

# Dual Mode of Education and Prospects in Tertiary Level: Perspective the Private Universities in Bangladesh

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## ABSTRACT

Due to the COVID-19 pandemic, many educational institutes in Bangladesh were forced to adopt online technologies for conducting their classes and examinations. Internet-based video conferencing applications, such as Zoom, google-meet, Facebook Messenger, etc., became especially useful during the quarantine days. Within a few months, almost all private and public universities started conducting online classes without much directive or pressure from the government. Within a short period, all stakeholders, including teachers, students, and management, get used to these new systems despite many challenges. This study aims to focus advantages of online education over classroom education for effective learning for university-level students. This study tries to identify the advantages and disadvantages of this online-based education system over the classroom-based system at the tertiary education level. Data was collected from 400 students from different private universities in Bangladesh using a Stratified sampling technique. Results show that the most crucial advantage is the participation of students in the class, i.e., students' attendance. Other benefits are reduced costs, systematic arrangement of study materials, and mental peace for working students as they could continue studying and doing jobs simultaneously. Vis-à-vis the study reveals disadvantages like 'conducting the fair examination,' availability, affordability, and internet reliability. Finally, the study suggests that "a combination of online-based education and classroom-based examination," i.e., dual mode of education, can increase the percentage of student enrollment in tertiary education without compromising quality.

**Key words:** Dual Mode of Education, Tertiary level, e-learning, Educational Technology

## INTRODUCTION

The COVID-19 pandemic was a global reality of the year 2020 that had almost halted educational activities during the beginning of the lockdown phase worldwide. Most educational institutes worldwide rose to the challenge, breaking the spell of the initial perception and inertia due to the pandemic. Governments introduced policies requiring all universities to go digital and resume their academic activities through online platforms. The situation in Bangladesh was the same. Many educational institutes, especially private ones, in Bangladesh were forced to adopt online technologies to conduct their classes and examinations. Internet-based video conferencing applications, such as Zoom, Google-meet, Facebook Messenger, etc., became especially useful during the quarantine days. Within a few months, almost all private and public universities started conducting online classes without much directive or pressure from the government. Besides, some universities also started working regular departmental meetings online since the onset of the

pandemic. This harmony between the administration and departments made the transition smooth. In some universities, faculty members were provided with the manual of the online platforms, as well as video demonstrations. This was followed by comprehensive live training so that each faculty member could raise their administration queries on the processes to be followed and get familiar with them. Thus, within a short period, all stakeholders, including teachers, students, and management, get used to these new systems despite many challenges. Since most universities have already learned to conduct classes online successfully, so for the future, we may think of a robust change in eLearning perspectives, at least for tertiary levels, by introducing a sound education system that is a blended learning system of education that incorporates the aspects of both online teaching and classroom-based examination along with working on minimizing their drawbacks. This study tries to identify the advantages of online-based education over classroom-based one along with some disadvantages



and tries to find the effectiveness of the combination of "online-based education and classroom-based examination," i.e., dual mode of education without compromising the quality. It is hoped to be another landmark for establishing a digital Bangladesh.

### Objectives of the study

This study aims to identify the prospects of online education along with the limitations at the tertiary level concerning the learning behavior of private university students in Bangladesh. The specific objectives are outlined below:

- To find out the advantages of online and classroom-based education at the tertiary level.
- To compare these two education systems.
- To find out the limitations of online education.
- To put the forward suggestion to make a blended learning system using both online and classroom platforms.

### LITERATURE REVIEW

Literature review shows that the university's classroom teaching and other learning processes primarily influence the students learning behavior. For example, the student-teachers at the University of Ilorin have a positive attitude comparable to those in other countries. This positive attitude is an essential indicator of willingness and the first step in effective ICT integration in the curriculum (Yusuf & Balogun, 2011). The use of IT is beneficial for the learning of the students. For example, a study shows that using ICT with other teaching strategies is more advantageous for student learning. However, the study also revealed that teacher-developed programs are more effective than commercial software programs. Consequently, more attention is given to specific educational objectives and curriculum goals when designing software for higher levels of effectiveness (Eng, 2005). "Psychological science has much to contribute to enhancing teaching and learning in the classroom," said Paris (2004), chair of the Coalition for Psychology in Schools and Education and a contributing author of the report. "teaching and learning are intricately linked to social and behavioral human development factors, including cognition, motivation, social interaction, and communication.

"The Impact Of ICTs In Education: The Case Of The University Of Macedonia Students" research suggested that university academic and administrative personnel find ways in order for the students to be motivated and maintain positive student attitudes toward using ICTs. Thus, the students will find it helpful during their studying or even supplement other teaching activities (Valasidou & Bousiou-Makridou, 2008). "The impact of ICT on students' study habits. Case study: University of Buea, Cameroon", research investigating the impact of

information and communication technology (ICT) on students' study habits. The results revealed that students have a positive attitude towards ICTs and use them to facilitate learning. However, male students are more favorable toward ICT usage and will likely find that ICTs help them in their studies (Mbah, 2010). Digital transformation is not a novel phenomenon, and it has been accompanying higher education institutions for some years (Kopp et al., 2019). Giannini (2020), in her article titled "COVID-19 causes the biggest disruption of the education system in history" focused on the challenges of the education system worldwide. However, Bangladesh's perspective needs to be added. Majed et al. (2020), in an article titled "Online Education: Bangladesh Perspective, Challenges, and Way Forward," only focused online education system for a particular university.

### METHODOLOGY

The study is descriptive, exploratory, and based on primary data. This study's sample population is 400 students from different private universities in Bangladesh. A Stratified sampling technique was used to collect primary data employing a survey, using self-administrated questionnaires from 400 respondents. Appropriate statistical analyses were used to satisfy the study's primary objectives, such as weighted average, Mean score, Bar diagram, Radar diagram, etc., with the help of standard statistical applications such as SPSS and MS Excel.

#### Determination of sample size

The sample students can be determined by using the following formula suggested by Cochran. The formula used in this study is shown below:

$$n_0 = \frac{Z^2 pq}{e^2}$$

Where:

e is the desired level of precision (i.e., the margin of error),

p is the (estimated) proportion of the population which has the attribute in question,

q is 1 – p.

The z-value is found in a Z table.

The sample size for the 95% confidence interval thus determined is 399. To project the magnitude of factors concerning the advantages of online education and classroom education, a structured questionnaire was administered with the following 5-point Likert scale: 1 = disappointing, 2 =average, 3 = good, 4 = very good, 5=Excellent

### SAMPLE DISTRIBUTION

Four hundred students were interviewed from ten private universities in Bangladesh. The sampled universities are the Asian University of Bangladesh, Dhaka International University, Stamford University, BRAC University,

American International University Bangladesh, United International University, Daffodil International University, Eastern University, University of Liberal Arts, and Asia Pacific University. Details are given below.

Table 1: Distribution of Sampled Students Studying in Private Universities in Bangladesh

Sl. No.	Name of the University	No. of Students Interviewed	Percentage (%)
1.	Asian University of Bangladesh	200	50%
2.	Dhaka International University	50	12.5%
3.	BRAC University	20	5%
4.	Stamford University	30	7.5%
5.	American International University-Bangladesh	10	2.5%
6.	United International University	10	2.5%
7.	Daffodil International University	30	7.5%
8.	Eastern University	10	2.5%
9.	University of Liberal Arts, and	20	5%
10.	Asia Pacific University	30	7.5%
	Total Sampled Students	400	100%

## DATA ANALYSIS AND FINDINGS

The Human Development Index (HDI) is a summary measure of average achievement in key dimensions of human development: a long and healthy life, knowledge, and decent living standards. The HDI is the geometric mean of normalized indices for each of the three dimensions.

Education is one of the significant components of the human development index. So development in the education sector is necessary for the country's development. That is why educators' (teachers') development is significant. The following table shows Bangladesh's Human Development and Education indexes till 2017, where it is seen that in each sector, Bangladesh is improving.

Table 2: HDI and Education Index of Bangladesh (Source-UNDP)

Year	1990	1995	2000	2005	2010	2011	2012	2013	2014	2015	2016	2017
HDI	.386	.424	.468	.505	.545	.557	.567	.575	.583	.592	.597	.608
Education Index	.251	.291	.344	.385	.425	.442	.454	.465	.477	.488	.490	.508

However, it needs rapid development in the education sector for rapid improvement. For the nation to effectively develop its human capital in light of the increasingly complex and skills-oriented modern economy, the tertiary education sector must play a critical role. However, it is a matter of great regret that Bangladesh's overall gross enrollment rate (GER) of 17 percent in tertiary education as of 2016 is much lower than that of neighboring countries India (27 percent) and Sri Lanka (19 percent). (Source UNESCO, UIS).

Some reasons for this low enrollment rate are lack of financial options, lack of availability of institutions nearby, especially for female students, early marriage, entering the job field for necessity, etc. An online platform can play an important role here. Because using this platform, the problems mentioned above can be solved. So It is possible to postulate that online education can reduce the dropout rate and enhance the enrollment rate in higher studies. In addition, data has been collected to

focus on the advantages of online and classroom education, then analyzed and given below with their weighted average.

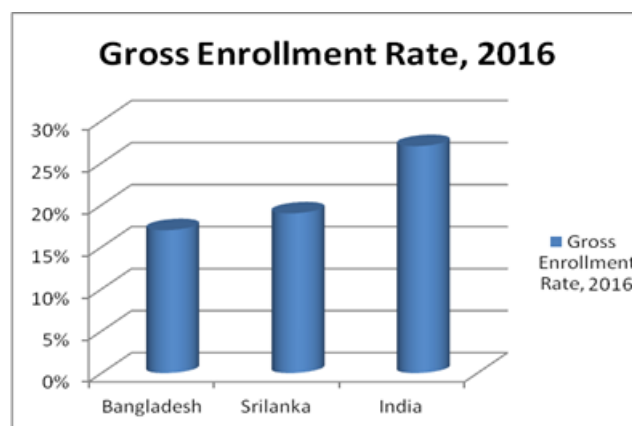


Figure 1: Gross Enrollment Rate in Higher Education

Table 3: Weighted average of the advantages of online education and classroom education

Aspects	Weighted Average of Online education	Weighted Average of Classroom education
Learning facilities for students staying in remote areas	5	3.25
Punctuality of the teacher	4.75	4.00
Duration of the class	4.25	4.00
Students attendance	4.50	3.50
Reduced cost	4.50	3.50
Systematic uploading of study materials	4.75	3.50
Flexibility, especially for the working students	4.50	3.75
Versatile mode of assessment	4.25	3.75
Parents monitoring	4.50	3.50
Getting familiar with the modern technologies	4.50	3.00
Teachers Students Interaction	3.50	4.75
Fair examination system	2.50	4.50
Internet service	3.00	Not relevant
Campus Environment	3.50	5.00
Club activities	3.75	4.00
Library facilities	3.75	4.00
Sports facilities	3.75	4.00
Internet and other technological support	3.00	Not relevant

We can show the most important factors with their mean scores graphically as follows:

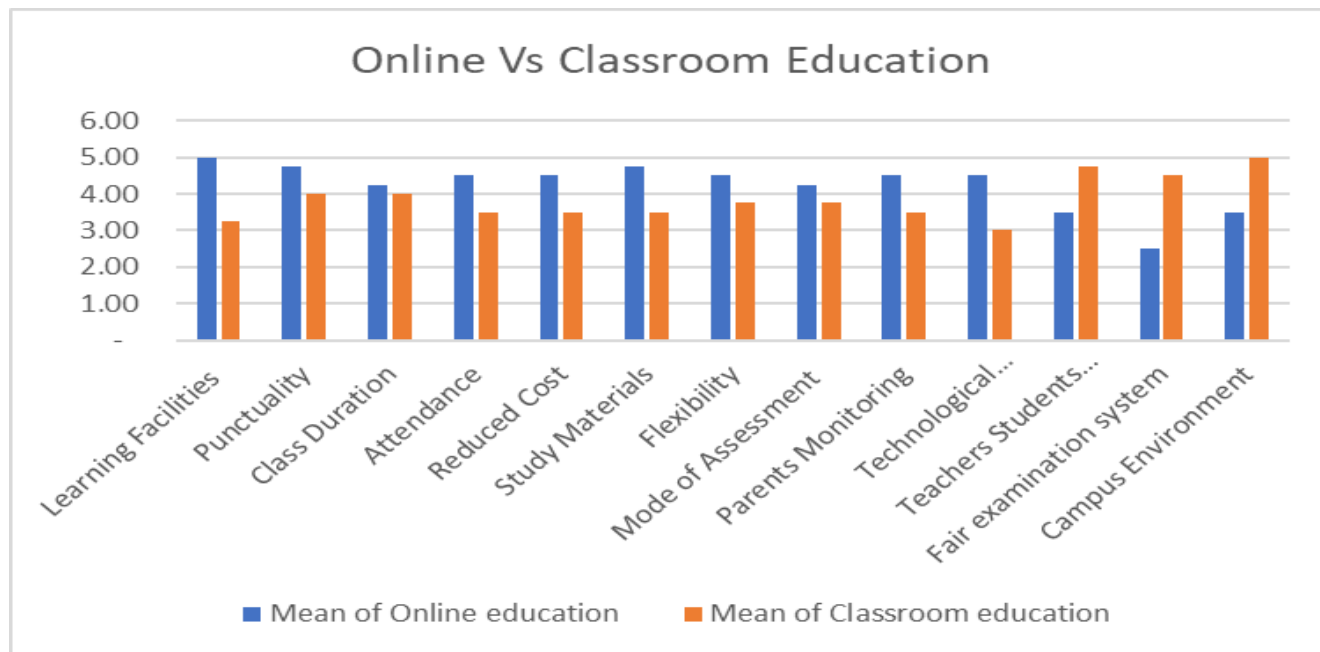


Figure 2: Online Vs. Classroom-Based Education (Weighted Mean)

The result shows that the most critical factor concerning the advantages of online education over classroom education is students' rate of presence in the class. The mean score here for online education is 4.5, and for the classroom, education is 3.5. A significant advantage of online education over classroom education is the systematic uploading of study materials. The weighted

average here for the online system is 4.75, and classroom education is 3.5. Students in the border and remote areas are disabled from online education. The mean score here for the online system is five, and for the classroom, education is 3.25. Another advantage is parents' monitoring, where for online education, the weighted average is 4.5, and for the classroom, education is 3.5.

Research shows that another critical factor concerning the advantages of online education is the punctuality of the teacher. The mean score here for online education is 4.75, and for the classroom, education is 4.0. Another significant advantage of online education over classroom education is reduced cost. Online education can cost less due to a variety of reasons. For example, there is no cost of commuting. Assorted expenses related to transport, such as fuel, parking, car maintenance, and public transportation, do not affect the online student.

Here weighted average for online education is 4.5, and classroom education is 3.5. Another vital advantage is mental peace, especially for the students engaged in jobs. They are more relaxed because they are not tied to a fixed schedule. In a traditional classroom setting, class meeting times are set, and the student has no power over this, forcing them to work their schedules around these dates. Most people who choose online learning tend to have other commitments and prefer this learning mode as it gives them power over how they will delegate their time to different projects. The mean score here for online education is 4.50, and for the classroom, education is 3.75. Other advantages are versatile modes of assessment, Parent monitoring, familiarization with modern technologies, maintaining the entire class duration, etc.

**Disadvantages**

Where the weighted average of online education is less than that of classroom education, those are considered the limitations of the online system. The main limitation is the examination process. The mean score here for online education is 2.5, and for the classroom, education is 4.5. Research shows that internet disruption is a fundamental

limitation of online learning. The mean score here is 3, which could be more satisfactory. Another significant limitation is Teachers students interaction. Teacher-student interactions are essential to learning outcomes. Student-centered learning typically focuses on helping students take ownership of education through active participation in lessons, self-reflection, and critical engagement with the material. It stands in contrast to more traditional teacher-centered, lecture-based approaches. Here weighted average for online education is 3.5, and the average for classroom-based education is 4.75. Other limitations are lacking club activities, sports activities, library facilities, campus environment, etc.

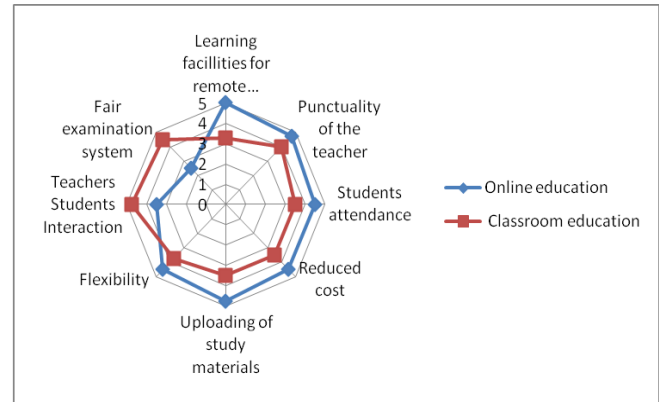


Figure 3: Radar diagram

The above diagram shows the advantages of online education over classroom education and its limitations.

The following data shows the response of the students regarding the combination of online education and classroom-based examination:

Table 4: Combination of online education and classroom examination

Aspects	Excellent (5)	Very good (4)	Good (3)	Average (2)	Not satisfactory (1)	Weighted average
Combination of online education & classroom examination	350	20	30			4.8
Student's enrollment with this combination will be	290	60	20	30		4.53
In saving time and money, this combination will be	250	100	50			4.5
In reducing traffic jams, this combination will be	188	90	56	66		4.00

Results show an incredibly positive response to online education and classroom examination. So a combination of online-based education and classroom-based investigation can increase the percentage of student enrollment in tertiary education without compromising quality.

**Recommendation**

The study strongly recommends a combination of online education and classroom-based examination. This

combination may enhance the enrollment of students who live in remote areas, are engaged in jobs, are married girls, and many others in tertiary education.

**Limitations**

Primary data has been collected only from Dhaka City, and the respondents are from different private universities in Dhaka. The study is only based on the learning behavior of private university students in



Bangladesh. It did not include the government universities. However, there is ample scope to conduct the further study by taking more samples with the inclusion of the government universities of Bangladesh in the future to obtain more accurate results in this regard.

## CONCLUSION

The World Health Organization has declared Covid-19 a pandemic that has posed a contemporary threat to humanity. Nearly 1.6 billion learners worldwide have been affected by the most considerable disruption of education systems in history caused by this pandemic. This has resulted in tremendous crisis-response migration of universities with online learning services as educational platforms. Bangladesh is no exception to this. Challenges and opportunities for the migration methods of universities are discussed. Some advantages of this online education system are a higher rate of student attendance, reduced cost, systematic arrangement of study materials, punctuality of the teachers, etc. Vis-à-vis there are some disadvantages too. The main disadvantage of this online system is conducting fair examinations as there is no way to monitor properly through this platform and the sudden disruption of the internet during classes or investigations. Despite all these challenges in some universities, more students, especially job-holders, are joining online semesters with higher retention rates, finding the e-learning process a more practical option with learning and assessment progressing with reduced distractions and less time investment, as commuting is not a requirement. No matter the number and complexity of challenges, universities in Bangladesh should always look for the best solution and alternative that will fit the purpose of the students prioritizing the quality of education over anything else. Bangladesh and people from different countries and diversities can also be admitted to an online program at any given time. This can be an excellent opportunity to earn a foreign degree, learn about different cultures, and develop interpersonal skills. So, it is time to relook at our conventional education system and blend it with a more flexible, equitable, and inclusive online system.

## REFERENCES

Eng, T. S. (2005). The Impact of ICT on Learning: A Review of Research. *International Education Journal*, 6(5), 635-650. <https://www.learntechlib.org/p/103489/>

Giannini, S. (2020). Covid-19 causing biggest disruption of education system in history: UN. *The Daily Star*. <https://www.thedailystar.net/coronavirus-deadly-new-threat/news/covid-19-causing-biggest-disruption-education-system-history-un-1939709>

Kopp, M., Gröblinger, O., & Adams, S. (2019). Five common assumptions that prevent digital transformation at higher education institutions. *INTED2019 Proceedings*, Pages: 1448-1457. <https://doi.org/10.21125/inted.2019.0445>

Majed, N., Jamal, G. R. A., Kabir, M. R. (2020). Online Education: Bangladesh Perspective, Challenges and Way Forward. *The Daily Star*. <https://www.thedailystar.net/online/news/online-education-bangladesh-perspective-challenges-and-way-forward-1937625>

Mbah, T. B. (2010). The impact of ICT on students' study habits. Case study: University of Buea, Cameroon. *International Journal of Science and Technology Education Research*, 1(5), 107-110. <https://academicjournals.org/journal/IJSTER/article-abstract/39677782182>

Paris, P. G., (2004). E-Learning: A study on Secondary Students' Attitudes towards Online Web Assisted. Learning. *International Education Journal*, 5(1), 98-112. <https://files.eric.ed.gov/fulltext/EJ903841.pdf>

Valasidou, A., & Bousiou-Makridou, D. (2008). The Impact of ICTs in Education: The Case of University of Macedonia Students. *Journal of Business Case Studies (JBSC)*, 4(3), 29-34. <https://doi.org/10.19030/jbcs.v4i3.4765>

Yusuf, M. O., & Balogun, M. R. (2011). Student-Teachers' Competence and Attitude towards Information and Communication Technology: A Case Study in a Nigerian University. *Contemporary Educational Technology*, 2(1), 18-36. <https://doi.org/10.30935/cedtech/6041>

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