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# Information Technology (IT) and Teaching Method: An Assessment on the Students of Social Science Faculty and Business Faculty of University of Dhaka

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#### Abstract

Bangladesh is a developing country where Information Technology (IT) is ever not highly developed but Government has a dream to develop this sector so that IT can entrance in every sector in Country. Information technology (IT) is an *umbrella term*, the use of computers and telecommunications equipment to store, retrieve, transmit and manipulate data. It is now a part of nearly every aspect of daily life in developing country-Bangladesh and is the backbone of many successful initiatives such as improving teaching quality of education. Information technologies are assumed to play a constructive role in education to make the teaching and learning process more productive through collaboration in an information rich society. Information rich society promotes new practices and paradigms for education where the teacher has to play new role of mentoring, coaching and helping students in their studies rather to play the conventional role of spoon-feeding in the classrooms. Students can learn independently having a wide choice of program selection and access to information. Information technology complements and enhances traditional teaching system through emphasis on the information basis in University of Dhaka. This study attempts to explore the impacts of information technology on teaching as well as learning system of educational institutions. In this research report, mixed method (both qualitative and quantitative method) is used to get an insight view about the related issues. It is observed that IT based learning system is a modern method of teaching and learning process which is helpful both for teachers and students. Keywords: Education, Information Technology, Teaching, Teaching method, Learning process.

#### **Section 1: Introduction**

#### 1.1 Background:

In the era of Globalization, Bangladesh dreams a stunning and ravishing dream where Information Technology broadens the way to come the dream into true. The information age becomes an era of knowledge providing sound and unmatched feasibility for discovery, exchange of information, communication and exploration to strengthen the teaching learning process. Information technologies have affected every aspect of human activity and have a potential role to play in the field of education and training, specially, in Higher education to transform it into an innovative form of experience. The need of new technologies in teaching learning process grows stronger and faster. Information technologies help in promoting opportunities of knowledge sharing throughout the world. These can help the teachers and students having up-to-date information and knowledge. Accurate and right information is necessary for effective teaching and learning. Technology engages learners and animates their imagination. Technology stimulates minds in ways that make a profound and lasting difference. Indeed, technology, for many, is the most important new teaching strategy and learning style introduced in the past 50 years.

One of the basic functions of education is preparation of students for life. This function in 21st century may be participation in an information rich society, where knowledge is regarded as the main source for sociocultural and politico-economical development of countries and/or nations. Information rich societies are developed and dominating and they are controlling the information throughout the world. Information encompasses and relies on the use of different channels of communication, presently called information and communication technologies and would be incorporating better pedagogical methods to cope with such emerging situations.

In Bangladesh for the last 15 years, more and more universities opened departments in this field. For the last 10/15 years, we have been dreaming to change the socio economy condition of the country through the benefit in Information Technology. Different governments have attached significant improvement to IT calling it thrust sector and so on. Efforts have been made to formulate IT policies in order to expedite and accelerate its progress. Meetings, seminars, festivals, exhibitions on IT have become a part of our life. Such as our present Government has already taken initiatives to make Bangladesh as 'Digital Bangladesh'. For this purpose, Govt. has provided 'Doel Laptop' so that students can buy in a lower cost or touch them with technology easily.

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# **1.2 Statement of the problem:**

Information Technology (IT) is a broad subject that deals with technology and other aspects of managing and processing information, especially in large organizations. Students have the power to change the history of a country of a country and they are the future of the country. Therefore, it is very important to give them quality education. Ensuring quality education is a pre-requisite for attainable development. Quality education depends on the quality of teaching of the University of Dhaka. In our country, most of the people are poor. Therefore, they are nearly not able to bear expenses of higher education. IT based learning system is a modern method of teaching and learning process which is helpful both for teachers and students.

The main purpose of the University is to create new areas of knowledge to the society through its students. Since its perception, the University has a distinct character of having distinguished scholars as faculties who have enriched the global pool of knowledge by making notable contributions in the fields of teaching and research. Among various faculties, Business faculty and social science faculty are most important faculties in the sector of advancing education. The University of Dhaka is dedicated to the advancement of learning and is committed to promoting research in all fields of knowledge. However, the Dhaka University is playing an important role in standard education but it is a time to assess "INFORMATION TECHNOLOGY AND TEACHING METHODS" on students of Social Science faculty and Business Studies of University of Dhaka.

1.3 Objectives: The main objective of this research would be-

- > To know the efficiency of University administration system regarding IT based teaching methods.
- > To know the difference between traditional education system and present IT based education system.
- > To know the impact of IT on the relation between teacher and students

#### **1.4 Hypothesis:**

Content-centered presentation by teachers to large groups of students may not have any justification to be dominant method of instruction. In the era of information technology teachers will be spending more time in facilitating students rather delivering lectures in the classrooms. The hypothesis of this research may as follows:

- Teachers may not up to date with new Information technology
- Student may not have access to the modern technology in accordance with the global demand.
- Due to lack of economic and logistic support university authority may not provide IT facility to the students.
- IT may reduce the habit of students to read academic books.
- The uses of IT may vary faculty-wise.

## **1.5 Research Questions:**

In this research report, it will be tried to find out the continuous practices of technology in learning system especially in classroom through a qualitative and with quantitative analysis. Questionnaire will show the definite way to gather objective in this very special research. Here some questions of research are mentioned as follows:

- What is the present situation of learning method in Dhaka University?
- Are the university administration systems effective regarding IT based teaching methods?
- Is there any drawback behind the uses of IT products in teaching methods?
- Is there any difference between traditional education system and present IT based education system.
- Does using of IT vary in accordance with the differences of Faculty and departments?
- Are students satisfied with the present IT based teaching system?
- What measures should be taken for the development of IT based Teaching methods

#### 1.6. Variables: The variables of this research are-



Middle point indicates the Dependent variables and the outside indicates Independent variables. Quality of teaching method depends on available facilities of IT – education software, projector, infrastructural facilities, eagerness of the Authority, financial capacity of the students, IT knowledge of teachers and students, available internet facilities etc. Quality of teaching method may change with the change of IT influence.

#### Section 2: Literature Review:

Over the past 20 years, technology has transformed society and changed many aspects of daily life. The proliferation of technology has led to a growing consensus among educators and the general public that it should play a more integral role in students' education (Culp et al., 2003; CEO Forum on Education and Technology, 2001; Fouts, 2000; Johnson, 2000). Educational technology is not restricted to individual computer use. It can involve other equipment and applications, such as videoconferencing, digital television (allowing students to interact with programs at their own pace), electronic whiteboards, and digital cameras (Jackson, 2008; Education Week, 2007; McCampbell, 2002; Marshall, 2002). Educators have struggled with decisions regarding what types of technology to use and how to use them (Culp et al., 2003). Researchers agree there is not one "right" type of technology or one "right" way to use it; rather, it should match schools' learning and teaching goals and be appropriate for the students who use it (Sivin-Kachala & Bialo, 2000).

Each technology is likely to play a different role in students' learning. For example, word processing and email can improve communication skills; database and spreadsheet programs can enhance organizational skills; and modeling software often increases understanding of math and science concepts (Honey et al., 2005). Experts have suggested that technology can enhance learning by providing students with the following opportunities (Honey et al., 2005; Gahala, 2001; Fouts, 2000; Johnston, 2000; Means, 2000):

- drilling and practicing with increasingly difficult content
- accessing a wide variety of information and gaining knowledge from many sources
- visualizing difficult to understand concepts
- interacting with data, engaging in hands-on learning, and receiving feedback; and
- managing information, solving problems, and producing sophisticated products using tools such as spreadsheets, databases, and word processors

Apple Computer (2005) examined trends in students' use of technology. They reviewed 30 studies on educational technology programs and concluded that students used laptops primarily for writing, taking notes, completing homework assignments, organizing their work, communicating with peers and teachers, and researching topics on the Internet. They tended to use word processing software, web browsers, and email to accomplish these tasks. Those students who used their laptops to complete more complex projects were most likely to use design and multimedia tools, such as presentation software and software for making and editing digital images and movies.

Proponents of educational technology contend that technology accommodates individual learning rates and styles and offers access to learning at any time and in any location. They believe that the use of technology in the classroom provides students with the opportunity to (Jobe & Peck, 2008; Bebell, 2005; Honey et al., 2005; Waddoups, 2004; Gahala, 2001; Healey, 2001):

- acquire the technological skills they will need for future employment
- develop critical thinking, problem-solving, and communication skills

- collaborate with peers
- engage in hands-on learning activities; and
- receive immediate feedback

Advocates also claim that teachers benefit from the introduction of technology into the classroom. Technology gives teachers the ability to tailor instructional materials and assessments to directly address their students' learning needs; offers access to more authentic material to assist in the development and delivery of lessons; and provides additional sources of information for their students to draw upon in the classroom (Dunleavy et al., 2007; Waddoups, 2004; Healey, 2001).

On the other hand, critics list a host of reasons why technology should not be emphasized in schools (Dunleavy et all, 2007; Valdez, 2005; Jackson, 2004; Cooley, 2001; Northwest Regional Educational Laboratory, 2001; Wright, 2001; Blumenfeld et al., 2000; Weiner, 2000; Oppenheimer, 1997). For example, they contend:

- Some educators have endorsed technology indiscriminately, as if the use of computers automatically produces quality teaching and learning experiences.
- Too many schools emphasize technology over learning. For example, the ability to create an attractive document doesn't mean that students have a greater understanding of concepts in the core academic areas
- When spending on technology increases, spending on other important programs and activities (such as art, music, sports, and field trips) decreases.
- Technology is not as cost effective as other interventions because equipment requires extensive support.
- Technological innovations have often proven unusable because schools lack the capacity to link equipment use with instructional objectives.
- The use of technology requires teachers with strong classroom management skills. Teachers must carefully monitor students' use of equipment and often have to provide complicated procedural explanations.
- Computers reduce students' opportunities for socialization
- Some teachers use computers to entertain students with irrelevant activities.
- Children are at particular risk of physical problems, such as repetitive stress injuries or eye strain.

Technology, by definition, is a method for making meaning. Insofar as it engages a system for doing so, meanings are delimited. Heidegger describes modern technology as having the effect of challenging and enframing the world. He writes, "We encounter not the revealing of the world but only the possibilities of transforming it or of using it. Applied to communications, modern technology necessarily displaces the revealing of the world with the characteristics of technology: the world is challenged to mean something, to appear in a particular way, to exist within particular framings, or uses, or gratifications." (Heidegger, 1977) Mumford viewed the enframing character of modern technology as a legacy of earlier habits acquired during the absorption of industrial technologies, in order to further articulate the linkage between technological determinism and technological adaptation (Mumford, 1963 [1934]).

In Standards for Technological Literacy (International Technology Education Association, 2000), the influence of technology on history is considered to be less significant than the role society and technological education plays in the development and use of technology. The variability of institutional cultures and individual communities will have a significant influence on the development, diffusion and absorption of learning technologies. Indeed, in the e-learning environment, the seeker (or synthesizer) of knowledge directs the flow of information. The health practitioner looking for assistance in diagnoses and treatment pulls what is needed from the system and in effect builds the necessary technology. The young person accessing self-help programs and collaborative online projects is defining identity and community need. In this way, contingency replaces technological determinism. (Pannabecker, 2004).

#### Section 3: Methodology

This study is an exploratory type of study, focuses on the teaching method of Business Faculty and Social Science Faculty based on Information Technology (IT). In this research report, mixed method (both qualitative and quantitative method) will be used to get an insight view about the related issues.

Survey is the best method for this selected research because here population is large to observe. I had to survey 100 students of Business Faculty and Social Science Faculty. For this research, I have collected data through preparing a questionnaire with 23 questions of open-ended and close-ended questions by following survey method.

The research area is the University of Dhaka, the oldest University in Bangladesh, a multi-disciplinary research university and is among the top universities in the region. Among different faculties – Faculty of Business Studies and Faculty of Social Science are selected for conducting this research.

Necessary data for the research have been collected from mainly primary sources and various secondary

sources have been used for the convenience of the research study. The primary data are collected through surveying 100 students of selected both Faculties. A mixed questionnaire consists of both close and open type of question has been used as the tool. Mixed questionnaire has been used because in social science research this type of questionnaire is most commonly used. The questionnaire is consisted of two part- Part A and Part B. The secondary sources of data consist of books, newspapers, articles, publications, magazines, websites or internets etc.

## **Sample Frame:**

A sample of 100 students has been chosen from the selected both Faculties. To make the sampling fair enough, equal number of males and females respondents have been chosen. Among 100 respondents 50 are male and 50 are female students. Business faculty students are about 50, among them male is about 25 and female is about 25. In Social Science Faculty, I have considered 25 male and 25 female students. They are from different years, department of selected Faculties of University of Dhaka.

#### Implementation:

If the hypothesis is confirmed then the output or the result of the research may be implemented in various sectors in University of Dhaka. For the development of Information technology and teaching style, the result of this research may be implemented. The policy maker of university of Dhaka may follow the result of this research in policy related with teaching methods. On the other hand, if the hypothesis is not confirmed then I will try to hold another research in next time. In addition, the research may be the record for the next batches student.

## Section 3: Conceptual overview

This section provides clear idea of the keywords and the theoretical clarification of issues of the study. An overview of the used terms is precisely thrashed out below.

Good teacher produce good students. That is the primary purpose of teaching. Teaching is one of the most complicated jobs today. It demands broad knowledge of subject matter, curriculum and standards; enthusiasm, a caring attitude and a love of learning; knowledge of discipline and classroom management techniques; and a desire to make difference in the lives of students. Teaching is the means whereby the experienced members of the group guide the immature and infant members of the group, guide the immature and infant members of the group, guide the immature and infant members in their adjustment to life. Teaching is the means whereby society trains the young in a selected environment as quickly as possible to adjust themselves to the world in which they alive.

A teaching method comprises the principles and methods used for instruction. Commonly used teaching methods may include class participation, demonstration, recitation, memorization, or combinations of these. The choice of teaching method or methods to be used depends largely on the information or skill that is being taught, and it may be influenced by the aptitude and enthusiasm of the students.

Best techniques of teachings may- Organization and management of the class room, Lesson planning, The assignment, Questioning, Directing pupils study activities, The socialized classroom, Diagnosis, Remedial teaching, The review, The appraisal of pupil progress, Promoting pupils and reporting their progress etc.

Sophisticated research becomes a toothless-tiger without IT where it is any education sector or else. Information Technology *means the use of hardware, software, services, and supporting infrastructure to manage and deliver information using voice, data, and video* Teaching Methods.

Information technologies affect the teaching learning process in different ways. These helps the teachers in preparing lecture notes for interesting presentation and also facilitates the students on the other hand. Different technologies help the teachers and students according to their respective nature and capabilities of storage and presentation. Newer teaching methods may incorporate television, radio, computer, and other modern devices. Some educators believe that the use of technology, while facilitating learning to some degree, is not a substitute for educational methods that encourage critical thinking and a desire to learn. Inquiry learning is another modern teaching method.

Information technologies may promote the opportunities of restructuring the teaching learning process. These can transform teaching and learning by offering alternatives to the teacher provided information, access to virtually unlimited resources and opportunities for real world communication, collaboration and competition developing awareness – recognizing that something is wrong or different

Students Use Information Technologies to improve the ways of learning in new learning fashions, extend the ability and skills of applying their learning in real situation, work in groups for cooperative and collaborative learning, develop self-learning habits at their own pace and time, use right information at right time to achieve right objective, exchange learning experiences and information with others students and teachers living anywhere in the world.

Therefore-

Teachers Use the Information Technologies to present the material in more interesting and attractive way, guide and help students in searching the qualitative material, make best use of time, coach the students, provide individualized instruction, direct the students toward cooperative as well as collaborative learning activities, prepare learning material for students, diagnose the learning problem of students and help them to overcome, solve the study problems of students etc.

#### Section 4: Empirical Findings 4.1 Data Presentation and Analysis:

I have collected empirical data information in both quantitative and qualitative from through using of survey, questioner etc. To make dynamic analysis of my research problem I have chosen some broad independent variables such as gender difference, faculty difference, resident \ nonresident, financial capability, infrastructural IT facilities- projector, available internet connection etc. The diversity of the opinions of students on the basis of variables is analyzed by using few statistical computations.

Data collected from the field, presented through descriptions and analysis. The responses of each item of close-ended type are analyzed in terms of number (frequency) of responses. The frequencies further are converted into percentages to describe the result of the item to arrive at the findings. The data collected by the respondents to each of the open-ended items are categorized based on their contents into different clusters along with their frequencies.

The results of questionnaire survey, which is obtained from 100 students from Business Faculty and Social Science Faculty, University of Dhaka, have been given below:

## **Respondent Information:**

	Social Science	e Faculty	Total
Female	Male	Female	
25	25	25	100
	25	Female Male	25 25 25

According to this data, 100 students are counted from Business Faculty and Social Science Faculty. Here Business faculty students are about 50, among them male is about 25 and female is about 25. In Social Science Faculty, I have considered 25 male and 25 female students. All these students are prime determinant of my research, with their help, my research have been accomplished.

Living Area	
Resident	Non-resident
55	45

In this research, I use the term as living area where exist resident and non-resident dimensions because of identifying IT used variations. This table indicates about 55 resident students and about 45 non-resident students of Business faculty and Social Science faculty.

Last 10 years of living place	Rural	Semi urban	Urban	City	Total
	13	23	32	32	100

I include the option is that about last 10 years of living place of students because using IT may vary on this pattern. Here exists rural, semi-urban, urban, city area to identify their basic background. Rural is about 13, semi-urban is about 23, urban is about 32 and city is about 32.

## PART-A

Part- A contains close-ended questions that make respondents easy to reply the questions. The Questions of this part are given below with data descriptions and analysis.

(Question 1) Have you read any course on basic computer knowledge in your department?

Perspective	Observed	Respondents		Total %
	value	BF (n=50)	SSF (n=50)	
Yes	65	45	20	65%
No	35	5	30	35%
Total	100			100%

According to this data, the students express information about the course on basic computer knowledge from their perspective department on Yes or No option. About 65 students replied Yes and 35 students replied No. Among the Yes respondents, 45 respondents are from Business faculty and 20 respondents are from Social Science faculty, total includes 65%. The other No respondents 5 respondents from Business faculty and 30 respondents from Social Science faculty, total 35 % replied that there is not any course on basic computer knowledge in their department.

# It is clear from the table that Business Faculty is more enriched than Social Science Faculty. Majority departments of Business Faculty have the course on basic computer knowledge. However, it is a matter of sorrow that all the departments of social science faculty have no computer course excepting few departments. The world is changing day by day and our demand is also changing with competition. All the departments should think market demand. According to this data, Business Faculty is more market- oriented as it adds the basic computer course in their department. In today any job demands basic computer knowledge as Business faculty

adds job-related course. Business Faculty students are more advanced in Information Technology than the students of Social science faculty. Social Science faculty lags behind in Information Technology excepting some departments such as Public Administration, International relationship, Developing Studies etc. so it varies from department to department.

Perspectives	Observed Value	Respondents		Total %
		S.S Faculty (n=50)	B. faculty (n=50)	
Less Benefitted	10	5	5	10%
Moderately Benefitted	44	20	24	44%
Highly benefitted	11	5	6	11%
No comment	35	20	15	35%
Total	100			100%

Question 2	) If ·	ves ((	) 1)	Have	von	benefitted	enough	from	that	course?
Question 2	, 11	Y C3 ( L	/•1 J•	, maye	you	Denenitieu	chough	11 UIII	unai	course.

This table is drawn from (Question 1) ,those who have basic computer course in the department answered this question is that less benefitted 10 students- SS faculty 5 respondents and B. faculty 5 respondents, moderately benefitted 44 students -20 from SS faculty and 24 respondents from B. faculty, highly benefitted 11 students -5 respondents from S.S. faculty and 6 respondents from B. faculty. Those have no basic computer course in their department is about 35 students- 20 respondents from S.S. faculty and 15 respondents from B. faculty (total 35%) students have no comments.

# It seems that those have basic computer course in their department, they are benefitted in various ways. Business Studies students are more benefitted that Social Science students. Computer course provide knowledge about software, hardware for using internet, projector facilities, how to use Microsoft word, how to make presentation through slide etc. Students who have computer course in their department can easily search any book related information in the internet as they have the knowledge. They can easily prepare assignment, research paper by proper using computer knowledge. Basic computer course broadens student knowledge that helps to compete with the competitive world. In Digital age, basic computer knowledge benefits the students. (Question 3) "IT based learning system available to you?"

Perspectives	Observed Value	Respondents		Total%
		B.Faculty (n=50)	S.S.Faculty (n=50)	
Agree	50	25	25	50%
Moderately	45	25	20	45%
Disagree	5	00	5	5%
Total	100			100%

The table (3) is presented on IT based learning system available to each respondent. Majority of the students (50) - B.F 25 respondents and S.S.F 25 respondents are agree considering that IT based learning system is available to them. 45 students replied moderately -25 from B.F and 20 respondents from SSF. Disagree is also come from 5 respondents- 0 from B.F and all 5 respondents from SSF because of not available IT based learning system to them.

# It seems that Authority of all faculties is not seriously concerned of providing IT facilities available to the students. Half of the students get IT facilities available to them. Authority of Business studies ensures IT based learning system for the students and they develop other facilities that make easy the way of getting IT available to students. Authority of Social science faculty don't provide IT-based learning system for all departments because of their low curriculum – traditional learning method, infrastructure facilities or financial problem etc. only some departments of Social science faculty provide IT-based learning system to their students. (Ouestion 4) How much time do you use internet for Daily study?

Hour	Less than 1	1	2	3	4	Total
Respondents	25	30	32	8	5	100
Average usage	of time $= 2.5$ Hou	rs(Both male	e and Female)			
Male =	3 hours					
Female	e = 2 hours					
Busine	ss Faculty =1 hou	r				
Social	Science faculty =	2 hour				
Reside	nt = 2 hour					
Nonres	sident = $2.5$ hour					
Correlation = (-	301) Weak but ne	egative corre	lation on the bas	sis of gender		

Correlation= (-.301) Weak but negative correlation on the basis of gender.

We measured the correlation of using Internet based on Gender. There is negative and weak correlation between male and female in using internet.

According to this data, the average use of internet for both male and female is 2.5 hours. However, male spends 3 hours and female spends 2 hours. The students of Business faculty spend less as 1 hour than students of

Social science faculty as 2 hours. Resident students use internet for study 2 hour and non-resident student use internet for 2.5 hour.

# The table notifies that male students use internet much time for study than he female students. Female students are so much home-bound, cultural-bound. Females' students have to stay home more than male students, females have to do domestic work. Parents have power over female students to use internet. They get less opportunity to use internet long time for study. But on the other hand, male students are outward as they get enough time for it. They can easily go out any time to computer lab for using internet for long time; they are not time-bounded by their parents.

# Resident students have less facilities to use internet for their study than non-resident students. Nonresident students generally stay with their parents or relatives. They have limited responsibilities in their home. They do not need to concern always about their all daily works. They can use LAN-CONNECTION easily staying at home and generally, they have no financial problem for using internet. That's why non-resident students spend much time in internet for study. On the other hand, resident students stay in Hall where he is the All, a manager. They have to consider all works with own decision, think what will be done in the next time, manage all things with study. They don't get enough opportunity to use internet for study.

# Social science faculty- students have less study pressure than the students of Business Studies. Therefore, the students of Social science faculty spend much time using internet for study than the students of Business Faculty.

Perspectives	Observed value	Respondents		Total%
		Resident (n=55)	Non-Res(n=45)	
Agree	28	23	5	28%
Highly Agree	65	25	40	65%
Moderately	7	7	00	7%
Disagree	00	00	00	00%
Highly Disagree	00	00	00	00%
Total	100			100%

(Question 5) 'Internet helps you massively in your study"

The table reveals that Internet helps massively in study. Majority of the students about 65 respondents are highly agree -25 respondents from resident and 40 respondents from non-resident about the help of internet in their study. Agree is about 28 students -23 respondents are resident and 5 respondents are non-resident. Moderately are about 7 students -7 from resident and 0 respondents from non-resident. There is no response in disagree and highly disagree options in that question.

# It is clear that internet helps students in their study massively for both resident and non-resident students. Internet extends bookish knowledge providing enough related information from various sites with various publications. Resident students get free WIFI that helps them using internet easily in their convenient time. On the other hand, non-resident students also get time using internet that helps massively in their studies because they have less work pressure. Majority non-resident students are highly agreed about this statement than resident student. But resident students have no electricity problem that also help using internet turns to studies well than non-resident students.

(Question 6) "IT- based education system is better than Traditional education syste
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Perspectives	Observed value	Respondents	-	Total %
		Male (n=50)	Female (n=50)	
Agree	46	28	18	46%
Highly Agree	32	7	25	32%
Moderately	22	15	7	22%
Disagree	0	0	0	0%
Highly Disagree	0	0	0	0%
Total	100			100%

Question (7) is surveyed on "It based education system is better than Traditional education system". 46 students are agree -28 respondents are male and 18 respondents are female on that statement. 32 students are highly agree -7 male respondents and 25 female respondents about it. Some express moderately ,22 students -15 male respondents and 7 female respondents. There are no responses in disagree and highly disagree option about this.

# It seems from the data that all male and female students consider that IT- based education system is better than Traditional education system. The concept of the students is changing day by day. They are agreed to receive the IT based education system canceling the traditional education system. As male students think more about the world, they are seriously agreed about this statement. The female students are advancing day by day. In IT-based education system, they get much real information than traditional system and make study comfortable

to collect softcopy- reading materials through pen drives, internet etc.
(Question 7) Do you have to make presentation with projector in your classroom?

Perspectives	Observed value	Respondents	Total %	
		B.F. (n=50)	S.S.F. (n=50)	
Yes	85	50	35	85%
No	15	00	15	15%
Total	100			100%

The table reveals that majority (85) students have to make presentation with projector in their classroom. Therefore, they answer Yes – majority 50 respondents are from BF and 35 respondents from SSF. Those do not have to make presentation with projector in classroom answer No (15 students) -00 from BF and 15 respondents are from S.S.F.

# A large portion of the students have to make presentation with projector in the classroom. The students of Business studies move forward more than the students of social science faculty. The curriculums or syllabus of Business studies are more developed than the education system of Social science faculty. Business studies include basic computer course for providing IT knowledge among the students but all the departments of social science faculty are not sincere about this and they, all don't include it as their basic course. Teachers of business faculty are much interested to use projector or IT in the classroom because they assume that it is easy for the students to understand study and presentation makes students skilled, expert, grow confident about their study. All the teachers of social science faculty are not concerned to arrange presentation by their students in the classroom because they are still staying in traditional stage. Some teachers arrange presentation by their students in the class room such as Public Administration department, International Department, Developing Studies etc.

## (Question 8) How many presentation you or as group have to present in a semester?

Times 2 3 4 5 More than 5								
Respondents 17 13 13 11 40								
Average = 5 Times								
Business faculty = $60\%$ (More than 5 times) and								
Social Science Faculty = 30% (More than 5 times)								

According to this data, Students have to make presentation in individual or as a group in a semester in 3, 4 5 or more than 5 times. Here average presentation is 5 times. Students of Social science faculty use presentation in a semester about more than 5 times -30 % are incorporated. But students of Business faculty provide presentation almost 60 % in more than 5 times in a semester.

# The syllabus of education system in a semester of Business faculty ensures that presentation is mandatory for all students in each semester where it is nearly absent in Social science faculty. Business studies arrange presentation for all course with individual or in a group that is the outcome of their basic computer course. But social science faculty lags behind because of their required syllabus, poor rules and regulation, poor IT facilities for education etc.

Because of various reasons, students of Business faculty make presentation individual or as a group about 60% than the students of Social Science Faculty about 30% (More than 5 times).

<i>y</i> now much benefit do you get nom the presentation.					
Perspectives	Observed value	Respondents		Total %	
		B.F (n=50)	S.S.F. (n=50)		
Less benefitted	00	00	00	00%	
Moderately Benefitted	23	5	18	23%	
Highly Benefitted	62	40	22	62%	
Non- Benefitted	15	5	10	15%	
Total	100			100%	

(Question 9) How much benefit do you get from the presentation?

The table (9) reveals how much benefit students get from that presentation. There are no students in both Business faculty and Social science faculty who are not benefitted from that presentation made by them. Few students are moderately benefitted (23) from presentation – 5 respondents from BF and 18 respondents from SSF. But majority students (62) are highly benefitted from presentation specially for BF students – 40 respondents from BF and 22 respondents from SSF - (total 62%). Non-benefitted students are very few almost 15 students – 5 from BF and 10 from SSF (total 15%).

# Business faculty students get more benefit than the students of social science faculty. Because their teaching method is different from the social science faculty in presentation perspectives. It increases students' courage to deliver speech before the teachers and all students. Students spend much time to prepare presentation which make their study reliable and accurate. So most of the students are benefitted from that presentation excepting a very few non-benefitted students.

## (Question 10) Does the authority of your department provide IT support system for using IT in your class?

Perspectives	Observed value	Respondents		Total%
		B.F (n=50)	S.S.F (n=50)	
No	00	00	00	00%
Less	13	3	10	13%
Moderately	35	10	25	35%
Highly	52	37	15	52%
Total	100			100%

The students' response on this topic that the authority of respective department provide IT support system for using IT in their class. 00% students answered NO from both BF and SSF. Few 13 students replied the Less - 3 respondents from B.F and 10 respondents from S.S.F (total 13%). Many students (35) replied Moderately – 10 respondents from B.F and 25 respondents from S.S.F (total 35%). But majority students (52) answered Highly where B.F. students are almost 37 of selected 50 students and S.S.F respondents are 15 of 50 students (total 52% answered Highly) in that question.

# It is clear from the table that all the departments provide IT support system for using IT in your class more or less. About 52% students highly accept what the authority of the department provide IT support system for using IT. Among them Business faculty provide very modern technology, required software, projector and appropriate class room for using it more than The Social Science Faculty. Majority students of the social science faculty moderately support what the authority of their department provide on IT- based. Departments of social science faculty supply IT equipments, most of them are traditional, poor or already damaged etc. (Ouestion 11) Does every teacher use IT to impart teaching in your class?

) Does every teach	Does every teacher use II to impart teaching in your class.				
Perspectives	Observed	Respondents	Respondents		
	value	BF (n=50)	SSF (n=50)		
Few of them	17	00	17	17%	
Some of them	10	10	00	10%	
Most of them	68	35	33	68%	
All of them	5	5	00	5%	
Total	100			100%	

The table (11) is presented on using IT of teachers to impart teaching in the class. 17 students replied few of them- teachers use IT to impart teaching in the class-0 respondents from BF and 17 SSF. 'Some of them' answer is come from 10 students – 10 from BF giving 0 from SSF. However, majority students (68) replied most of the teachers use IT to impart teaching in the class where more 35 respondents come from BF than SSF- 33 respondents (total 68%). But only 5 students answered All of them option almost from BF 5 respondents, not in SSF as 0 respondents (total turns into 5%).

# The data notifies that most of the teacher of Business studies like to use IT to impart teaching in their class than the teacher of social science faculty. Among both faculties almost 68% teachers are acknowledged about the IT-based present teaching method. Some Teachers who joined in the department as senior teacher excepting few are not agree to use IT in the class room. However, most of the young teachers are so much interested of using IT in teaching duration.

(Question 12) Are you satisfied with the performance on IT based teaching method of your teachers?
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Perspectives	Observed value	Respondents		Total	%
		BF (n=50)	SSF (	n=50)	
Satisfied	43	20	23		43%
M. Satisfied	25	15	10		25%
H. Satisfied	20	15	5		20%
Dissatisfied	12	00	12		12%
H. Dissatisfied	00	00	00		00%
Total	100			100%	1

The data reveals about students' satisfaction with the performance on IT based teaching method of their teachers. Various results are come from students from different criteria from both faculties. Such as majority, students (43) are satisfied with the performance on IT based teaching method where BF 20 respondents and SSF carry 23 respondents (total 43%). Many students (25) are moderately satisfied -15 BF respondents and 10 for SSF. Here also some students who are highly satisfied (20) with the performance on IT based teaching method of their teachers – 15 respondents from BF and 5 respondents from SSF (total 20%). However, it is important to note that very few students are dissatisfied (12) with the performance on IT based teaching method -0 respondents from BF and 12 respondents from SSF. There are no responses in highly dissatisfied option from both.

# It seems that all the teachers are not efficient to use IT for teaching in the class lack of their well required

knowledge. Some teachers don't know how to use MS word, make slide, presentation effectively. Teachers of Business studies are more progressed because of their IT-related vast knowledge than the teachers of social science faculty excepting some teachers.

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Observed value	Respondents		Total%
	Male (n=50)	Female (n-50)	
7	0	7	7%
20	12	8	20%
63	33	30	63%
10	5	5	10%
100			100%
	Observed value   7   20   63   10	Observed value Respondents   Male (n=50) 7   0 20   63 33   10 5	Male (n=50) Female (n-50)   7 0 7   20 12 8   63 33 30   10 5 5

(Question 13) Is every student being benefitted equally from IT based teaching method in your class?

According to this data on the concept of equal benefit from IT based teaching method to students, presents that 7 students answered Few of them – almost 7 respondents from female, not male. Students (20) replied some of them- 12 male respondents and 8 female respondents. However, Students (63) replied most of the students are being benefitted equally from IT based teaching method in class 33 male respondents and 30 female respondents (total 63%). Only students (10) answered All of them are equally benefitted from IT based teaching method -5 male respondents and 5 female respondents (total 10% answered All of them).

# So it is clear that all the students are not equally benefitted from IT based teaching method in class. Here arise various variations because of gender perspective – different roles, poor computer basic knowledge, available internet, lack of proper help from their teachers, not available personal computer to practice etc. That's why every students don't get equal benefit from IT based teaching method.

(Question 14) "The slide based teaching method massively used by the teachers is beneficial for the student" –

Perspectives	Observed value	Respondents		Total %
		B.F. (n=50)	SSF (n=50)	
Agree	31	10	21	31%
Highly Agree	40	30	10	40%
Moderately agree	19	0	19	19%
Disagree	10	10	00	10%
Highly Disagree	0	00	00	00%
Total	100			100%

The data indicates that students (40) of 100 students are Highly agree on the statement that the slide based teaching method massively used by the teachers is beneficial for the student – more 30 respondents from BF than 10 respondents from SSF (total 40%). 31 students –BF 10 respondents and SSF 21 respondents are agree with that. Students (19) are moderately agree – almost all are SSF respondents. Only 10 % respondents are disagree from BF, not from SSF. There are no highly disagree students from both faculty on this statement of slide-based teaching method.

# The result shows clearly that all the students are not agreed of the statement that "The slide based teaching method massively used by the teachers is beneficial for the student". Most of the Business Faculty students are highly agreed because they are almost accustomed in this process for long period than the students of Social science faculty. Students get the daily lectures easily from their teachers that improved their study trough the slide based teaching. Only few students express disagreement from Business studies as some teachers of their faculty only deliver slide-based presentation or class not considering their students convenience to understand the lectures. These teachers are somehow robotic –only come and go with delivering slide-based class to students.

Perspectives	Observed value	Respondents		Total%
		Male (n=50)	Female (n=50)	
No	44	12	32	44%
Less	18	18	00	18%
Moderately	20	15	5	20%
Highly	18	5	13	18%
Total	100			100%

According to this data, 44 students (12 male respondents , 32 female respondents) replied NO on the statement that IT replaced reading habit of academic books. Students (18) from 18 male respondents and 00 female respondents answered less. Many students (20) expressed moderately -15 male and 5 female respondents. However, students (18) responded highly – 5 male respondents and 13 female respondents (total 18%) are highly agreed on that IT replaced reading habit of academic books.

# It is apparent that near half of the students are not agreed with the statement that IT replaced reading habit of academic books. Majority students use IT as their education materials because they can search enough information in internet in their related text topics. Few students are highly agreed with statement because they abuse IT using various web sites (Facebook) which hampers their reading habit of academic books. However they easily get softcopy what teachers deliver in the class hampers their reading habit of academic books.

Perspectives	Observed value	Respondents		Total%
		BF (n=50)	SSF (n=50)	
Satisfied	22	16	6	22%
M. Satisfied	39	18	21	39%
H. Satisfied	14	9	5	14%
Dissatisfied	18	00	18	18%
H. Dissatisfied	7	7	0	7%
Total	100			100%

(0) (1)		cilities provided by the		1 (0)
(1) mostion (6) Anos	you cotisticd of the too	ilitios providod by the	an montan lab of	vour donoutmont?
IN MESHOIL LOT ATE	von sansnen af the fac	innes provided by the	соппоннег тяр ог	vour denarment?
(Question 10) Inc	you sutisited at the inc	milles provided by the	compater has or	your acpurements

The table (16) reveals on the students satisfaction at the facilities provided by the computer lab of their department. Students (22) are satisfied -16 BF respondents and 6 SSF respondents. Majority students about 39 are moderately satisfied from 18 for BF and 21 SSF respondents about their computer lab. Highly satisfied are 14 students- 9 respondents of BF and 5 respondents of SSF. Here exist also some students who are dissatisfied (18) – almost 18 respondents of SSF about their computer lab. Therefore, students (7) are highly dissatisfied from BF respondents, not from SSF.

# It is plain that computer lab what departments provide for students is not satisfactory. Majority students of Business Faculty are satisfied of their computer lab than the students of Social science faculty. Business studies have enriched computer lab because of their available financial support and authority willingness. They provide updated Windows for computer keep Anti- virus as important documents may not be deleted, have printer efficient officials who run the lab. So, their majority students are satisfied by the computer lab of their department. These facilities are somehow absent in the departments of social science faculty although some departments of SSF have computer lab. However, it is not almost satisfactory because of their poor officials in computer lab, lack of printer, lack of modern updated computer (keeping traditional computer) which is not easy to run. Computer lab of majority departments are not opened in due time. For the above reasons, all the students are not somehow satisfied at the facilities provided by the computer lab of the departments.

Perspectives	Observed Value	Respondents	Total %	
		Male (n=50)	Female (n=50)	
No	00	00	00	00%
Less	9	5	4	9%
Moderately	66	35	31	66%
Highly	25	10	15	25%
Total	100			100%

(Question 17) Do you think IT has brought behavioral changes among the students?

According to this data, majority students (66) - 35 male respondents and 31 female respondents moderately think that IT has brought behavioral changes among the students. No response is 00 from both male and female respondents. Less (9) is answered from some students -5 male and 4 female respondents. 25 students highly think that IT has brought behavioral changes among the students -10 male respondents and 15 female respondents (total 25%- Highly). So, it is apparent that all the respondents avoid the option NO because they consider that IT has not brought behavioral changes among the students. Majority students moderately think that IT has brought behavioral changes among the students moderately think that IT has not brought behavioral changes among the students of the option NO because they consider that IT has not brought behavioral changes among the students of the option happendents through hampering reading habit, addicted to internet, make lazy about their study turn to dependable on IT highly for study.

(Questio	n 18) Do	you t	hink that	: IT has i	mprove	l the 1	relationship	between	teach	er and s	tudent?

Perspectives	Observed Value	Respondents		Total %
		Resident (n=55)	Nonresident (n=45)	
No	19	17	2	19%
Less	00	00	00	00%
Moderately	35	25	10	35%
Highly	46	13	33	46%
Total	100			100%

The survey of this question is done on the concept that IT has improved the relationship between teacher and student. Here arise variation depending on resident and non-resident students perspectives. Students (19) replied No - 17 resident respondents and 2 non-resident respondents. O respondents answered less. Total 35 % students (25 resident and 10 non-resident) are moderately agreed with the statement that IT has improved the

relationship between teacher and students. But majority students 46% (13 resident and 33 non-resident respondents) replied Highly because they think that IT has improved the relationship between teacher and students. So, it is lucid that some students are not agreed with that statement and a large portion is highly agreed that IT has improved the relationship between teacher and students. Here arise resident, non-resident variations. Resident students strongly support it than non-resident respondents. Because at any time they can easily get or contact with their teachers as they stay in University area and it is tough for non-resident students. IT creates a close relationship between teacher and students effectively.

Question 19) Present pattern of teaching method based on IT is sufficiently helping to make learning process effective?

Perspectives	Observed value	Respondents	Total %	
		B.F. (n=50)	S.S.F. (n=50)	
Agree	46	25	21	46%
Highly Agree	20	10	10	20%
Moderately	25	15	10	25%
Disagree	9	00	9	9%
Highly Disagree	00	00	00	00%
Total	100			100%

The table reveals information based on the idea that Present pattern of teaching method based on IT is sufficiently helping to make learning process effective. 5 criteria such as agree, highly agree, moderately agree, disagree and highly disagree are set for identifying information effectively. 46 respondents - (25 for Business faculty, 21 for Social science faculty respondents) replied agree. 20 respondents - (10 for Business faculty and 10 for Social Science faculty respondents). 25 students are moderately agreed -15 respondents from Business faculty and 10 from Social Science faculty. Only 9 students expressed disagree that is almost from Social Science faculty. No students response in Highly disagree option both from Business faculty and Social science faculty. All data are collected from total 100 students. So, it is understandable that Present pattern of teaching method based on IT is sufficiently helping to make learning process effective because majority students are agreed on that statement more or less. Students can make their study from complex to simple. Sometimes teachers deliver lectures in the class without considering students' problem especially in traditional teaching method. However, in present pattern of IT based, students clearly know what the teachers are going to deliver before them. Teachers also provide its softcopy or hardcopy among their students. Teachers are well-efficient on using IT in the classroom. They offer enough supplemented information related with academic books to students that create encourage about study among the students. As mostly Business Studies use IT-based teaching method, turn into learning process effective than the Social Science Faculty. It is more convenient and time saving. Teachers are much effective in IT based education system. Traditional education system is not suitable for 21th century, as we know it is an era of IT. In case of traditional system, this follow backdated and book base knowledge. Every moment of our modern life is directly or indirectly influenced by IT. So as education is a main part of building nation where IT influences is needed. So, Present pattern of teaching method based on IT is sufficiently helping to make learning process effective.

## PART: B

Part- B provides open-ended questions that contain respondents own view from different perspectives. These are given below-

## (Question 1) What problems do you personally face to use IT in your learning?

The answers which have been collected under this question, it is apparent that students face so many problems to use internet in their learning mainly because of their basic computer knowledge which is not provided by the all departments to students. Here also arise poor computer lab, poor internet facilities, and unwillingness of respective authority for providing proper IT facilities that hampers students' education progress. Some students have financial problem to computer personally, so that they have limited opportunity to use IT always in their learning. Time duration in the computer lab of maximum department is so limited that students always don't get open the computer lab in their particular time. Many students use 'Face Book' in the computer lab that obstructs other students who wanted to study through internet or by using computer. Efficient lab officials are absent in most of the lab that cannot help students in their required time. Modern computer is not available in the computer lab which is not easy to run effectively, traditional computer is slower than modern updated computer.

# (Question 2) What measures can be taken to make IT system effective in teaching methods?

From the collected data it is plain that various types of measures should be taken to make IT system effective in teaching method which students want for their study perspective. Authority willingness is at first needed to add basic computer course as mandatory in curriculum, so that students have the knowledge about the computer using for their study. Enriched computer lab with effective officials are needed to be ensured as students use IT effectively. Available internet connection with various important sites that are essential for study

should be incorporated in the computer lab. Wifi in hall should be accessible always easily to download any reading documents etc. Students of both faculties demand necessary measures to make IT –sector effective in teaching method.

## Section 5: Recommendations and Conclusion

Based on the findings some recommendations are given below:

# 5.1 <u>Recommendations</u>:

- Authority willingness of ensuring IT –based education is the crying need for every department as well as faculties. Education curriculum should be changed from traditional method to modern- digitalized method. Computer course in syllabus should be compulsory for students to provide knowledge about basic information of computer. As they can easily use computer, internet, projector presentation etc. Both Business studies and Social Science faculty should be an adequate amount of development. Authority should allocate sufficient fund of providing IT facilities for students. Authority should distribute equally IT- facilities for all departments to progress.
- Computer lab which is provided for the students should be much more enriched with sufficient computer for all students. Open and close time of computer lab in the department should be increased for students' perspectives. Efficient officials should be appointed in the computer lab so that they can solve any problems of using internet what students face. They should be more friendly with students. Proper maintenance should be ensured in the lab. Availability of internet must be ensured with different web-sites in the lab as students find their required materials easily. The speed of internet should be high, so that it does not hamper valuable time of students.
- Classrooms should be developed for using IT effectively. Multimedia projector should be set up in the classroom of using it. Updated software should be included. Anti- virus must be ensured for saving important documents. Electricity problem should be reduced in the classroom for ensuring the use of IT.
- All teachers should at first change their mentality from traditional to modern. They should think that ITbased teaching method is the demand of today's world. They should have enough knowledge, should be skilled of using IT for searching enough information in the internet, make presentation before the students in reliable, attractive way as students get interest to learn it. Every teacher should use power point in the class. Teachers should be friendlier with the students; they need to understand the students' problem. They can make campaign about the benefit of using IT in studies.
- Internet facilities should be available in the department as well as in the all Hall of Dhaka University as the students can easily use internet for study without cost. Wifi should be strong with high speed in the department and Hall. If it is ensured in everywhere in the campus, then it will be highly beneficial for the students. The price of modem should be reduced as students can easily use internet that have no wifi facilities. All important websites should be ensured that provides related educational information.
- Students who are aware of using IT, can campaign on the importance of using IT to other students who are lagging behind. They can provide update information to their teachers and students for increasing the use of internet. Cultural binding for male and female different roles should be removed from the society.
- The price of computer should be reduced for students. All students cannot purchase computer because of its high price. As it is a digital- age where all students need to keep computer for their study. "Doel" laptop made by Bangladesh which is provided with less money than other laptop or computer should be supplied more among the students. So that students get the touch of IT.

# 5.2 Conclusion

Information technology is an enormously vibrant field that emerged at the end of the last century as our society experienced a fundamental change from traditional society to an "information society." Information Technology (IT) encompasses all aspects of computing technology. Information technologies are the result of knowledge explosion. These include hardware & software technologies and facilitate teaching learning process. Using Information Technologies learners are now able to participate in learning communities throughout the world. They are independent and free in choice of their programs of study and access to the resources. They can learn collaboratively, share information, exchange their learning experiences and work through cooperative activities in virtual learning communities. Information technologies facilitate teaching learning process in more productive fashion. Similarly, the role of teacher is also different in new settings from in the conventional system. Teacher facilitates and guides the learners in their study playing the role of a coach or mentor. Now teacher is not at the center of the instruction and sole source of information as in conventional classrooms. He/she decides contents/experiences and/or activities, locates the resources and guides learners how to have access and utilize the information for required outcomes. Information technologies are restructuring teaching learning process to meet the students requirements and National, International standards. The teacher must adopt effective teaching

methods in education which can be ensured trough using IT easily. Teaching and learning are the two sides of a coin. Effective teaching method turns into effective learning. Teaching is a challenge. Learning is a challenge. Combining both effectively is a challenge.

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