INTRODUCTION

Bangladesh is one of the world’s most densely populated countries with a population of 162 million. The country has made noteworthy progress in the areas of access to primary schools and gender parity in the recent years. Primary education of Bangladesh is one of the largest in size in the world. According to the annual report (2017-2018) of the Directorate of Primary Education (DPE), number of primary school children in Bangladesh is 17,338,100 of which 8,799,033 are girls. Educational Database-2018 of the Bangladesh Bureau of Educational Information and Statistics (BANBEIS) reported that total number of college student’s in Bangladesh is 4,278,441, among them 2,046,479 are girls.

However, relevance and quality of our primary and higher education curriculum are yet to be comparable with global standards. Emergence of new technologies has drastically changed the educational landscape of today’s world. Now anyone can access educational resources anytime and anywhere. The conventional primary, secondary and higher secondary education of our country is now challenged by the ongoing rapid transformation of educational process and delivery techniques. Thus use of ICT in education to transform our young generation to a digitally literate generation is a crucial necessity at this time and years to come. Taking this in consideration Bangladesh Government has taken various measures to transform its young population to an IT enabled generation.

In the National Education Policy 2010, use of ICT from primary to higher levels was given high importance. One of the objectives of the Education Policy 2010 is “to extend the use of information and communication technology (ICT) instrumental in educational process at every level”, which reflects the government’s commitment towards expansion of ICT in education.

“Digital Bangladesh” initiative is another initiative of the Government of Bangladesh which is a strong impetus for use of digital technology to make all government services digitally available to the people. “Digital Bangladesh” is aiming to transform the country into a modern, knowledge-based society by 2021 and promoting the ICT sector as the growth engine for Bangladesh.

In 2015 Government of Bangladesh approved its ICT policy to promote ICT in Education. Vision of this policy is to “expand and diversify the use of ICTs to establish a transparent, responsive and accountable government, develop skilled human resources, enhance social equity, ensure cost-effective delivery of citizen-services through public-private partnerships, and support the national goal of becoming a middle-income country within ten years and join the ranks of the developed countries of the world within thirty years”. In line with this vision Government of Bangladesh has started extending the reach of ICT literacy throughout the country by incorporating ICT courses in secondary education and TVET programmes as well as expanding ICT infrastructure facilities in educational institutions.

Master Plan for ICT in Education (2012-2021), Ministry of Education, Government of the People’s Republic of Bangladesh sets aim for Secondary and Higher Secondary Education to improve quality of education with the creation of ICT-enabled teaching–learning environment and building up the learners at the secondary and higher secondary levels as skilled human resource for the knowledge- oriented society that is responsive to the needs of the 21st century. Now it is high time for Bangladesh to transform its young population into an IT capable generation. This generation should also be prepared to cope with technological wonders of the 4th industrial revolution which is already started transforming all aspects of our lives.

In this backdrop, Center for International Education and Development (CINED) of Dhaka Ahsania Mission (DAM) in cooperation with Commonwealth of Learning (COL) and Access to information in Bangladesh(a2i) implemented a pilot project on “Commonwealth Digital Education Leadership Training in Action”(C-DELTA). The aim of this project was to develop ICT leaders in Bangladesh at the collage and community levels. As part of the project 30 college teachers from 20 colleges were trained about the C-DELTA and its seven e-learning modules on ICT. The aim of this piloting was to register college teachers and students in the C- DELTA platform and create access to COL e-learning modules and help build a culture of lifelong digital learning. It is expected that after joining in the
C- DELTA platform, individual learners can develop their skills using online resources and get certified. As a result, registered individuals will also improve their employability by enhancing their level of digital education and leadership skills, and by getting the electronic badge as a credential in their résumés.

PROJECT IMPLEMENTATION STRATEGY

Selection of teachers

Dhaka Ahsania Mission took systematic steps to select college teachers. The following criterion were followed while selecting college teachers:

- Two teachers from each college were selected so that together they can bring a change in the college.
- Colleges were selected from different districts to give access to district level colleges along with central level college.
- To assure internet accessibility to complete e-learning modules by the teachers and student, colleges having digital lab were selected.
- Women teachers were given preference to attend in the course so that they can encourage more female students in the C-DELTA platform,
- Teachers who have ICT literacy and basic training on ICT were selected

Selection of teachers was supported by a2i project. a2i is a special programme of the government of Bangladesh that catalyzes citizen friendly public service innovation, simplifying government procedures and bringing people closer to it). With the support of a2i, 30 teachers were selected from 5 districts of Bangladesh i.e. Dhaka, Chittagong, Kustia, Manikganj and Narshingdi.

C-DELTA Teachers Profile

In total 32 participants and2 observers participated in the teachers training. Among the participants, 26 were male and 6 were female. Among the teachers were 25 lecturer, 2 Senior lecturer, 2 Assistant professors and 1 senior teacher. In terms of educational qualification of the participants 24 participants have post-graduate degrees, 5 have Graduate degree and 1 have post-graduate diploma.

Training of teachers

A three days teachers training were organized in the Auditorium of Dhaka Ahsania Mission from 24-26 January 2019. 30 college teachers from 20 colleges and 2 observers attended in the teachers training. C-DELTA training workshop was organized for the first time in Bangladesh under COL’s long-term program. Prof. Mostafa Azad Kamal, Dean, school of business, Bangladesh Open University and Mr. GF Hamim, Director, Programmes, Dhaka Ahsania Mission facilitated the workshop.

On the first day of the workshop, participants were oriented on the roles of digital education leaders, use of ICT in educational institutes, digital identity, digital literacy& education, creating and managing online profiles and digital identities, privacy and data protection, searching strategies etc.
On the second day a thorough training was delivered on what the digital resources are and how to find digital resources for learning, objective setting/purposive searching, skills for effectively using search engines, creating and sharing digital resources, selecting and engaging networks, safety and well-being in online networks, digital footprint and managing digital footprint, building a personal learning network, internet ethics, using the COL platform & access to C-DELTA modules, cultivating innovation etc.

On the last day of the workshop participants prepared a draft learning object/content design based on own context and share the content in teacher’s network/DAM and COL e-learning platform. Besides the roles of digital education leaders in schools and C-DELTA platform was elaborately discussed.

During the workshop, all participating teachers developed a C-DELTA Action Plan to be implemented in their institutions for the next three months. As part of the plan, all the teachers agreed to complete all seven modules, form a student group and facilitate them to complete at least three modules and sit for the pre and post-test. The trained teachers also agreed to engage their colleagues and other students back in their institutions, to make an inroad to the promotion of C-DELTA activities and lead efforts to create a digitally mediated society. CINED, DAM maintained a regular communication with the teachers to follow up the implementation of their plan.

The methods of the training workshop were participatory, interactive and online practice based. Specific methods used to conduct the training were: group discussion, brainstorming and group exercise. To facilitate the learning, a WhatsApp group was formed through which the trainee teachers started to share their learning and different contents. Earlier, all teachers registered themselves on C-DELTA platform and took the pre-test.

Role of the teachers

Teachers who attended the training agreed to play the following roles performed after the training:
1) Serve as Manager for C-DELTA in their colleges.
3) Conduct orientation sessions for their colleagues and interested higher secondary students.
4) Encourage all higher secondary students and teachers to register and take up the C-DELTA online over a period of 3 months.
5) Provide support and guidance as may be required from time to time by those who will take up the modules of C-DELTA.
6) Organize group sessions, as required by the students to understand the modules.
7) Provide a short report on activities undertaken at the college level to promote the use of C-DELTA platform in their colleges.

Methods of data collection and analysis

After the C-DELTA training in Dhaka, CINED maintained regular communication with the teachers through e-mail and telephone. During the middle of the project period, CINED requested all teachers to send mid-term progress report regarding implementation of C-DELTA activities in their respective colleges. At the end of the project period
CINED received end-of-project report as per prescribed reporting format. CINED analyzed all data and information of the teacher’s reports. The information mentioned in the following sections is based on these reports.

**Implementation of C- DELTA at the college level**

All teachers follow almost same procedure to implement C-DELTA in their respective colleges. On the final day of the C- DELTA training in Dhaka all teachers prepared individual action plan on how to implement C-DELTA in their respective colleges. After the training the first activity they undertook was to complete seven e-learning modules designed for them. At the same time they organized meeting with college principals and other fellow teachers to orient them about C- DELTA and organized several meetings with interested students who are studying in 11thand 12thgrade. After that several sessions were organized to help students to register in the C-DELTA platform as well as guide them to complete three modules which were designed for the students. Teachers also helped register students in module assessments, pre-test and post-test. At the college level certificate ceremonies were organized where local leaders and members of college committee were present.
Changes in the teaching learning practice in the colleges

It was expected that after the training and completion of e-learning modules the capacity and motivation of the teachers will be increased, and they will utilize the newly gained knowledge and skills in bringing changes in their respective colleges. Analyzing the reports received from C-DELTA implementing colleges, it was noticed that after registration in the C-DELTA platform, students in general become motivated to doing online courses and getting certificates from home. This changed their knowledge and attitude towards online learning. Most of the teachers who have completed e-modules started innovating new techniques, styles, process in their teaching learning practices. Some of the teachers created Facebook group and started group discussion with their students by offering suggestions and send photos on Instagram. Now some of the teacher are downloading OER and creating their lessons. Some of the teachers have created groups on whasapp, imo, viber, messenger etc and replying to student’s questions quickly. After the C-DELTA training now teachers can easily add lecture sheets, problems and solutions of creative questions on the groups. This saves time for students and brought excitement in the teaching learning process.

Since the teachers and students are now aware about online safety it will help them in the long run. Teachers are in general planning to incorporate their digital knowledge in their teaching-learning activities. They have also increased multimedia classes which are very useful for students. Most of the teachers are happy to learn about quick access to global networks to find contents and share topics or ideas. Before the C-DELTA training, teachers mostly prepared PowerPoint slides using photos and videos from any source. Now they are using photos and videos from open educational resources.

Future plan of the trained teachers

In the project completion report, some of the teachers expressed their desire to register more students to the C-DELTA platform from their respective colleges and even neighboring colleges and schools so that others become aware of their future digital life from the start. Teachers are willing to spread the message of C-DELTA to other related persons and institutions. Besides, they wish to invest more time to make digital content for their classes so that it would be easy for even the weaker students to understand contents.

Some teachers are planning to organize meetings or workshop with parents regarding online safety so that they can understand the seriousness of the issues and make their child aware of those.

Some teachers have mentioned that new admission of 2019-2020 will start soon. They will include as many of the newly admitted students in the C-DELTA platform as possible.
LESSONS LEARNED AND PROBLEMS ENCOUNTERED

Students were very happy and motivated to join the online course platform which they enjoyed and completed, and got certificates for. They also appreciated that the course was very helpful for getting knowledge about developing digital identities, mobilizing resources, engaging with networks and use that knowledge in their day to day life. The course was also helpful for learning English. But the time duration was too short as the Class-11 were facing their final exam and the Class – 12 were facing the Board Exam.

February and March were tough months for the students as well as for the teachers as monthly exams were being held. Due to this they could not get the opportunity to study the modules thoroughly, as a result they could not give the pre and post tests in time. But the students who could give the pre tests did moderately well.

On the other hand, some parents were hesitant to give their children mobile phones or computers for study courses materials at home. Their argument is that it will be wastage of time. Perception of many parents regarding e-learning is not very positive. Many teachers commented that C-DELTA website is very slow. In this case, some teachers stopped doing the course and some did not continue.

Teachers of the government institution have faced some problems to implement this activity. As there is no government order their Principal did not give permission to do the activity. Teachers had to work with the students after college hours or during holidays and use their own residence as a venue. That is why some teachers and students left the activity after registration and lost their enthusiasm. Some teachers could not manage their time to undertake the additional activities as a manager of C-DELTA in their colleges besides their regular academic activities and did not succeed to encourage their students to register in the C-DELTA platform. Students those were not very good in English faced difficulty to complete the modules. They also commented that modules are lengthy.

OUTCOME OF THE PROJECT

30 college teachers from 20 colleges and 2 observers attended in the C-DELTA teachers training. During the training workshop all the participants and observers registered in the C-DELTA platform. After completion of the teachers training 19 teachers (13 were male and 6 were female) performed their role successfully. Within the duration of 3 months all 19 teachers completed seven e-learning modules of C-DELTA and motivated total 302 college students (174 girls and 128 boys) to register in the C-DELTA platform. In addition to students, 8 additional teachers (5 male and 3 female) also registered in the C-DELTA platform, inspired by the trained teachers. Some of the additional teachers completed C-DELTA modules and others are in a process of completing modules. Most of the students completed modules prescribed for them. Some of the students could not complete their modules due to college exams are now in a process of completing their modules. Most of the trained teachers completed their modules and are helping more students to register in the C-DELTA platform. CINED is now communicating with 11 C-Delta trained teachers to complete their e-learning modules and help their students to register in the C-DELTA platform.

RECOMMENDATIONS

Piloting of C-DELTA in Bangladesh is completed. Now a study can be organized to determine the level of digital education leadership skills among participating teachers and students and compare these skills with non participating college teachers and students. This will provide us a national benchmark for scaling up this activity in Bangladesh. A tracer study can be planned to measure the long term impact on the students and teachers who are registered in the C-DELTA platform. A national level advocacy workshop can be organized to disseminate the findings of the study.

In Bangladesh use of internet is increasing rapidly among the students but they have limited knowledge about digital identity and potentials of ICT. Arranging more courses for more teachers on C-DELTA will create scope for more students to get access to e-learning modules of COL. A workshop can be organized with selected students and teachers to listen to their experiences before designing future courses for the teachers. This way C-DELTA can play a vital role for developing a new generation of digital leaders.
Students who already finished their modules can be requested to encourage more students in the C- DELTA platform. Every student who is able to contribute to register more students can be awarded as Young Leaders by giving them certificates.

Scale-up of this pilot project would be a vital contribution for developing digital education leadership skills among teachers and students in Bangladesh.

WAY FORWARD

C- DELTA is a voluntary professional development activity for teachers, and this is an additional course for the students at secondary/ higher secondary level to develop their digital skills. After the training, college teachers are now in a process of assisting their students to complete at least three e-learning modules as well as register more students in the C- DELTA platform. C- DELTA Bangladesh pilot project officially completed in May 2019. Since this pilot project is a part of lifelong learning, we are expecting that teachers who have not completed their course due to many reasons will complete their action plan in future. CINED will maintain contact with the trained teachers and encourage them to remain active in the digital learning. As a pilot project C-DELTA is successful and created enthusiasm among teachers and students. There are huge number of success stories of this pilot project, one of which is appended below:

CASE STUDY

Commonwealth Digital Education Leadership Training in Action (C-DELTA)’ program, arranged by “Commonwealth of Learning”, is quiet befitting as far as this modern era is concerned and deserves a lot of appreciation. The modules played a vital role in making this program successful and attractive. Each and every information needed to set foot on this modern world of technology, is incorporated within these modules.

By going through these modules, I have got to know about ICT’s different fields and their uses and limitations. My prior ideas concerning hardware-software, seems to have become a lot clear. Apart from that, I have facilitated myself by gaining detailed knowledge on Digital Identity, Digital Footprint, Open Content, Wikipedia, and Open Education Network. After completing this course, I have gained a great deal of self-confidence. Now, I can perform different tasks online in a proper way. This undoubtedly has brought a significant change in my life. In today’s twenty first century, undoubtedly, the online based communication system is the best medium for communication and I too, am a part of this golden age of technology. So, I am always eager to keep myself engaged in the round-the-clock online based activities. For this reason, I have increased my online presence on Facebook, E-Mail, Imo, YouTube and many other websites. I have been continuously deriving facilities from these fields and at the same time I am helping and enlightening others to facilitate themselves with these facilities. Very often, I on my social media platforms, post various types of posts on the current situation of the world, counteracting different problems and to enlighten others. Along with that, I try to share important information from other sources as well as to inform others. Apart from that, I always inspire the people around me by discussing with them about the importance of online based activities and communication.

To keep pace with this rapidly progressing world of today, programs like these, are really very important. I am very much benefitted to have been able to complete this course and now I am feeling proud to be a participant of such a unique program. I would always like to be connected to this lifelong program of E-commonwealth. In future I want to be even more active in participating in such programs. Along with that, I want to increase the connectivity of my classmates to this program. I want to step forward with everyone by giving them appropriate information regarding the proper usage of technology and the benefits of technology in education.

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References


