



## **THE ICT ON THE EDUCATION SYSTEM AND IT’S FUTURE PROSPECTS IN BANGLADESH**

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### **Abstract:**

Bangladesh as a developing nation has acquired a significant change financial areas during 2001-2021 years. The longing of being a center pay country has driven Bangladesh to think of a cutting edge education strategy which will assist them with delivering the talented teaching force. Information and communications technology (ICT) reconciliation in education was the main advance of this most recent education strategy and Government of Bangladesh has moved forward to make a fruitful execution of ICT in education. This study explored the methodology of education system in Bangladesh its outlook prospects. It inspects the degree of ICT utilization in the classroom and overall text curriculum. I has been collected 28 samples size of total secondary, higher secondary and graduate student of Bangladesh and pre-based questionnaire. Study findings reveal that optional educational institutes began involving advancements in their educating and learning, yet at the same time, the utilization isn't ideal chiefly due to least foundation and view of partners. ICT assisted with making the classes student focused and intuitive which was one of the points of new education strategy, yet the act of involving innovation in instructing and learning is as yet restricted in a large portion of the educational institution. Although every one of the partners of education area comprehends the advantages of ICT consideration, they are dealing with different issues in the execution interaction. Additional time is expected to defeat these obstructions and to achieve social changes among the teachers and students to a fruitful reconciliation of ICT in auxiliary education of Bangladesh.

**Keywords:** Talented Teaching, Education Strategy, Intuitive, Interaction

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**Introduction:**

Information and Communication Technology has gotten a strong change society. It has associated the entire world and has affected monetary and social areas. ICT has delivered a sparkling change in both instructing and learning. Sultana & Shahabul (2018) portrays ICT as a device of education which can supplement, advance and change education to improve things. ICT can give admittance to a wide range of worldwide assets and can work with secure coordinated effort in with current world education. Different educating and learning materials can be imparted to the teachers and students (Aziz, 2020). Facilitators can examine their thoughts regarding inventive classroom rehearses and their examination works connected with this. As per policymakers around the world (Daniel & Harland, 2017), ICT in schools should prompt huge educational and academic results, useful for the two students and teachers. Nowadays, the actual impact of integration of ICT into everyday classroom practices constitutes an essential question. A significant amount of research has shown that the use of ICT in education can increase students' motivation and deepen understanding, promote active, collaborative and lifelong learning, offer shared working resources and better access to information, and help them to think and communicate creatively. In other words, ICT appears to be changing the very nature of teaching and learning. With emerging technologies, the teaching profession could evolve from an emphasizing on teacher centered instruction to creating more student-centered interactive learning environments .

ICT helps to build a more knowledgeable workforce by engaging students more in their studies and create the ability to use modern equipment which is more productive than previous versions. Innovation in the classroom through ICT brings creativity, distribution, and handling of knowledge properly which make an impact students' future. ICT helps students to solve the complex and real world problem which add more value to the society and also on the economy (Goswami et al., 2020).

ICT is considered as an essential means to promote new methods of instruction in teaching and learning. In last few decades, many studies have been undertaken on ICT implementation in education and reformation of instruction technology. Bangladesh has additionally underlined on carrying out ICT in pretty much every area of the country as the Government of Bangladesh (GOB) has expected to make the country altogether computerized inside 2021. As an outcome, the most recent education strategy of the year 2010 concocted an outline of coordinating ICT in education (Hoque & Alam, 2010). In the mean time, just the definition of strategy doesn't guarantee the activity of it actually. Standard and powerful practices can guarantee fruitful execution of ICT strategy in each degree of education. ICT in education can carry these abilities to students, and they can turn into a piece of their country's financial improvement through their education and preparing. Khan et al. (2012) observed an express association among development and public arrangements that advance ICT use in the classroom. Be that as it may, strategy alone can't adequately guarantee the utilization of innovation in the educating learning process (Haldorai et al., 2021).

Combination of ICT in education into the general thought of instructing advancing consistently puts teaching method over innovation (Kumar, 2008). It isn't just with regards to utilizing innovation and being a specialist on ICT yet in addition making the learning system more

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appealing by Lim et al. (2020), happy and drawing in for the students. This incorporation will assist students with advancing inception, innovativeness, and decisive reasoning. Teachers are relied upon to oversee the class with new adaptable (Bairagi et al., 2011; Mahi et al., 2019), intelligent and interactive media based classroom exercises with ICT which will carry another aspect to the learning environment.

#### **Research Methodology:**

This study analyzed the ICT integration and adaptation as an educational component in classroom teaching learning process in secondary and higher secondary schools of Bangladesh. It analyzed the recent educational policy of Bangladesh which gave an immense interest to use ICT in the classroom to build up a modern knowledge based society (Mou, 2016), as well as to make classes interesting to the students. This study does not intend to provide any generalized view of the education system. It rather aims to offer insight into how the schools are implementing and adopting ICT as a new means of teaching technique.

#### **Sample Size and Sampling:**

Savar region of Dhaka district in Bangladesh was chosen as 64 samples size for this assessment since certain teachers and student from each school, college and university in the survey area have preparing on ICT reconciliation in classroom exercises as per the rundown of optional and higher auxiliary education board. Then again, this site was additionally helpful for the specialist to gather information in regards to contact with school specialists to lead perception in their schools. Initially, the scientist intended to follow a purposive inspecting of the schools and teachers for information assortment following class perception and students bunch interview. The specialist chose to pick schools from school rundown of Savar upazila, Dhaka district of Bangladesh given by optional and higher auxiliary education board. Service of Education gave that rundown of schools those are performing better as indicated by board assessment results. The analyst has isolated schools into two groups.

Figure 1: Selected college of Savar upazila, Dhaka district.



Source: <https://oldweb.lged.gov.bd/ViewMap.aspx>

**Results and Discussion:**

Questionnaire base total data collection and respondent 64, frequency system analyzes total part and results distribution by percentage measurement 100.00% of all survey description.

**Socio-demography of Survey Area:** Table 1 shows that maximum number of respondents (71.88%) were from man followed by women (28.13%) survey found in respectively.

Table 1: Sex distribution of Survey

Type	Frequency	Percentage	Cumulative Percent
Male	46	71.88	71.88
Female	18	28.13	100.00
Total	64	100.00	

Figure 2 expose that maximum number of respondents (76.56%) are 18- 25 years old, (18.75%) are 26-40 years old, (3.13%) are 41-60 years old and (1.56%) is respondent above 60 years old, survey found in correspondingly.

Figure 2: Respondent Age

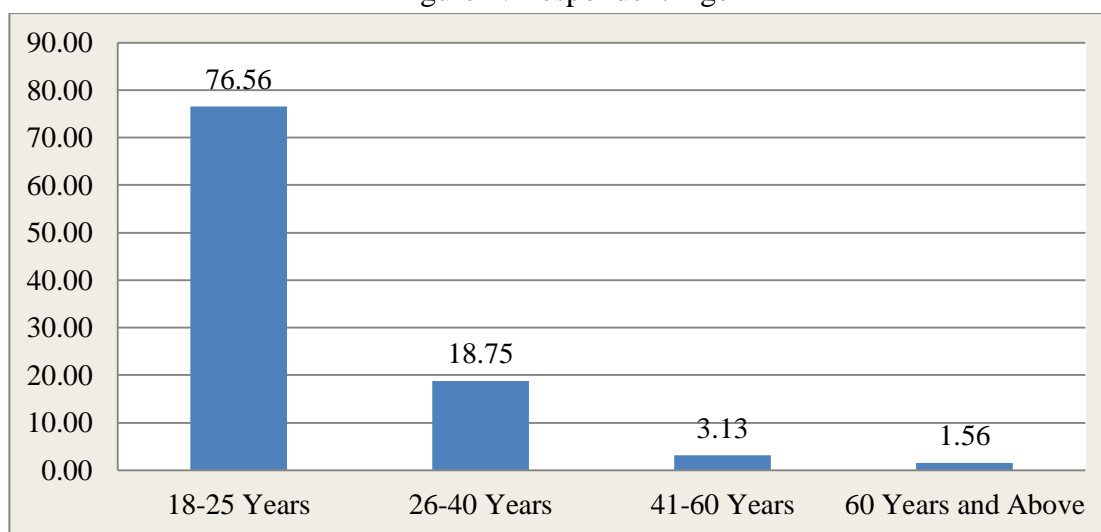


Table 2 shows that educational qualification of respondents (21.88%) studied in undergraduate education, (17.19%) are graduation qualified, (40.63%) are SSC/HSC level and (20.31%) is respondent education qualified in other discipline survey found in respectively.

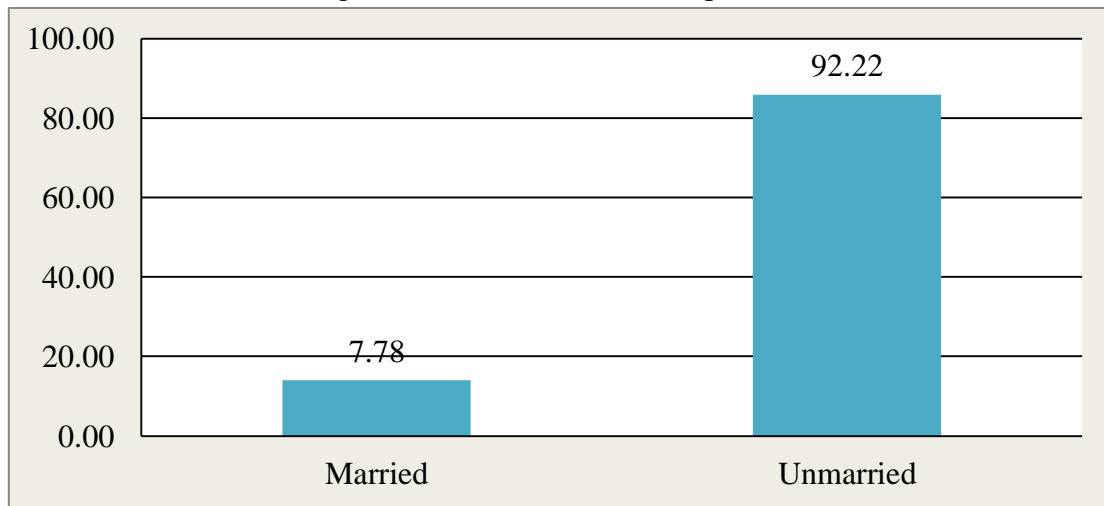
Table 2: Educational Qualification

Type	Frequency	Percentage	Cumulative Percent
BBA/BSS/BA	14	21.88	21.88
MBA/MSc/BSS/MA	11	17.19	39.06
SSC/HSC	26	40.63	79.69
Other	13	20.31	100.00
Total	64	100.00	

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Figure 3 represent that maximum numbers of respondents (92.22%) were unmarried and (7.78%) are married survey found in respectively.

Figure 3: Marital Status of Respondent



**Educational Technology Related Perception:** Table 3 shows that respondents (42.19%) have desktop computer, (37.50%) are laptop or tab computer has been used, (20.31%) are other yes or no usable computer found in respectively.

Table 3: Own computer in an office at the institution

Type	Frequency	Percentage	Cumulative Percent
Yes, a desktop computer	27	42.19	42.19
Yes, a laptop computer	24	37.50	79.69
Yes, both of them/No	13	20.31	100.00
Total	64	100.00	

Table 4 shows that 64 respondents multiples answered technological equipment is available in the classrooms used computer. Respondent consent I allowed by question types unit in survey area.

Table 4: Technological Equipment is Available in the Classrooms Used

Types	In no class-room I use	In all classrooms	Upon request	Total Score
Personal computers	64	0	0	64
Interactive whiteboards	57	3	0	64
Video conferencing systems	63	0	0	64
Audio equipment (including software)	64	0	0	65
Digital photo cameras (including editing software)	57	0	6	64
Digital video cameras (including editing software)	64	0	0	64

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Mobile phones	4	25	19	64
Projection system	48	4	4	64

Figure 4 represent that maximum numbers of respondents (84.38%) believed available need technological support and (15.63%) are no technological no support found in correspondingly.

Figure 4: Technological Support Available for Teacher Trainers at Institution

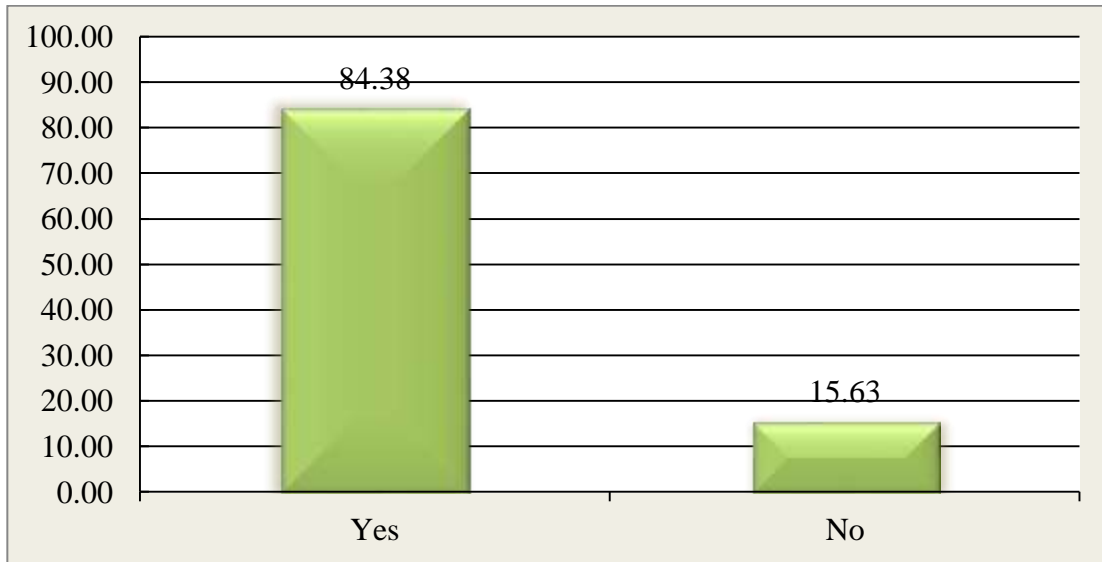


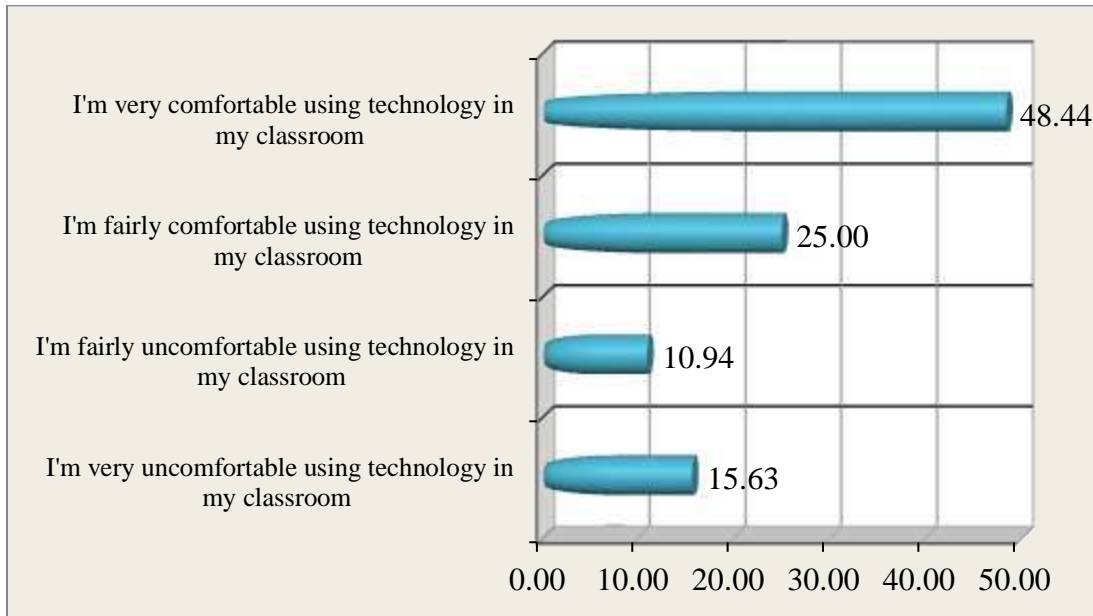
Table 5 shows that maximum numbers of respondents (40.63%) alleged comfortable using technology at home and minimum respondent (10.96%) are imagined very uncomfortable using technology at home found in survey respectively.

Table 5: Level of technology expertise in home use

Type	Frequency	Percentage	Cumulative Percent
I'm very uncomfortable using technology at home	7	10.94	10.94
I'm fairly uncomfortable using technology at home	14	21.88	21.88
I'm fairly comfortable using technology at home	17	26.56	26.56
I'm very comfortable using technology at home	26	40.63	32.81
Total	64	100.00	

Figure 5 shows that maximum numbers of respondents (48.44%) support very comfortable using technology at classroom and minimum respondent (10.94%) are likely uncomfortable using technology at classroom found in survey respectively.

Figure 5: Level of Technology Expertise in Classroom



**Pedagogical use of ICT:** Table 6 represent that maximum numbers of respondents (95.1%) believed academic department have changes and (15.63%) are no technological no support found in correspondingly.

Table 6: Academic Department Have a Policy and Sustain ICT-Based Innovations in Course Teaching

Types	Frequency	Percentage	Cumulative Percent
Yes	61	95.31	95.31
No	3	4.69	100.00
Total	64	100.00	

Figure 6 shows that maximum numbers of respondents (85.94%) answered yes and (14.06%) are no support innovative way of ICT education survey found in correspondingly.

Figure 6: Project aimed at using ICT in new and innovative ways as a teacher or teacher trainer

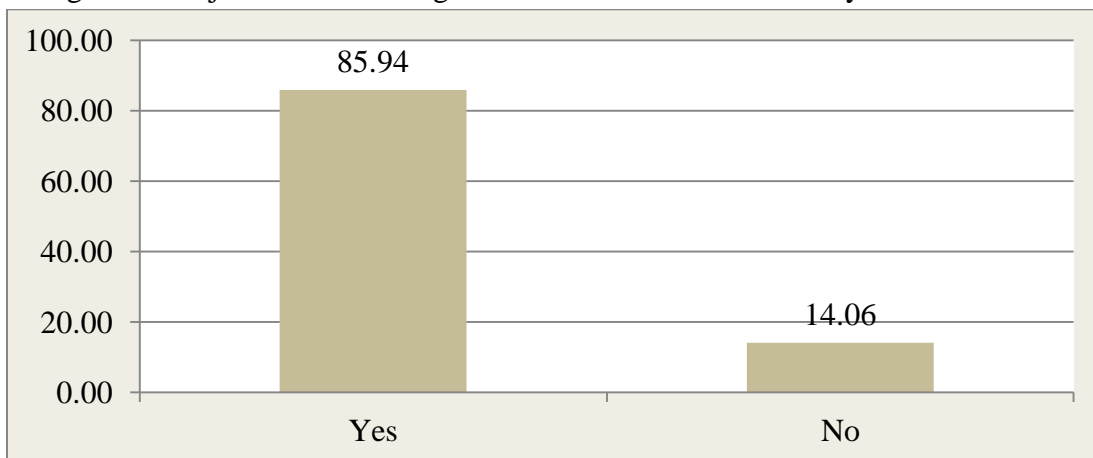


Table 7 represent that maximum numbers of respondents (73.44%) have answered yes and (26.56%) are no support available for teacher training found in survey respectively.

Table 7: Support available for teacher trainers regarding pedagogical use of ICT at institution

Type	Frequency	Percentage	Cumulative Percent
Yes	47	73.44	73.44
No	17	26.56	100.00
Total	64	100.00	

Figure 6 expose that maximum numbers of respondents (50.00%) are answered poor, (28.13%) are mediocre, (15.63%) are good and (6.25%) are answered very good, survey found in respectively.

Figure 6: Rate the quality of the pedagogical ICT support

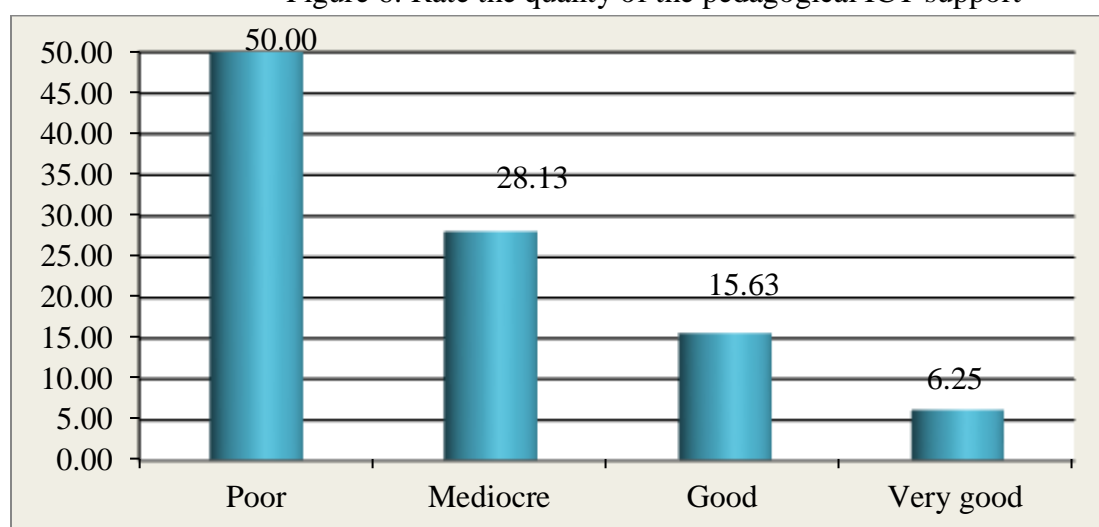


Table 8 shows that maximum numbers of respondents (40.63%) have answered other, (34.38%) are answered no and (25.00%) are yes answere for student and teacher's used ICT assessed in courses found in survey respectively.

Table 8: Student and teachers' pedagogical competencies regarding the use of ICT assessed in courses

Type	Frequency	Percentage	Cumulative Percent
Yes	16	25.00	25.00
No	22	34.38	59.38
Other	26	40.63	100.00
Total	64	100.00	

Table 9 shows that 64 respondents multiples answered technological equipment is available in the classrooms used computer. Respondent consent I allowed by question types unit in survey area.



Table 9: Importance attach to the following suggestion to help teacher trainers increase the integration of technology in their courses

Types	No importance at all	Quite great importance	Very great importance	Total Score
Better access to technological equipment	1	27	28	64
Reliability of equipment	13	28	13	64
Availability of high quality equipment	0	14	36	64
Training/courses in pedagogical use of ICT	26	9	11	64
Pedagogical ICT-support	4	26	10	64
Technological hands-on training/courses	1	20	31	64
Technological support	9			9
Policies on using ICT across curriculum	0	26	29	64
Time to prepare, explore and develop	19	9	25	66
Task related incentives	31	14	12	64

**Discussion:**

Most of the teachers both are using different types of devices in their classroom. Among them, almost all the teachers had given their focus in using computer or multimedia in their classes. Apart from computer some of them use a calculator, mobile phone, audio recording player, microphone, sound-box, microscope in biology classes, etc. To amplify the images and videos, they also use the projector in the classroom.

Directorate of Secondary and Higher secondary education helped every government educational institution to build at least one well-equipped computer laboratory on school premises. These schools also got more than one projector and laptop for using in other general classes. Though, teachers from government schools think that they have limited resources than non-government schools. They claimed that government has not enough budget for the schools which can make a rapid influence in implementing ICT integration in classroom teaching. Teachers usually cannot use computer laboratory for their classes as all the students have a compulsory computer course in secondary education and this lab remain busy always with students from

different levels. Therefore, one or two projectors given by government and teachers' laptop are the primary resources to integrate ICT into the classroom. Hence, teachers need to cooperate among themselves to distribute the supplies as every one of them can use technologies at least minimum number of time. Teachers from non-government schools have a different experience from the government schools. Though they have equipped classrooms for an extended period, still they are facing problem to take care of the devices which making unavailability of technological devices nowadays.

Students usually use a calculator in their math and physics classes. Students who are not studying science have less opportunity to use technologies in the classroom or school. Typically, students do not get any chance to use a computer in their classroom activities. Teachers use the laptop and projector to show the presentation made by either picture or video or any other content. Students have almost no chances to operate technologies in classroom activities. In large classrooms teachers use microphone and sound-box to reach their voice to all students, sometimes students also get the chance to use this mic during their presentation or to give any speech in the classroom. In most of the schools, students are not allowed to use a mobile phone on school premises and in some schools, it is strictly prohibited to bring mobile phones or tab in school premises though many of the students use these technologies at their home.

Most of the schools are facing the lack of infrastructural resources very seriously. Though every school has a computer lab and at least one classroom with ICT equipment, it is not enough for their students. All the schools have more than 50 students in every classroom, whereas none of the school has more than 40 computers in their laboratory. As there are only one computer and projector in the classroom, there is no opportunity for students to use the technology. From researcher observation, it has been found that most of the teachers use computer and projector in their classes. It is not evident that they use this multimedia facility in their every class as they have not enough classrooms with such kind of services.

### **Recommendation and Conclusion:**

As indicated by Karim (2014) "The advancement of specialized ability works on students' ability to retain innovation when they move to the labor force." Along with instructive, curricular and appraisal, utilization of innovation bring information inventiveness among students. Both teacher and students can share their plans to make new information and furthermore can screen their current degree of getting (Kennewell et al., 2002). In Bangladesh, normal oversight and observing from both school organization and service of education can complement the mechanical utilization in classroom rehearses as well as in school's regulatory exercises. GOB additionally can permit some specific financial plan or impetuses for the teachers on the appropriate execution of ICT in school level which can animate one of their essential concentration to construct a digitalized, gifted and educated society. Specialists can be delegated to make computerized substance as per the educational program for all subjects which will be accessible for all teachers of the country. Assuming that teachers will help the conceivable substance of their illustrations through the web and can download and utilize it, they can not show further reasons of time requirement or inaccessible materials.

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Fast framework improvement is another essential move ought to be made. There are as yet 12.02 percent schools without power in the nation (Rahaman & Akter, 2017) which is one of the significant obstructions to carrying out innovative utilization on school exercises. As the PC is taking the spots for a large portion of the other specialized gadgets (Saha et al., 2022), GOB needs to ensure the accessibility of PCs in each school to achieve their arrangement on the real world. Bangladesh can follow a few other developing nations in the execution of the procedure (Tas, 2011). Developing nations can involve ICT to lessen the feeling of separation as well as to make open admittance to information on a lengthy level. Broad utilization of ICT in schools can assist the students with decreasing the information hole with created nations and make them sure to rival the information society.

#### **Conclusion:**

Integration of ICT in education is a relatively new peculiarity in Bangladesh like numerous other developing nations. This review has drawn in National Education Policy 2010 which is most recent education strategy of Bangladesh, and the experiences of teachers and students from various schools who are straightforwardly associated with the ICT coordination process. Thus, the discoveries from the review deal to investigate what is happening of coordinating ICT in the auxiliary degree of education in Bangladesh. The outcomes from records and perception followed by interviews show that, after just about seven years of presenting ICT in education, still it isn't rehearsing in instructing and learning at a full stream in auxiliary schools of Bangladesh. It will require some investment to guarantee effective, useful and nonstop utilization of advancements in classroom rehearses as a result of different social, monetary and moral obstructions. Starting the utilization of innovations in education is unquestionably a positive sign for the auxiliary education of the country. By and by, the educational program should refresh as per it, and the foundations of schools must be created to guarantee more admittance to advancements for the two teachers and students.

The vast majority of the teachers who are in the showing calling for quite a while were utilized to with their conventional educating directions. They need a tad of additional time than the youthful and new age teachers who have referred to about ICT mix in educating as it is remembered for their pre-administration preparing. It might require some investment for teachers to move the worldview of educating from simple to advanced guidance. This change of ICT in education is a continuous interaction, and the genuine advancement is as yet not appeared obviously to the general public. Assuming that the government accepts and finds a way fundamental ways to achieve the venture with a high accomplishment, it is feasible to incorporate ICT in each classroom in the country with the assistance of different partners engaged with the education area. Further review should be possible on this issue to investigate the impact of ICT coordination on student's exhibition on the public assessment. There are additionally more chances to concentrate on the circumstance of ICT execution in education particularly in country regions and, surprisingly, in Madrasah education of Bangladesh.

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