Considering the Present Corona Pandemic Situation and its Possible Impact on Education Sector in Bangladesh

Muslima Jannat Mou*

[Abstract : It is a well-known fact that technology has improved our lifestyle and communication systems. It has brought a revolutionary change in the field of education. In this paper, the impact of social media, especially Facebook, is discussed broadly. This study focuses on the past, present, and future status of Facebook in education due to the changing environment caused by the coronavirus pandemic situation. Participants are students who are studying at a public university. Data was collected through a pre-structured questionnaire. This study is quantitative in nature. This study has explored students' experiences of using Facebook to continue communication with others and also to continue studying. Major findings show that during the corona pandemic, Facebook has played a vital role in developing a sense of community within a specific learning environment, whereas before the pandemic situation, Facebook was not considered as an appropriate formal learning platform. On the other hand, participants predict that after a pandemic situation, Facebook's contribution to building teacher-student and student-student relationships will be the most noticeable fact. This study will help both teachers and students think in a different way about using Facebook as a study platform in terms of teaching and learning.]

Key words : Facebook, social media, pandemic, change, study platform.

Introduction

The first attempt was to develop Facebook focusing only on students of colleges and universities in 2004 by students of Harvard University, but gradually it has been used for business, education, and private purposes (Selwyn, 2007). Facebook is accepted worldwide as the most popular social networking site. A maximum number of people from all classes and levels have their own personal Facebook account. Students and teachers are not excluded from this population who use Facebook regularly. Giving information to all the students at a time, the Facebook group plays a vital role and makes it easy for the information giver. Facebook provides a platform for knowledge exchange opportunities for both educators and learners. To integrate different apps like Zoom and Google Meet into the traditional teaching learning process, the Facebook group has helped a lot, and it has brought positive solutions to maintain the continuation of our regular academic sessions.

If a time period is divided based on the outbreak of a pandemic situation, such as before, during, and after a pandemic situation, then the status of Facebook can be

*Lecturer, Department of Bangla, Rabindra University, Bangladesh.

found through the analysis of the data. Before the pandemic situation, students were connected with one another using this social networking site. They were partially familiar with the use of Facebook as an educational platform because they had their own groups where they shared notices, PDF files needed, and discussed several issues related to course materials. But in the Bangladeshi classroom, Facebook was not so popular as an educational platform. On the part of teachers, they did not encourage the use of Facebook in the classroom. For them, it was considered a form of distraction. Students were habituated to this practice. They made groups on Facebook to keep themselves updated, but they were not accustomed to normalizing the use of Facebook in their regular classes. These incidents are true for most situations, except a few. A few teachers were connected with them through Facebook. The teacher himself or herself made groups and invited students to add themselves to the group where he or she informed them of the discussion hour, shared class notes, topic-related content, YouTube videos, and so on. But it was not a common scenario.

Perhaps the situation has now turned completely around from the start of the outbreak of the coronavirus pandemic situation. During this period, schools, colleges, and universities in Bangladesh were closed for more than one and a half years because of health issues concerning the students. The physical presence of the students was not allowed. To face this challenging situation and to continue the whole education system, online learning platforms are introduced from different angles. In the past, mobile phones and other electronic devices were not allowed in the classrooms. During pandemic situations, teachers and students have used these devices as necessary ones, and even the Bangladesh government has offered loans for underprivileged students to buy those devices for ensuring the continuation of regular classes and keeping the system running. Teachers who had never allowed online involvement with students were forced to create several groups on social networking sites at the start of the pandemic in order to maintain communication with students and continue classes, share information and course materials, take assignments, and even take online exams to evaluate students during lockdown. Students' use of social networking sites has increased. Teachers who were taking classes using the Zoom app had to create groups on Facebook to inform students about class time and share PDF files with them. On the other hand, students who thought using Facebook would kill their valuable study time are also using Facebook to make their time valuable by attending live classes, discussions, group work, and so on. The pandemic situation has more or less changed our traditional beliefs about the classroom and teacher-student relationship, and it has introduced a so-called "new normal" situation.

The pandemic situation has not ended yet. So, while we cannot predict what will happen in the future, we can make educated guesses based on our past experiences. We cannot say how long this situation will continue. We cannot claim Facebook as

an educational platform that will dominate or disappear. Several situations may arise, such as: 1) after this pandemic situation, both teachers and students will go back to their previous traditional classroom; 2) students and teachers will continue both online and offline classroom; 3) students as well as teachers will demand a full online teaching and learning system.

The present generation is surrounded by technology and perhaps they expect a digital learning environment. That expectation has been fulfilled to some extent due to the pandemic situation. Facebook can play a positive role where institutional infrastructural deficiencies exist or technical support is not available. There are many educational institutions where multimedia classrooms do not exist. But the demand for students' basic knowledge regarding technology does not disappear. Facebook can provide the platform for sharing video content and some kind of tutorial to make students learn about a specific topic, like how to make a PowerPoint presentation. Facebook can work as a support system to introduce technology and its blessings to students.

This paper covers the answers to the following research questions :

1. How do students evaluate the status of Facebook in education during a pandemic situation?
2. What was the status of Facebook in education before the pandemic situation?
3. What is the future prospect of Facebook as an educational platform?

Literature Review

Theoretical framework

Social Capital Theory and Technology Acceptance Model properly describes the underlying causes of integrating Facebook into the conventional learning and teaching environment. Bourdieu (1986) has given a social capital theory that can explain how social networks or relationships among individuals can be converted into capital or assets, and how this asset works as the basis of some changes, revolutions, and positive outcomes. Facebook is a social networking site. The primary purpose of using Facebook is to build a network with the members of society. This network can create something new, can change an existing culture, and can also destroy an organized system. Facebook provides the opportunity to implement the concept of social capital theory.

On the other hand, Davis (1989), has given an answer to the question of why people will accept new technological innovations by explaining the Technology Acceptance Model. Two major causes of accepting it willingly are its usefulness and ease of use. In terms of online or distance learning, Facebook's usefulness and ease of use make people more likely to use it as a learning platform.

Facebook as a study platform

Several researchers have analyzed whether Facebook can be used as an educational

tool or if it is used only for communication. According to Mazman, and Usluel (2010), Facebook is widely used by students for maintaining communication with friends, colleagues, classmates, and so on. Facebook, being a medium for communication, can play a vital role in education. Maintaining communication with classmates and colleagues facilitates the teaching and learning process. Using Facebook opens the door of collaboration, and Facebook is an effective platform for sharing academic information. So, the major advantages of Facebook, if tagged with the purpose of educational usage, such as communication, collaboration, and sharing information, may have a positive impact.

Wise, Skues , and Williams (2011) have worked together to get the answer to whether Facebook is only promoting social engagement or also academic involvement while considering this platform as a facilitating tool in higher education. The answer is that Facebook is an effective platform for social engagement but not so much for academic engagement. Students with higher academic records spend less time on facebook than students with low academic records. Overall, this research comes to the conclusion that Facebook, instead of being a facilitating tool in education, distracts the attention of university students. When comparing two Facebook groups, one is for social interaction and the other is for academic discussion and sharing of information, it is found that students' being added to the group for educational engagement turns this into a platform for interaction, not a platform for academic discussion. Analyzing several groups like these, it is concluded that Facebook promotes social but not academic purposes.

Buzzetto.-More (2012) considered social networking sites, mainly Facebook, as instructional tools to extend the instructions. From their content analysis, it is found that social networking sites have engaged the students positively. Students' response rates have increased as they frequently comment, ask questions, and share information. The students' participation in the original posting is noticeable. The result of the survey shows students have shown their positive attitude towards the use of social networking sites, especially Facebook in education, because using Facebook has enhanced their internal communication, increased engagement, and helps in building community. They do not only want a traditional classroom environment. They perceive the use of social networking sites with traditional classroom learning as side by side.

Leaver and Kent (2014) have talked about Massively Open Online Courses (MOOCs) and the use of Facebook as an online education platform. The popularity of MOOCs is increasing day by day. As it is operated or continued using an online platform, Facebook, being an online platform with its educational value, can also play a vital role in this sector.

According to Menzies, Petrie, and Zarb (2017), use of Facebook has increased because Facebook is used not only as a social site but also as an educational platform. Use of Facebook is an effective means of communication. To discuss

different topics, different groups can be easily introduced to use Facebook as a medium of interaction, communication, and discussion. Almost all students are familiar with Facebook. That's why they can easily adopt the educational purposes served by Facebook. Facebook's usability being easy for students provides comfort rather than other social media. Upon gaining the status of moderators, both teachers and students enjoy the freedom of posting and deleting posts at their convenience. Though in terms of using Facebook, privacy is questioned, participants are not so much concerned with this issue. Overall, students' positive responses were recorded for using Facebook for educational purposes.

Voivonta, & Avraamidou (2018) focus on Facebook's educational value. The author's primary concern is how Facebook can be used effectively as an educational tool. Though students' use of Facebook is targeted to serve educational purposes, it ends only by increasing communication among friends, family members, etc. (Davis 2012, Grosseck, Bran, & Tiru 2011, cited in Voivonta & Avraamidou 2018). Teachers' initiatives to integrate technology into traditional classroom settings are introducing an inquiry-based learning system, creating opportunities for students to use different technologies as per their choices and explorations, and encouraging "online learning communities" by using social networking sites like Facebook. Though suggestions have been made to integrate Facebook into professional learning, the integration of Facebook into professional learning and its success is not yet confirmed.

The Benefits of Using Facebook in Education

Selwyn (2007) agrees with the fact that Facebook accelerates communications among batch mates, adding the benefits of using Facebook as a means of educational support as well as emotional support. Educational utilization of Facebook by students is supported by five major themes such as: describing and discussing students' experiences at the university, changing views on pragmatic information, sharing pedagogical details, and sharing funny or amusing stuff on Facebook (Selwyn, 2007, as cited in Mazman and Usluel , 2010).

Lam (2012) did research on the students of the School of Continuing and Professional Studies and the Chinese University of Hong Kong and found that the benefits of Facebook use increase students' motivation for learning. Four major benefits found while doing this research are: reciprocal action benefit, exchanging of information benefit, community-based alliance benefit, and engagement benefit.

Bateman and Willems (2012) identified advantages of integrating Facebook into higher education are: an organized circle for geographically scattered groups, possible different learning handling systems, teaching from a person of the same status or age, and materials exchange.

Cristescu and Iordache (2017) have analyzed the advantages of the learning facilitation platforms offered by social networking sites, specifically Facebook. The

following are the major benefits discovered: easy communication, an effective way of sending information quickly, providing ease of access, interaction facility, means of development, platform for facilitation, more opportunities for cooperation, and easy information accessibility.

The Drawbacks of Using Facebook in Education

Bateman, and Willems (2012) identified disadvantages of integrating Facebook into higher education are: indecision about whether to be friends or not; risk of identity stealing; not being a private domain; harassment caused by third parties and bullying using digital devices; and virtual honesty.

Cristescu, and Iordache, (2017) have identified disadvantages of study platforms offered by social networking sites, specifically Facebook, including the possibility of sending wrong information, wastage of time, dependency, fewer opportunities for face-to-face interaction, copying tendency, possibility of information not understood properly, absence of individual's progress, absence of academic performance, difficulty in accessing different contents, lethargy, and absence of particular agreement.

The above mentioned studies have analyzed the opportunities of using Facebook as a study platform and the advantages and disadvantages of integrating Facebook into higher education. These studies were conducted before the breakout of the corona pandemic (in 2019), and this pandemic situation has brought lots of changes in the education sector. For keeping the continuation of a country's education system, both teachers and students are supposed to adopt an online teaching and learning system, and Facebook is working here as an online learning facilitating tool. Now the experience of using Facebook is different from the experience of using it before the corona pandemic situation. The main focus of this paper is to analyze the practical experiences of students' use of Facebook for educational purposes in a pandemic situation.

Methodology

Sampling : A total of one hundred and four Bangladeshi university students participated in this research and have given their valuable opinions by putting tick marks on the previously prepared questionnaire. Students are studying at a public university. That's why they are called "tertiary level students." All of them are over 18 and less than 30. Students from the Management Studies department, the Economics department, the Cultural Heritage and Bangladesh Studies department, and the Rabindra Studies department participated. Obviously, these departments are non-technical and do not demand practical experience and lab work. For this reason, during this pandemic situation, it was not difficult for them and also for the teachers to continue online classes. Their responses reflect their experiences, expectations, and predictions. No specific requirements were set to select the participants, and they were selected on the basis of availability. That's why this sampling is called "convenience sampling."

Instrument & Procedure : This research is quantitative in nature. A prepared questionnaire was used to get responses from participants. Participants were given a printed questionnaire and detailed instructions on how to complete it. The questionnaire was taken from Buzzetto-More (2012) and edited to serve the purpose of this research paper. The questionnaire is set up following the five-point Likert Scale, indicating strongly disagree (1), disagree (2), neutral (3), agree (4), strongly agree(5), to measure students' perceptions. Data is collected from primary sources as direct responses are collected from participants through a questionnaire. After getting responses from the participants, the printed questionnaire was checked one by one by the researcher. Incomplete responses were found and those were removed before analyzing the responses . Participants put tick marks on the questionnaire based on their experiences, and all the responses were categorized according to the theme. Pie chart, table and column are used to represent the data.

Findings

Hours spent online during, pre and post pandemic situation.

Hours spent online during pandemic		Hours spent online before pandemic		Hours spent online after pandemic	
0-30 minutes	0%	0-30 minutes	19.23%	0-30 minutes	11.54%
1-3 hours	26.92%	1-3 hours	65.38%	1-3 hours	46.15%
4-6 hours	61.54%	4-6 hours	11.54%	4-6 hours	26.92%
7-9 hours	11.54%	7-9 hours	0%	7-9 hours	11.54%
10-12 hours	0%	10-12 hours	3.85%	10-12 hours	3.85%

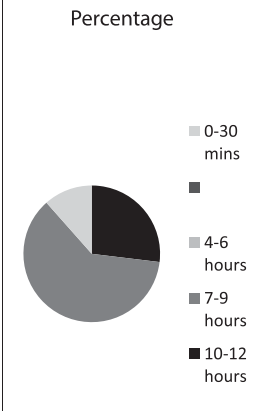


Figure A

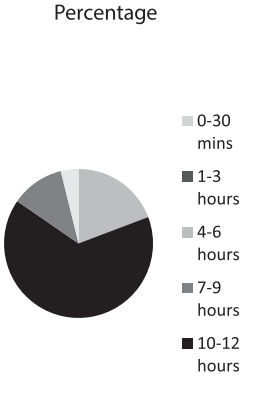


Figure B

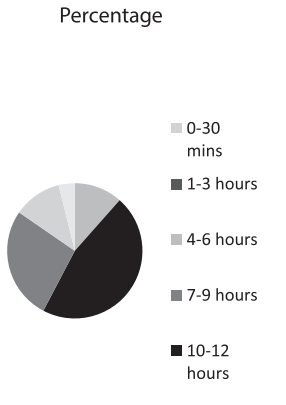


Figure C

Table 1 : Collected data from participants are presented using table and pie chart

The above shown pie charts show the percentage of students spending time on Facebook per day during a pandemic, before a pandemic, and after a pandemic situation. Figure A represents the data that during a pandemic situation, 0% of participants are using Facebook for 0-30 minutes, 26.92% are for 1-3 hours, 61.54% are for 4-6 hours, 11.54% are for 7-9 hours, and 0% for 10-12 hours. Figure B shows that before the pandemic situation, 19.23% of participants used Facebook for 0-30 minutes, 65.38% used it for 1-3 hours, 11.54% used it for 4-6 hours, 0% used it for 7-9 hours and 3.85% used it for 10-12 hours. Another figure named C shows that after a pandemic situation, 11.54% of participants will use Facebook for 0-30 minutes, 46.15% will use it for 1-3 hours, 26.92% will use it for 4-6 hours, 11.54% will use it for 7-9 hours, and 3.85% will use it for 10-12 hours according to their prediction.

Item 1

Contribution of Facebook in building teacher-student and student-student relationship

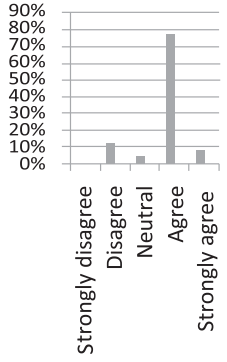
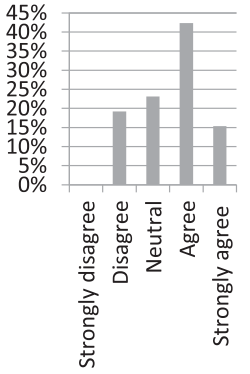
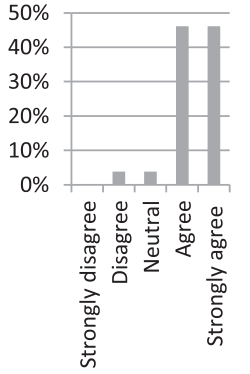
Status of Facebook during pandemic		Status of Facebook before pandemic		Status of Facebook after pandemic	
Facebook contributes in building both teacher-student and student-student relationship	1-Strongly disagree (0%) 2-Disagree (11.54%) 3-Neutral (3.85%) 4-Agree (76.92%) 5-Strongly agree (7.69%)	Facebook contributed in building both teacher-student and student-student relationship	1-Strongly disagree (0%) 2-Disagree (19.23%) 3-Neutral (23.08%) 4-Agree (42.31%) 5-Strongly agree (15.38%)	Facebook will contribute in building both teacher-student and student-student relationship	1-Strongly disagree (0%) 2-Disagree (3.85%) 3-Neutral (3.85%) 4-Agree (46.15%) 5-Strongly agree (46.15%)
					
Mean	3.81	Mean	3.54	Mean	4.35

Figure 1 : Comparative representation of participants' responses to item no. 1.

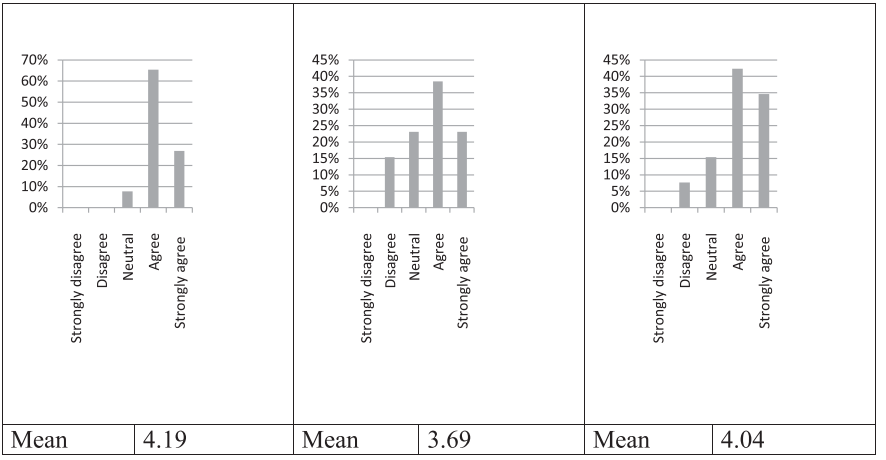
response to the statement "Facebook contributes to building both teacher-student and student-student relationships" during the pandemic situation, 76.22% of participants agreed, 7.69% strongly agreed, 3.85% of participants were neutral, 11.54% of participants disagreed, and 0% of participants strongly disagreed. The mean value for this statement is 3.81, which is close to 4. This means participants agree with this statement.

In response to the statement "Facebook contributed to building both teacher-student and student-student relationships" before the pandemic situation, 42.31% of participants agreed, 15.38% of participants strongly agreed, 23.08% of participants were neutral, 19.23% of participants disagreed, and 0% of participants strongly disagreed. The mean value for this statement is 3.54, which is close to 4. This means all participants agree with this statement.

In response to the statement "Facebook will contribute to building both teacher-student and student-student relationships" after the pandemic situation, 46.15% of participants agreed, 46.15% of participants strongly agreed, 3.85% of participants were neutral, 3.85% of participants disagreed, and 0% of participants strongly disagreed. The mean value for this statement is 4.35, which is close to 4. This means participants agree with this statement. Data found through the analysis of the questionnaire is graphically represented in figure 1.

Item 2
Role of Facebook in developing a sense of community within a specific learning environment

Status of Facebook during pandemic		Status of Facebook before pandemic		Status of Facebook after pandemic	
Facebook plays a vital role in developing a sense of community within a specific learning environment	1-Strongly disagree (0%) 2-Disagree (0%) 3-Neutral (7.69%) 4-Agree (65.38%) 5-Strongly agree (26.92%)	Facebook played a vital role in developing a sense of community within a specific learning environment	1-Strongly disagree (0%) 2-Disagree (15.38%) 3-Neutral (23.08%) 4-Agree (38.46%) 5-Strongly agree (23.08%)	Facebook will play a vital role in developing a sense of community within a specific learning environment	1-Strongly disagree (0%) 2-Disagree (7.69%) 3-Neutral (15.38%) 4-Agree (42.31%) 5-Strongly agree (34.62%)



Mean	4.19	Mean	3.69	Mean	4.04

Figure 2 : Comparative representation of participants' responses to item no. 2

Participants' responses to the statement "Facebook plays a vital role in developing a sense of community within a specific learning environment" during a pandemic situation showed the following results: 65.38% of participants agreed, 26.92% of participants strongly agreed, 7.69% of participants were neutral, 0% of participants disagreed, and 0% of participants strongly disagreed. The mean value for this statement is 4.19, which is close to 4. This means participants agree with this statement.

Participants' responses to the statement "Facebook played a vital role in developing a sense of community within a specific learning environment" before the pandemic situation showed the result that 38.46% of participants agreed, 23.08% of participants strongly agreed, 23.08% of participants were neutral, 15.38% of participants disagreed, and 0% of participants strongly disagreed. The mean value for this statement is 3.69, which is close to 4. This means all participants agree with this statement.

Participants' responses to the statement "Facebook will play a vital role in developing a sense of community within a specific learning environment" after the pandemic situation showed the following results: 42.31% of participants agreed, 34.62% of participants strongly agreed, 15.38% of participants were neutral, 7.69% of participants disagreed, and 0% of participants strongly disagreed. The mean value for this statement is 4.04, which is close to 4. This means participants agree with this statement. Figure 2 depicts the results of the questionnaire analysis in graphic form.

Item 3
Role of Facebook for ensuring ease in case of teaching and learning process

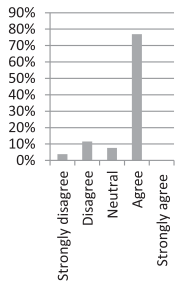
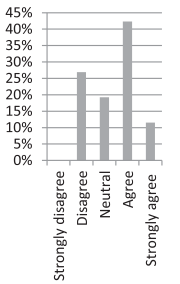
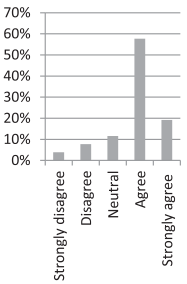
Status of Facebook during pandemic		Status of Facebook before pandemic		Status of Facebook after pandemic	
Facebook provides ease in case of teaching and learning process	1-Strongly disagree (3.85%) 2-Disagree (11.54%) 3-Neutral (7.69%) 4-Agree (76.92%) 5-Strongly agree (0%)	Facebook provided ease in case of teaching and learning process	1-Strongly disagree (0%) 2-Disagree (26.92%) 3-Neutral (19.23%) 4-Agree (42.31%) 5-Strongly agree (11.54%)	Facebook will provide ease in case of teaching and learning process	1-Strongly disagree (3.85%) 2-Disagree (7.69%) 3-Neutral (11.54%) 4-Agree (57.69%) 5-Strongly agree (19.23%)
					
Mean	3.58	Mean	3.38	Mean	3.88

Figure 3 : Comparative representation of participants' responses to item no. 3

76.92% of participants agreed with the statement "Facebook provides ease in the case of the teaching and learning process" during a pandemic situation. 0% agreed strongly, 7.69% were neutral, 11.54% disagreed, and 3.85% disagreed strongly. The mean value for this statement is 3.58, which is close to 4. This means participants agree with this statement.

Before the pandemic situation, 42.31% of participants had shown agreement with this statement, `Facebook provided ease in case of teaching and learning process' 11.54% of participants had shown strong agreement, 19.23% of participants had shown a neutral attitude, 26.92% of participants had shown disagreement, and 0% of participants had shown strong disagreement. The mean value for this statement is 3.38, which is close to 3. This means participants are neutral regarding this statement.

"Facebook will provide ease in case of teaching and learning process" after a pandemic situation, 57.69% of participants agreed with this statement, 19.23% of participants agreed strongly, 11.54% of participants were neutral, 7.69% of participants disagreed, and 3.85% of participants strongly disagreed .The mean value for this statement is 3.88, which is close to 4. This means participants agree with this statement. Figure 3 depicts the results of the questionnaire analysis in graphic form.

Item 4
As a learning tool Facebook's contribution to make classes more interactive and interesting

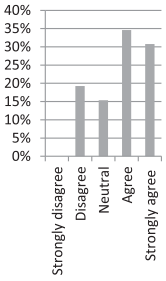
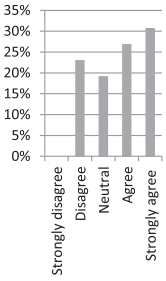
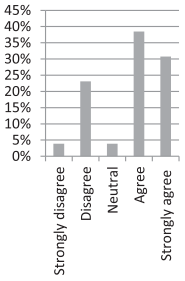
Status of Facebook during pandemic		Status of Facebook before pandemic		Status of Facebook after pandemic	
Use of Facebook as a learning tool makes classes more interactive and interesting	1-Strongly disagree (0%) 2-Disagree (19.23%) 3-Neutral (15.38%) 4-Agree (34.62%) 5-Strongly agree (30.77%)	Use of Facebook as a learning tool made classes more interactive and interesting	1-Strongly disagree (0%) 2-Disagree (23.08%) 3-Neutral (19.23%) 4-Agree (26.92%) 5-Strongly agree (30.77%)	Use of Facebook as a learning tool will make classes more interactive and interesting	1-Strongly disagree (3.85%) 2-Disagree (23.08%) 3-Neutral (3.85%) 4-Agree (38.46%) 5-Strongly agree (30.77%)
					
Mean	3.81	Mean	3.65	Mean	3.69

Figure 4 : Comparative representation of participants' responses to item no.4

When participants were asked to respond to the statement "Use of Facebook as a learning tool makes classes more interactive and interesting" during the pandemic situation, 34.62% of participants agreed, 30.77% of participants strongly agreed, 15.38% of participants were neutral, 19.23% of participants disagreed, and 0% of participants strongly disagreed. The mean value for this statement is 3.81, which is close to 4. This means participants agree with this statement.

When participants were asked to respond to the statement "Use of Facebook as a learning tool made classes more interactive and interesting" before the pandemic situation, 26.92% of participants agreed, 30.77% of participants strongly agreed, 19.23% of participants were neutral, 23.08% of participants disagreed, and 0% of participants strongly disagreed. The mean value for this statement is 3.65, which is close to 4. This means all participants agreed with this statement.

When participants were asked to respond to the statement "Use of Facebook as a learning tool will make classes more interactive and interesting" after the pandemic situation, 38.46% of participants agreed, 30.77% of participants strongly agreed, 3.85% of participants were neutral, 23.08% of participants disagreed, and 3.85% of participants strongly disagreed. The mean value for this statement is 3.69, which is close to 4. This means participants agree with this statement. Data found through the analysis of the questionnaire is graphically represented in figure 4.

Item 5
Role of Facebook as a learning platform to increase students' engagement

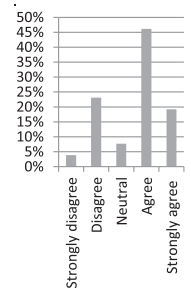
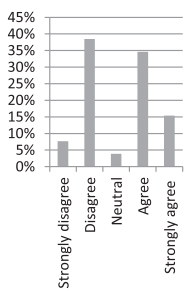
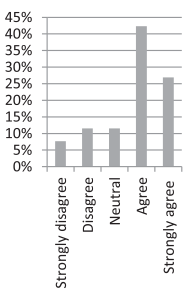
Status of Facebook during pandemic		Status of Facebook before pandemic		Status of Facebook after pandemic	
Facebook as a learning platform increases students' engagement	1-Strongly disagree (3.85%) 2-Disagree (23.08%) 3-Neutral (7.69%) 4-Agree (46.15%) 5-Strongly agree (19.23%)	Facebook as a learning platform increased students' engagement	1-Strongly disagree (7.69%) 2-Disagree (38.46%) 3-Neutral (3.85%) 4-Agree (34.62%) 5-Strongly agree (15.38%)	Facebook as a learning platform will increase students' engagement	1-Strongly disagree (7.69%) 2-Disagree (11.54%) 3-Neutral (11.54%) 4-Agree (42.31%) 5-Strongly agree (26.92%)
					
Mean	3.54	Mean	3.12	Mean	3.69

Figure 5 : Comparative representation of participants' responses to item no. 5

46.15% of participants agreed, 19.23% of participants strongly agreed, 7.69% of participants were neutral, 23.08% of participants disagreed, and 3.85% of participants strongly disagreed with the statement "Facebook as a learning platform

increases students' engagement" during a pandemic situation. The mean value for this statement is 3.54, which is close to 4. This means participants agree with this statement.

Whereas 34.62% of participants agreed, 15.38% of participants strongly agreed, 3.85% of participants were neutral, 38.46% of participants disagreed, and 7.69% of participants strongly disagreed with the statement "Facebook as a learning platform increased students' engagement" before the pandemic situation. The mean value for this statement is 3.12, which is close to 3. This means participants are neutral regarding this statement.

On the other hand, 42.31% of participants agreed, 26.92% of participants strongly agreed, 11.54% of participants were neutral, 11.54% of participants disagreed, and 7.69% of participants strongly disagreed with this statement "Facebook as a learning platform will increase students' engagement" after the pandemic situation. The mean value for this statement is 3.69, which is close to 4. This means participants agree with this statement. Data found through the analysis of the questionnaire is graphically represented in figure 5.

Item 6
Contribution of Facebook to increase class discussions

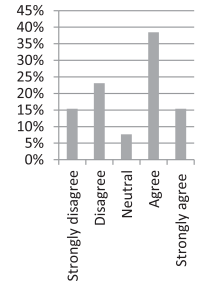
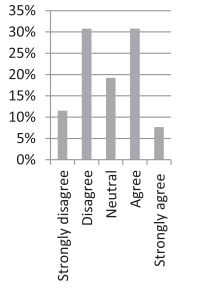
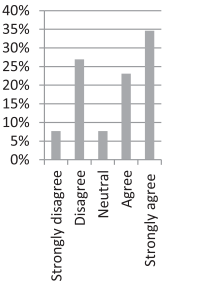
Status of Facebook during pandemic		Status of Facebook before pandemic		Status of Facebook after pandemic	
Facebook increases class discussions	1-Strongly disagree (15.38%) 2-Disagree (23.08%) 3-Neutral (7.69%) 4-Agree (38.46%) 5-Strongly agree (15.38%)	Facebook increased class discussions	1-Strongly disagree (11.54%) 2-Disagree (30.77%) 3-Neutral (19.23%) 4-Agree (30.77%) 5-Strongly agree (7.69%)	Facebook will increase class discussions	1-Strongly disagree (7.69%) 2-Disagree (26.92%) 3-Neutral (7.69%) 4-Agree (23.08%) 5-Strongly agree (34.62%)
					
Mean	3.15	Mean	2.92	Mean	3.5

Figure 6 : Comparative representation of participants' responses to item no. 6

For this statement "Facebook increases class discussions" during a pandemic situation, 38.46% of participants have shown agreement, 15.38% of participants have shown strong agreement, 7.69% of participants have shown neutral attitude, 23.08% of participants have shown disagreement, and 15.38% of participants have shown strong disagreement. The mean value for this statement is 3.15, which is close to 3. This means participants are neutral regarding this statement.

For this statement "Facebook increased class discussions" before the pandemic situation, 30.77% of participants have shown agreement, 7.69% of participants have shown strong agreement, 19.23% of participants have shown neutral attitude, 30.77% of participants have shown disagreement, and 11.54% of participants have shown strong disagreement. The mean value for this statement is 2.92, which is close to 3. This means participants are neutral regarding this statement.

For this statement "Facebook will increase class discussions" after the pandemic situation, 23.08% of participants have shown agreement, 34.62% of participants have shown strong agreement, 7.69% of participants have shown neutral attitude, 26.92% of participants have shown disagreement, and 7.69% of participants have shown strong disagreement. The mean value for this statement is 3.5, which is close to 4. This means participants agree with this statement. Data found through the analysis of the questionnaire is graphically represented in figure 6.

Item 7
Preference of Facebook discussion over whiteboard discussion

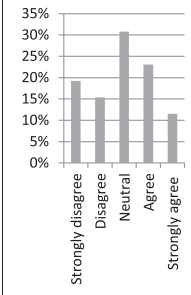
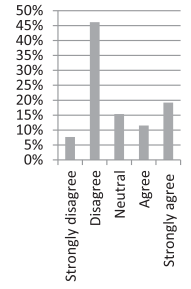
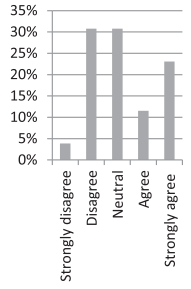
Status of Facebook during pandemic		Status of Facebook before pandemic		Status of Facebook after pandemic	
I prefer Facebook discussion over whiteboard discussion	1-Strongly disagree (19.23%) 2-Disagree (15.38%) 3-Neutral (30.77%) 4-Agree (23.08%) 5-Strongly agree (11.54%)	I preferred Facebook discussion over whiteboard discussion	1-Strongly disagree (7.69%) 2-Disagree (46.15%) 3-Neutral (15.38%) 4-Agree (11.54%) 5-Strongly agree (19.23%)	I will prefer Facebook discussion over whiteboard discussion	1-Strongly disagree (3.85%) 2-Disagree (30.77%) 3-Neutral (30.77%) 4-Agree (11.54%) 5-Strongly agree (23.08%)
					
Mean	2.92	Mean	2.88	Mean	3.19

Figure 7 : Comparative representation of participants' responses to item no. 7

23.08% of participants agreed, and 11.54% of participants strongly agreed with the statement "I prefer Facebook discussion over whiteboard discussion" during a pandemic situation, whereas 30.77% of participants were neutral, 15.38% of participants disagreed, and 19.23% of participants strongly disagreed with the statement. The mean value for this statement is 2.92, which is close to 3. This means participants are neutral regarding this statement.

11.54% of participants agreed, 19.23% of participants strongly agreed with the statement "I preferred Facebook discussion over whiteboard discussion" before the pandemic situation. On the contrary, 15.38% of participants were neutral, 46.15% of participants disagreed, and 7.69% of participants strongly disagreed with the statement. The mean value for this statement is 2.88, which is close to 3. This means participants are neutral regarding this statement.

11.54% of participants agreed, and 23.08% of participants strongly agreed with the statement "I will prefer Facebook discussion over whiteboard discussion" after the pandemic situation, where as 30.77% of participants were neutral, 30.77% of participants disagreed, and 3.85% of participants strongly disagreed with the statement. The mean value for this statement is 3.19, which is close to 3. This means participants are neutral regarding this statement. Data found through the analysis of the questionnaire is graphically represented in figure 7.

Item 8
Noticeable advantages that can make Facebook a better platform for class discussions and announcements over a learning management system like whiteboard

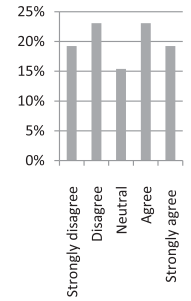
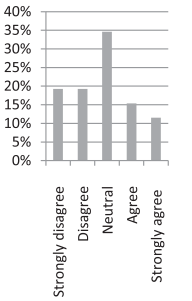
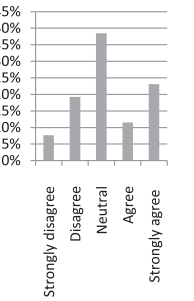
Status of Facebook during pandemic		Status of Facebook before pandemic		Status of Facebook after pandemic	
No added advantages are noticeable that make Facebook a better platform for class discussions and announce-ments over a learning management system like whiteboard	1-Strongly disagree (19.23%) 2-Disagree (23.08%) 3-Neutral (15.38%) 4-Agree (23.08%) 5-Strongly agree (19.23%)	No added advantages were noticeable that made Facebook a better platform for class discussions and announcements over a learning management system like whiteboard	1-Strongly disagree (19.23%) 2-Disagree (19.23%) 3-Neutral (34.62%) 4-Agree (15.38%) 5-Strongly agree (11.54%)	No added advantages are noticeable that will make Facebook a better platform for class discussions and announcements over a learning management system like whiteboard	1-Strongly disagree (7.69%) 2-Disagree (19.23%) 3-Neutral (38.46%) 4-Agree (11.54%) 5-Strongly agree (23.08%)
					
Mean	3	Mean	2.81	Mean	3.23

Figure 8 : Comparative representation of participants' responses to item no.8

Participants' responses to the statement "No added advantages are noticeable that make Facebook a better platform for class discussions and announcements than a learning management system like Whiteboard" during a pandemic situation represent the data that 23.08% agreed, 19.23% strongly agreed, 15.38% were neutral, 23.08% disagreed, and 19.23% strongly disagreed. The mean value for this statement is 3. This means participants are neutral regarding this statement.

Participants' responses to the statement "No added advantages were noticeable that made Facebook a better platform for class discussions and announcements than a learning management system like Whiteboard" before the pandemic situation

represent the data that 15.38% agreed, 11.54% strongly agreed, 34.62% were neutral, 19.23% disagreed, and 19.23% strongly disagreed. The mean value for this statement is 2.81, which is close to 3. This means participants are neutral regarding this statement.

Participants' responses to the statement "No added advantages are noticeable that will make Facebook a better platform for class discussions and announcements than a learning management system like Whiteboard" after the pandemic situation represent the data that 11.54% agreed, 23.08% strongly agreed, 38.46% were neutral, 19.23% disagreed, and 7.69% strongly disagreed. The mean value for this statement is 3.23, which is close to 3. This means participants are neutral regarding this statement. Data found through the analysis of the questionnaire is graphically represented in figure 8.

Item 9
Students' desire to get their course content in Facebook instead of white board

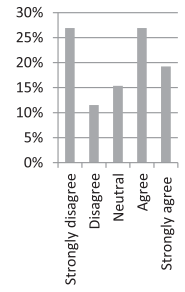
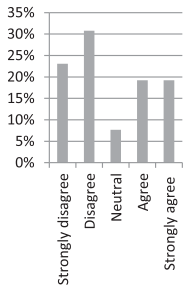
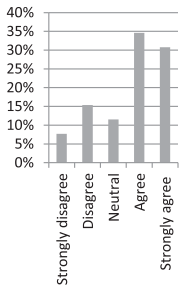
Status of Facebook during pandemic		Status of Facebook before pandemic		Status of Facebook after pandemic	
I would rather ask my course teacher put their course content in Facebook instead of whiteboard	1-Strongly disagree (26.92%) 2-Disagree (11.54%) 3-Neutral (15.38%) 4-Agree (26.92%) 5-Strongly agree (19.23%)	I requested my course teacher put their course content in Facebook instead of whiteboard	1-Strongly disagree (23.08%) 2-Disagree (30.77%) 3-Neutral (7.69%) 4-Agree (19.23%) 5-Strongly agree (19.23%)	I will request my course teacher put their course content in Facebook instead of whiteboard	1-Strongly disagree (7.69%) 2-Disagree (15.38%) 3-Neutral (11.54%) 4-Agree (34.62%) 5-Strongly agree (30.77%)
					
Mean	3	Mean	2.81	Mean	3.65

Figure 9 : Comparative representation of participants' responses to item no. 9

Responses to the statement "I would rather ask my course teacher to put their course content on Facebook instead of a whiteboard" during a pandemic situation represent the data that 26.92% of participants agreed, 19.23% of participants strongly agreed, 15.38% of participants were neutral, 11.54% of participants disagreed, and 26.92%

of participants strongly disagreed. The mean value for this statement is 3. This means participants are neutral regarding this statement.

Responses to the statement "I requested my course teacher put their course content on Facebook instead of a whiteboard" before the pandemic situation represent the data that 19.23% of participants agreed, 19.23% of participants strongly agreed, 7.69% of participants were neutral, 30.77% of participants disagreed, and 23.08% of participants strongly disagreed. The mean value for this statement is 2.81, which is close to 3. This means participants are neutral regarding this statement.

Responses to the statement "I will request my course teacher put their course content on Facebook instead of a whiteboard" after the pandemic situation represent the data that 34.62% of participants agreed, 30.77% of participants strongly agreed, 11.54% of participants were neutral, 15.38% of participants disagreed, and 7.69% of participants strongly disagreed. The mean value for this statement is 3.65, which is close to 4. This means all participants agree with this statement. Data found through the analysis of the questionnaire is graphically represented in figure 9.

Item 10

Consideration of Facebook as an inappropriate informal learning environment

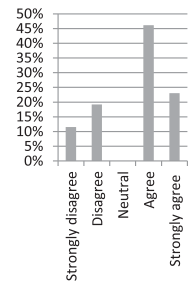
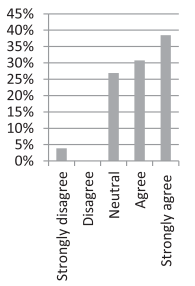
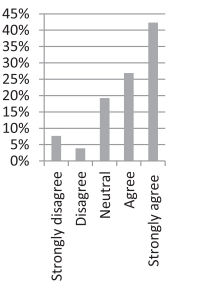
Status of Facebook during pandemic		Status of Facebook before pandemic		Status of Facebook after pandemic	
Facebook is not an appropriate formal learning environment.	1-Strongly disagree (11.54%) 2-Disagree (19.23%) 3-Neutral (0%) 4-Agree (46.15%) 5-Strongly agree (23.06%)	Facebook was not an appropriate formal learning environment.	1-Strongly disagree (3.85%) 2-Disagree (0%) 3-Neutral (26.92%) 4-Agree (30.77%) 5-Strongly agree (38.46%)	Facebook will not be considered as an appropriate formal learning environment.	1-Strongly disagree (7.69%) 2-Disagree (3.85%) 3-Neutral (19.23%) 4-Agree (26.92%) 5-Strongly agree (42.31%)
					
Mean	3.5	Mean	4	Mean	3.92

Figure 10: Comparative representation of participants' responses to item no. 10

46.15% of participants have shown agreement; 23.08% of participants have shown strong agreement; 0% of participants have shown neutral attitude; 19.23% of participants have shown disagreement; 11.54% of participants have shown strong disagreement with the statement "Facebook is not an appropriate formal learning environment" during a pandemic situation. The mean value for this statement is 3.5, which is close to 4. This means all participants agree with this statement.

Before the pandemic situation, 30.77% of participants agreed, 38.46% agreed strongly, 26.72% were neutral 0% disagreed, and 3.85% disagreed strongly with the statement "Facebook was not an appropriate formal learning environment". The mean value for this statement is 4. This means all participants agree with this statement.

After a pandemic, 26.92% of participants agreed with the statement, "Facebook will not be used as a formal learning environment." 42.31% agreed strongly, 19.23% were neutral, 3.85% disagreed, and 7.69% disagreed strongly. The mean value for this statement is 3.92, which is close to 4. This means all participants agree with this statement. Data found through the analysis of the questionnaire is graphically represented in figure 10.

Discussion

The first noticeable change we find from the collected data shows that the maximum number of students (65.38%) spent 1-3 hours online per day before the pandemic situation, but during the pandemic situation, the maximum number of students (61.54%) spent 4-6 hours online per day. The pandemic has increased students' online engagement. Participants predict that in the future, they will come back to their previous time frame as 46.15% of participants predict they will spend 1-3 hours online per day after a pandemic situation. This analysis confirms that the duration of Facebook use has increased due to the breakout of the Corona pandemic situation.

Comparative analysis of the data found through the research indicates that the contribution of Facebook to building relationships among teacher-student and student-student, developing a sense of community within a learning environment, providing ease in the teaching and learning process, making classes more interesting and interactive, and increasing student engagement has increased during the pandemic situation. They agree with the statement that Facebook is not an appropriate environment for learning. Though several changes have occurred due to this pandemic situation, participants do not prefer Facebook discussion over whiteboard discussion. Whereas participants remain silent when they were asked to give their opinion regarding issues like whether the use of Facebook increases class discussion, there are no added advantages that make Facebook a better forum for class discussions and announcements than a learning management system like Whiteboard, and they would rather ask their instructors to put their course content on Facebook instead of Whiteboard.

Participants agree that before the pandemic situation, Facebook contributed to building relationships among teacher-student and student-student, developing a sense of community within a specific learning environment, and making classes more interactive and interesting. They agree that in the past, Facebook was not an appropriate environment for formal learning. Participants remained neutral considering issues like Facebook provided ease in the teaching and learning process, increased student engagement, promoted class discussion, preferenee for Facebook discussion over whiteboard discussion, there were no specific added advantages that made Facebook a better forum for class discussions and announcements over a learning management system like Whiteboard, they requested their instructors to put their course content on Facebook instead of Whiteboard.

After the pandemic situation, analyzed data represented participants' predictions regarding the status of Facebook in education. Participants predict that in the future, Facebook will contribute to building teacher-student and student-student relationships, will develop a sense of community within a specific learning environment, will make classes more interactive and interesting, will provide ease in the case of the teaching and learning process, will increase student engagement, will promote class discussion, and will make the students request their instructors to put their course content on Facebook instead of a whiteboard. Participants show their neutral attitude considering the issues that they will prefer Facebook discussion over whiteboard discussion, Facebook will not be considered as a better forum for class discussions and announcements than a learning management system like Whiteboard. They believe that in the future, Facebook will not be considered as an appropriate formal learning environment. In the case of online learning, the contribution of Facebook, as specified by this study, shows educational utilization of Facebook is noticeable because of the pandemic. Students' responses to the statement "Preference of Facebook discussion over whiteboard discussion" reveal the scenario that educational utilization of Facebook cannot replace the appeal of a conventional classroom environment that exists in Bangladesh.

Conclusion

Several incidents change our lives. The pandemic situation is one of them. It has changed our lifestyle, habits, beliefs, and so on. Our outlook or perspective has also changed a lot. Situations that were viewed negatively are now accepted positively. Before the pandemic situation, in Bangladesh, browsing Facebook in the classroom using electronic devices was not accepted by the system, but the situation has made it possible. Lifestyles have been shaped by the demands of the situation, not by the demands of the person. Conditioning ourselves and coping with the situation by targeting how to get the best out of this arising dilemma is the only option left for us. Before the pandemic, it was an attempt by individuals or institutions to increase the value of Facebook as an educational platform, but during this pandemic

situation, a sudden change has added educational value with the use of Facebook. Now it is high time we compared the overall value-adding possibilities of Facebook use for both individuals and institutions. The introduction of Facebook as a platform for teaching learning practices is not a new incident for both teachers and students. Before the pandemic situation, this had existed, but the user rate has increased tremendously due to this pandemic situation. It has become easy for teachers to get responses as well as personal opinions from students. Whereas, in the traditional classroom, students' shyness and fear kept them away from responding. Here, face-to-face communication is not mandatory to respond. So, the probability of students' participation rate has increased.

Further research can be done by increasing participants' numbers, including participants who are studying technical subjects, focusing teacher's perspective on the status of Facebook in education during, pre and post pandemic situations, comparing public and private university students' perspectives regarding this issue, comparing male and female students' experiences, and also by comparing teachers' and students' experiences of using Facebook as a study platform.

References

Bateman, D., & Willems, J. (2012). Facing off: Facebook and higher education. In *Misbehavior online in higher education*. Emerald Group Publishing Limited.

Bourdieu, P. (1986). The forms of capital. Handbook of theory and research for the sociology of education. JG Richardson. *New York, Greenwood*, *241*(258), 19.

Buzzetto-More, N. A. (2012). Social networking in undergraduate education. *Interdisciplinary Journal of Information, Knowledge, and Management*, *7*(1), 63-90.

Cristescu, I., & Iordache, D. D. (2017). Learning tools offered by online social networks-a qualitative approach. *Revista Romana de Interactiune Om-Calculator*, *10*(4), 271-284.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, 319-340.

Lam, L. (2012). An innovative research on the usage of Facebook in the higher education context of Hong Kong. *Electronic Journal of E-learning*, *10*(4), pp 378-386.

Leaver, T., & Kent, M. (2014). Facebook in education: Lessons learnt. *Digital Culture and Education*, *6*(1), 60-65.

Mazman, S. G., & Usluel, Y. K. (2010). Modeling educational usage of Facebook. *Computers & Education*, *55*(2), 444-453.

Menzies, R., Petrie, K., & Zarb, M. (2017). A case study of Facebook use: Outlining a multi-layer strategy for higher education. *Education and information technologies*, *22*(1), 39-53.

Selwyn, N. (2007). Screw Blackboard... do it on Facebook!': an investigation of students' educational use of Facebook. *Ponencia. En: Poke*.

Voivonta, T., & Avraamidou, L. (2018). Facebook: a potentially valuable educational tool?. *Educational Media International*, *55*(1), 34-48.

Wise, L. Z., Skues, J., & Williams, B. (2011). Facebook in higher education promotes social but not academic engagement. *Changing demands, changing directions. Proceedings ascilite Hobart*, 1332-1342.

Questionnaire

1.How many hours a day do you normally spend online at present?
a) 0-30mins b) 1-3 hours c) 4-6 hours d) 7-9 hours e) 10-12 hours
2. How many hours a day did you normally spend online before this pandemic situation?
a) 0-30mins b) 1-3 hours c) 4-6 hours d) 7-9 hours e) 10-12 hours
3. How many hours a day will you normally spend online after this pandemic situation(when situation will become normal) according to your assumption?
a) 0-30mins b) 1-3 hours c) 4-6 hours d) 7-9 hours e) 10-12 hours

Status of Facebook in education during pandemic situation

No. of Item	Item	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
1.	Facebook contributes in building both teacher-student and student-student relationship					
2.	Facebook plays a vital role in developing a sense of community within a specific learning environment					
3.	Facebook provides ease in case of teaching and learning process					
4.	Use of Facebook as a learning tool makes classes more interactive and interesting					
5.	Facebook as a learning platform increases students' engagement					
6.	Facebook increases class discussions					
7.	I prefer Facebook discussion over whiteboard discussion					
8.	No added advantages are noticeable that make Facebook a better platform for class discussions and announcements over a learning management system like whiteboard					
9.	I would rather ask my course teacher put their course content in Facebook instead of whiteboard					
10.	Facebook is not an appropriate formal learning environment.					

Status of Facebook in education before pandemic situation

No. of Item	Item	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree(5)
1.	Facebook contributed in building both teacher-student and student-student relationship					
2.	Facebook played a vital role in developing a sense of community within a specific learning environment					
3.	Facebook provided ease in case of teaching and learning process					
4.	Use of Facebook as a learning tool made classes more interactive and interesting					
5.	Facebook as a learning platform increased students' engagement					
6.	Facebook increased class discussions					
7.	I preferred Facebook discussion over whiteboard discussion					
8.	No added advantages were noticeable that made Facebook a better platform for class discussions and announcements over a learning management system like whiteboard					
9.	I requested my teacher to put their course content in Facebook instead of whiteboard					
10.	Facebook was not an appropriate formal learning environment.					

Future status of Facebook in education after this pandemic situation

No. of Item	Item	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree(5)
1.	Facebook will contribute in building both teacher-student and student-student relationship					
2.	Facebook will play a vital role in developing a sense of community within a specific learning environment					
3.	Facebook will provide ease in case of teaching and learning process					
4.	Use of Facebook as a learning tool will make classes more interactive and interesting					
5.	Facebook as a learning platform will increase students' engagement					
6.	Facebook will increase class discussions					
7.	I will prefer Facebook discussion over whiteboard discussion					
8.	No added advantages are noticeable that will make Facebook a better platform for class discussions and announcements over a learning management system like whiteboard in future					
9.	I will request my course teacher to put their course content in Facebook instead of whiteboard					
10.	Facebook will not be considered as an appropriate formal learning environment.					