employer's recognition and bridging gap, vi) no boundaries irrespective caste, class, time and location, vii) very fast process etc. **Eric and Loeb (2017)**, observed that the online system of course, instead of face-to-face course increases the tendency of dropout rate of the students from school and also the negative impacts of online course produce the lowest performing students. **Herman & Banister (2017)**, have carried out research to compare the cost and learning outcomes of online course and traditional learning. Their study revealed that, the online course saves cost and efforts, having engages online course students have strong learning outcomes. **Fahad (2016)**, investigates the attitude and perceptions of university students towards effectiveness of online learning in their studies. The findings directed that online learning through mobile and other ICTs as interesting and effective tools that improves their communication, technological knowledge as well as learning. **According to Stack & Steven (2015)**, online education has proliferated in the last decade. His research has not found any major difference in the scores of the students taking online course and face to face classes. **Abramenka (2015)**, has conducted a study to know the effect of online education regarding the LPGAT & CP classes students, and also revealed that their participation in the online session of review did not significantly enhance the rate of percentage of pass on the CP & LPGAT class. **Yang, Linda & Cornelius (2010)**, "Students' Perceptions towards the Quality of Online Education: A Qualitative Approach". The findings revealed that cost-effectiveness, ease of connection to the Internet, flexibility, electronic research availability, and well-designed class interface were students' positive experiences. **Rovai, Wighting & Lui (2005)**, studied the medium of delivery, such as face-to-face versus technology classroom settings. The results indicates that it does not make any huge difference of the learning outcomes and also asserted that the quality of instruction or the medium of delivery impacts learning outcomes. **Donlevy (2003)**, stated that, the lack of least peer interaction can negatively effect on some aspects of learning process. "Social and emotional aspects of learning are as important as the technical information" instruct to the students.

4. Objectives of the study:

1. To assess the level of attitude of higher secondary school students towards Online education in the district of Dakshin Dinajpur.

2. To find out the difference between male and female higher secondary school students regarding their attitude towards Online education in the district of Dakshin Dinajpur.

3. To find out the difference between rural and urban higher secondary school students regarding their attitude towards Online education in the district of Dakshin Dinajpur.

4. To find out the difference between arts and science higher secondary school students regarding their attitude towards Online education in the district of Dakshin Dinajpur.

5. Hypothesis of the study:

H01. There would not have favourable attitude of higher secondary school students towards Online education in the district of Dakshin Dinajpur.

H02. There is no significance difference between male and female higher secondary school students regarding their attitude towards Online education in the district of Dakshin Dinajpur.

H03. There is no significance difference between rural and urban higher secondary school students regarding their attitude towards Online education in the district of Dakshin Dinajpur.

H04. There is no significance difference between arts and science higher secondary school students regarding their attitude towards Online education in the district of Dakshin Dinajpur.

6. Operational Definitions of the terms:

Attitude: In this study, the term 'attitude' has been used as state of mind or opinion of students towards online education and how they feel about it.

Online Education: It is a form of education where transaction process between teachers and students have been made via internet.

Higher Secondary School Students: In this study, students who are studying school in class XI & XII under the W.B.C.H.S.E. board.

7. Methodology of the study:

7.1. Methods of the study:

Descriptive survey research methods have been used by the researchers for conducting this study. Naturally the researchers have used different research tools, strategies and other methods of survey research for collecting, analysing and interpretation of the data.

7.2. Population of the study:

All the higher secondary level students (class XI and XII) studying in the district of Dakshin Dinajpur, West Bengal as selected population for the present study.

7.3. Sample of the study:

250 higher secondary level school students comprising class XI & XII were selected as sample for the present research.

7.4. Sampling technique:

Simple random sampling technique has been adopted to select the samples from the population in this study.

7.5. Tool of the study:

The investigator developed a self-made research tool followed by five-point Likert's scale i.e., strongly agree (SA), agree (A), undecided (UD), disagree (D), strongly disagree (SD) and applied for collecting the data for conducting this current research. The tool consists total 26 statement with combination positive (15) and negative (11) items based on the 8 dimensions such as flexibility, communication and relationship, academic activities, autonomy, understanding of imparted subject, class system, extra-curricular activities, evaluation system. Only academic activities dimension has 5 items or statements and other each dimensions have 3 items. The scale has

been validated by expert validity and test the reliability by Cronbach alpha through SPSS 2.0. The result has shown .602 and we can say that the test is okay and good.

7.6. Techniques of data analysis:

Present study the researcher has used Mean, S.D, and t-test for analyzing the data with the help of SPSS 2.0.

7.7. Data collection procedure:

As per previous planning, the investigator collects the data from the higher secondary level students during covid 19 pandemic situation. The researcher has visited various tuition centre and nearby schools during the vaccination time and also visited the home of the students as much as possible. The constructed tool has been administered on 250 students and it has been seen that there were participated total 8 schools student combination with rural and urban area. First attempt with students, the investigator introduced himself and what purpose behind the collection of data. After complete the introductory section, the researcher told them about the instruction of the tool and process to response the tool. The tool was fully English version and for the better understanding of the respondents the researcher has translated each statement wherever required. There was no time limitation to the rating of the scale. After completion the response all questionnaire collected very carefully and thanks them by the investigator.

After collecting the data from samples, the researcher scoring each questionnaire and each item based on the pre-selected method. In case of positive item, the scoring technique was 5-4-3-2-1 on the other hand reverses scoring technique 1-2-3-4-5 was applied by the researcher. The total process of data collection and scoring has been done very carefully and sensitively.

8. Analysis and interpretations:

H01. There would not have favourable attitude of higher secondary school students towards Online education in the district of Dakshin Dinajpur.

Table no-1. Shows the Number, Mean and SD of the total students.

Group	Number	Mean	SD
Students	250	76.08	8.97

$M \pm \sigma$

$$M + \sigma = 76.08 + 8.97 = 85.05$$

$$M - \sigma = 76.08 - 8.97 = 67.11$$

Table No-2. Shows the level of attitude of students towards Online Education on the basis of cut-off point.

Scores	Frequency	Percentage	Level of Attitude
Above- 85.05	70	28%	Favourable
Between- 67.11 to 85.05	130	52%	Moderate
Below- 67.11	50	20%	Unfavourable
Total	250	100%	

From the table no-2, on the basis of cut-off point it has been seen that, out of total 250 students 28% have scored above 85.05, between 67.11 to 85.05 have scored 52% and 20% have scored below 67.11 on attitude measuring tool constructed by the researcher for the students. Therefore, it has clearly seen that the maximum percentage (%) of students have scored between 67.11 to 85.05, which indicates the level of attitude of the higher secondary level students towards online education in the district of Dakshin Dinajpur, West Bengal is Moderate.

H02. There is no significance difference between male and female higher secondary school students regarding their attitude towards Online education in the district of Dakshin Dinajpur.

Table-3: Shows the Difference between Male and Female Higher Secondary Level School Students Regarding Their Attitude towards the Online Education

Groups/ Variables	N	Mean	SD	Mean Difference	SED	Df	t- value	Level of Significance
Male	136	75.361	9.959	1.587	1.948	248	0.815	Not significant at 0.05 and 0.01 level
Female	114	76.948	7.663					

From the table no-3, it is evident that, the calculated ‘t’-value (0.815) is less than the table value both at 0.05 (1.97) and 0.01 (2.60) level of significance with df 248. Therefore, the result indicates that the male and female higher secondary level student’s attitude did not differ significantly. Hence, it is stated that, there is no significance difference between male and female higher secondary school students regarding their attitude towards Online education in the district of Dakshin Dinajpur, West Bengal. The null hypothesis is accepted. But on the basis of obtained mean score we can say that female student’s attitude towards online education is comparatively more favorable than male students in the district of Dakshin Dinajpur, West Bengal.

H03. There is no significance difference between rural and urban higher secondary school students regarding their attitude towards Online education in the district of Dakshin Dinajpur.

Table-4: Shows the Difference between Rural and Urban Higher Secondary Level School Students Regarding Their Attitude towards the Online Education

Groups/ Variables	N	Mean	SD	Mean Difference	SED	Df	t- value	Level of Significance
Rural	132	75.476	8.667	1.183	1.943	248	0.609	Not Significant at 0.05 and 0.01 level
Urban	118	76.659	9.323					

From the table no-4, it is evident that, the calculated ‘t’-value (0.609) is less than the table value both at 0.05 (1.97) and 0.01 (2.60) level of significance with df 248. Therefore, the result indicates that the rural and urban higher secondary level student’s attitude did not differ significantly. Hence, it is stated that, there is no significance difference between rural and urban higher secondary school students regarding their attitude towards Online education in the district of Dakshin Dinajpur, West Bengal. The null hypothesis is accepted. But on the basis of obtained mean score we can say that urban student’s attitude towards online education is comparatively more favorable than rural students in the district of Dakshin Dinajpur, West Bengal.

H04. There is no significance difference between arts and science higher secondary school students regarding their attitude towards Online education in the district of Dakshin Dinajpur.

Table-5: Shows the Difference between Arts and Science Higher Secondary Level School Students Regarding Their Attitude towards the Online Education

Groups/ Variables	N	Mean	SD	Mean Difference	SED	Df	t- value	Level of Significance
Arts	155	76.446	8.390	1.494	2.260	248	0.661	Not Significant at 0.05 and 0.01 level
Science	95	74.952	10.740					

From the table no-4, it is evident that, the calculated ‘t’-value (0.661) is less than the table value both at 0.05 (1.97) and 0.01 (2.60) level of significance with df 248. Therefore, the result indicates that the arts and science higher secondary level student’s attitude did not differ significantly. Hence, it is stated that, there is no significance difference between arts and science higher secondary school students regarding their attitude towards Online education in the district of Dakshin Dinajpur, West Bengal. The null hypothesis is accepted. But on the basis of obtained mean score we can say that arts student’s attitude towards online education is comparatively more favorable than science students in the district of Dakshin Dinajpur, West Bengal.

9. Major findings of the study:

Donlevy (2003), stated that, the lack of least peer interaction can negatively effect on some aspects of learning process. “Social and emotional aspects of learning are as important as the technical information” instruct to the students.

The following findings are come out from the present study:

i. It has seen that, most of the student’s attitude in the Dakshin Dinajpur district, West Bengal towards online education is moderate level.

ii. The attitude of male and female students of higher secondary level in Dakshin Dinajpur district did not differ from each other regarding their attitude towards online education. But it has found that female students have comparatively more favourable attitude towards online education than the male students on the basis of their obtained mean scores.

iii. The attitude of rural and urban students of higher secondary level in Dakshin Dinajpur district did not differ from each other regarding their attitude towards online education. But it has found that urban students have comparatively more favourable attitude towards online education than the rural students on the basis of their obtained mean scores.

iv. The attitude of arts and science students of higher secondary level in Dakshin Dinajpur district did not differ from each other regarding their attitude towards online education. But it has found that arts students have comparatively more favourable attitude towards online education than the science students on the basis of their obtained mean scores.

Conclusion:

Online education is one of the interesting educational stations, where teachers and students are enjoying with full autonomy according to their own pace. Because it creates an atmosphere based on the principle of barrier free classroom. In this system of education students and teachers are allow to connect either synchronously or asynchronously. The present study concludes that, online education system is one of the alternative interesting educational platforms in the time of covid 19 pandemic and also it is easily accessible. Students of Dakshin Dinajpur district have shown their moderate attitude and irrespective their gender, location and stream also they have presented the same level attitude towards online education. But female students, urban students and arts students have comparatively more favourable attitude towards online education than the male students, rural students and science on the basis of their obtained mean scores.

References:

- Abul, T., & Kamal, K. M. (2011). Analysis of Effectiveness of Web based E Learning Through Information Technology. *International Journal of Soft Computing and Engineering*, 1(3), 36-42.
- Alley, L. R. (2001). What makes a good online course? The administrator’s role in quality assurance of online learning. *European Scientific Journal*, 4(11), 50-53.
- Aksal, F. A. (2011). Developing evaluative tool for online learning and teaching process. *The Turkish Online Journal of Educational Technology*, 10(3), 36-42.
- Ash, K. (2014). E-Learning’s Potential Scrutinized in Flu Crisis. *Education Week*, 8(2), 1-13.
- Barr, B. A., & Miller, S. F. (2013). Higher education: The online teaching and learning Experience. *Online Teaching and Learning*, 13(5), 242-250.
- Beard, L.A. & Harper, C. (2002). Student perceptions of online versus on campus instruction. *Education*, 122(4), 658-664.

- Bianche M. B., & Carr-Chellman, A. A. (2002). Exploring Qualitative Methodologies in Online Learning Environments. *The Quarterly Review of Distance Education*, 3(3), 251-260.
- Bowen, W.G., Chingos, M.M., Lack, K. A., & Nygren, T.I. (2014). Interactive Learning Online at Public Universities: Evidence from a Six-Campus Randomized Trial. *Journal OfPolicy Analysis & Management*, 33(1), 94-111.
- Capdeferro, N., & Romero, M. (2012). Are online learners frustrated with collaborative learning experiences? *The International Review of Research in Open and Distributed Learning*, 13(2), 26-34.
- Dellana, S. A., Collins, W. H., & West, D. (2000). On-line education in a management science course: Effectiveness and performance factors. *Journal of Education for Business*, 76(1), 43-47.
- Di, X., & Jaggars, S. S. (2014). Performance Gaps Between Online and Face-to-Face Courses: Differences Across Types of Students and Academic Subject Areas. *Journal of Higher Education*, 85(5), 633-659.
- Dwyer, L. M., Carey, R., & Kleiman, G. (2007). A study of the effectiveness of the Louisiana Algebra I online course. *Journal of Research on Technology in Education*, 39(3), 289-306.
- Geostat. (2019). Share of households with internet access. *National statistics office of Georgia*. 10-14, <https://www.geostat.ge/en/modules/categories/106/information-and-communication-technologies-usage-in-households>
- Google. (2020). *Hangouts Meet improvements for remote learning March 19, 2020*. Retrieved from <https://gsuiteupdates.googleblog.com/2020/03/hangouts-meet-edu-updates.html>
- Hedberg, J. G., Harper, B., & Brown, C. (1993). Reducing cognitive load in multimedia navigation. *Australian Journal of Educational Technology*, 9(2),157-181.
- Khanlarian, C. J., & Singh, R. (2013). An exploratory study of the online learning environment. *Issues in Accounting Education*, 29(1), 117-147.
- Markel, M (1999). Distance education and the myth of the new pedagogy. *Journal of Business and Technical Communication*, 13(2), 208-223.
- McConnell. R. & M. Graham. (2001). Do no harm: A comparison of the effects of online vs. traditional delivery media on a science course. *Journal of Science Education and Technology*, 10(3), 257-265.
- Ryabov, I. (2012). The effect of time online on grades in online sociology courses. *Journal of Online Learning and Teaching*, 8(1), 13.
- Schmeackle, J. M. (2003). Online training: An evaluation of the effectiveness and efficiency of training law enforcement personnel over the Internet. *Technology*, 12(3), 205-260.
- Savenye, W.C. (2005). Improving Online Courses: What is Interaction and Why Use It? (Undetermined). *Distance Learning*, 2(6), 22-28.
- Thomson, L. D. (2010). Beyond the Classroom Walls: Teachers' and Students' Perspectives on How Online Learning Can Meet the Needs of Gifted Students. *Journal of Advanced Academics*, 21(4), 662-712.
- Wilkes, R.B., Simon, J. C., & Brooks, L. D. (2006). A comparison of faculty and undergraduate, student perceptions of online courses and degree programs. *Journal of Information Systems Education*, 17(2), 131-140.
- Yeung, D. (2001). Toward an effective quality assurance model of web-based learning: The perspective of academic staff. *Online Journal of Distance Learning Administration*, 4(4).
- You, J. W., & Kang, M. (2014) The role of academic emotions in the relationship between perceived academic control and self-regulated learning in online learning. *Journal of Asynchronous Learning Network*, 77, 125-133.
- <https://www.weforum.org/agenda/2016/09/is-online-learning-the-future-of-education/>
- <https://www.online-education.net/articles/general/what-is-online-education.html>