ICT EDUCATION IN BANGLADESH: SECONDARY AND HIGHER SECONDARY LEVEL

Project Proposal

SUBMITTED TO

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GROUP-03 MEMBERS

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CHAPTER 1: BACKGROUND

The challenge Bangladesh currently faces is how to become a learning society and how to ensure that its citizens are equipped with the knowledge, skills and qualifications on information and communication technology (ICT) needed in the next decade.

Computer science was introduced as an optional subject for secondary level students from 1994. About 150 schools were permitted to teach the subject. ICT has been introduced in National Education Policy 2010 ICT has been compulsory in SSC since 2015. ICT has been compulsory in HSC since 2015. This project is for analysis the current state of ICT education in HSC and SSC level. Our focus is on the compulsory subject ICT in SSC and HSC.

The information communication technology has been emerged with the development of technology as well as the speedy spreading of computer literacy. The issue of 'computer in education' started to become popular in education policy making in the early 1980s, when relatively cheap microcomputers became available for the consumer market. In this process, some developed countries started to give the computers in their schools. Later, near at the end of the 1980s, the term 'computer' was replaced by 'IT' (information technology), signifying a shift of focus from computer technology to the capacity to store and retrieve information. This was followed by the introduction of term ICT (information and communication technology) which involves collection, storage, processing, presentation and distribution of information, around 1992, when e-mail started to become available to the general public. Computers, internet and electronic communication are integral parts of ICT.

In the developing countries of the globe, prime areas to apply ICTs applications are in education, health, agriculture, commerce and industry, family planning sector and so on. Similarly Bangladesh has been trying to apply ICTs application in those fields. Among these, in the field of education, ICTs can have a vital role to help overcome the global challenges. Especially at secondary and higher stage, we need to prepare more; since these two stages are the bases to provide skilled human resources through technical education or higher education. That is why, these two stages could be considered as important stages among the existing three broader stages of education system of Bangladesh.

CHAPTER 2: OBJECTIVE

2.1 BROAD OBJECTIVE:

Analyze the overall state of ICT Education of Secondary and Higher Secondary level in Bangladesh.

2.2 SPECIFIC OBJECTIVES:

This project is for giving a picture of the current state of ICT education in Bangladesh. We also want to find ways to resolve the problems currently faced by educators and students.

1. Analyze the existing status of ICTs education in the mainstream educational institutions of Bangladesh

2. Explore the prospects of ICT education in the said field

3. Identify the problems of ICTs in education sector

4. We want to find answers of the questions given below-

QUESTION 1:

Bangladesh Government has taken some initiatives like:

- For teacher training in secondary and higher secondary education, 20 computer labs were established for each of the Teachers' Training Institutes in the country (14 Teacher Training Centers/TTC, 5 Higher Secondary Teacher Training Institutes (HSTTI) and 1 Bangladesh Madrassa Teachers' Training Institute (BMTTI) under the Teaching Quality Improvement for Secondary Education Project (TQI-SEP). (Access to Information (A2I, 2011)
- Approximately 2,250 teachers received training under this agreement in 2010. (Access to Information (A2I, 2011)
- From January 2011 to June 2013, a total of 7000 and 5000 secondary and higher secondary teachers respectively, received training (ICT4E-SHSP)
- The government has decided to set up 2,000 computer labs and 64 language training labs in educational institutions across the country. (Government to set up 2000 computer labs, 2017)

Question: Are these initiatives enough or not for the progress of ICT education in Bangladesh?

QUESTION 2:

Current HSC ICT Syllabus is given below:

(Information and Communication Technology, HSC, 2012)

অধ্যায়	অধ্যায়ের শিরোনাম
প্রথম	তথ্য ও যোগাযোগ প্রযুক্তি : বিশ্ব ও বাংলাদেশ প্রেক্ষিত
দ্বিতীয়	কমিউনিকেশন সিস্টেমস ও নেটওয়ার্কিং
তৃতীয়	সংখ্যা পদ্ধতি ও ডিজিটাল ডিভাইস
চতুর্থ	ওয়েব ডিজাইন পরিচিতি এবং HTML
পঞ্চম	প্রোগ্রামিং ভাষা
ষষ্ঠ	ডেটাবেজ ম্যানেজমেন্ট সিস্টেম

Figure 1: ICT Syllabus of HSC

Question: Is the content of the syllabus appropriate?

5. Our objective is to find some way to meet up the following challenges:

1. Slow decision-making process in the government level
2. Uninterrupted electricity and internet connectivity
3. Lack of multimedia contents
4. Lack of trained and potential teachers

CHAPTER 3: SCOPE

To meet the project objectives, we want to interview students and teachers from secondary schools and colleges. Through the interview process we want to gather their opinion about the current state of ICT Education in Secondary and Higher Secondary Level in Bangladesh, the problems they currently face and solutions they recommend. The schools we will visit will be within Dhaka City.

We would also like to interview policy makers from the Directorate of Secondary and Higher Education, Bangladesh and ask them about their vision for ICT Education in Secondary and Higher Secondary Level in Bangladesh. We would also like to inform them about the problems, that students and teachers currently face and ask them about what solutions they are working on.

Finally we would like to interview domain experts from the Institute of Information Technology, University of Dhaka, to ask their opinion about the effectiveness of the curriculum and changes they recommend.

Opinions collected from Interviewee may be subjected to biases.

The project will be completed and reported by 14th April 2017.

CHAPTER 4: METHODOLOGY

Population and unit of analysis - Some schools and colleges of Dhaka city will be selected as the unit of analysis. We will collect informed opinion from all stakeholders (students, teachers, professors and government) on the current state of ICT education. Finally we will try to draw a conclusion over the population. We will collect information from Directorate of Secondary and Higher Education, 16, Abdul Gani Rd, Dhaka 1000, Bangladesh. We will also discuss with professors on this topic. We will take interview from the Director of Institute of Information Technology, University of Dhaka.

Data collection techniques - Interview. Interviews are particularly useful for getting the story behind a participant's experiences. We have decided to use the interview as data collection techniques for this project. We will make an interview schedule for people, take interview from individual and found out their opinions. Closed and open-ended questions have been asked during interview.

Our focused questions will be-

1. Are the initiatives of government enough or not for the progress of ICT education in Bangladesh?
2. What is actual need of a compulsory subject like this in SSC and HSC?
3. How many teachers assigned to this subject in a particular school or a college?
4. Will the students be benefitted studying this syllabus of ICT in the long run?
5. Is the content of the present syllabus of ICT appropriate?
6. How can the teachers be more efficient to teach the students?
7. How can we meet up the challenges in this regard?
8. What is the recent future plan of government to develop the progress of the condition of ICT education in HSC and SSC level?

Data Analysis - Finally we will analyze the information. By this we will conclude a summary of our project. We hope we can find answers of our questions and can find some ways to solve the problems of ICT education in Bangladesh

CHAPTER 5: TIMELINE CHART

Start Date: **14/03/2017**

End Date: **14/04/2017**

Our tasks can be divided into 6 sections. They are-

1. Set goals and objectives
2. Visit schools and colleges
3. Interview IT experts/Professors
4. Visit Directorate of Secondary and Higher Education (DSHE)
5. Data analysis
6. Finalizing report

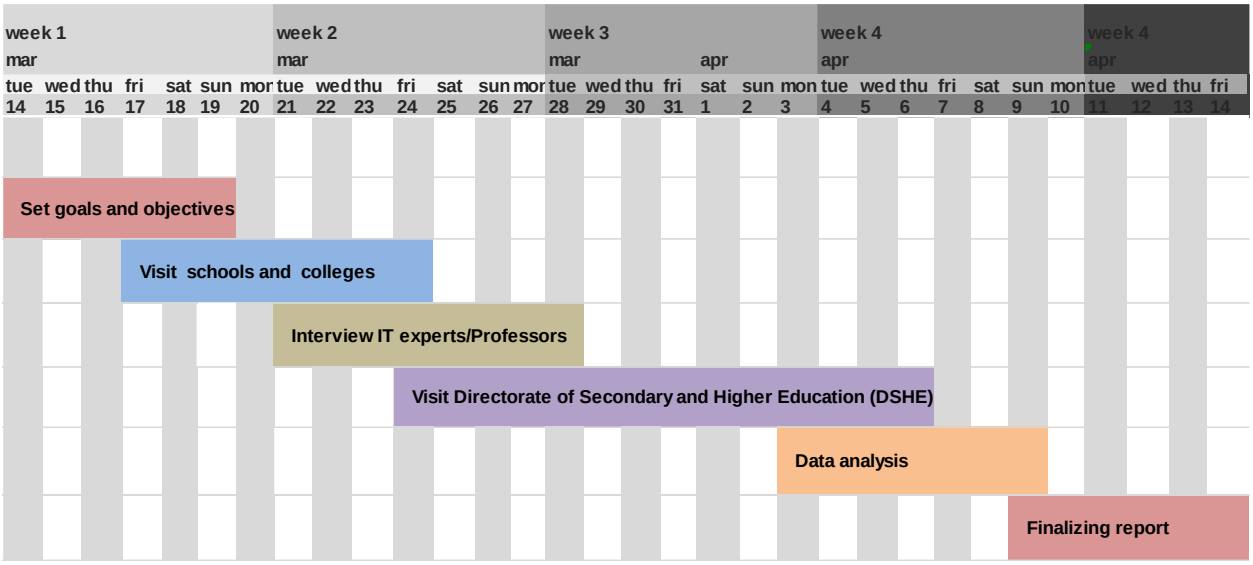

Figure 2: Timeline chart

CHAPTER 6: TEAM MEMBERS

6.1 LIST OF GROUP MEMBERS

MEMBERS	ROLL	ROLE IN GROUP
Md. Shihab Shahriar Khan	703	General Member
Shuvo Saha	705	Team Leader
Md. Eusha Kadir	708	General Member
Maliha Nawshin Rahman	713	General Member
Md. Aquib Azmain	718	General Member

6.2 BRIEF CV OF EACH MEMBER

MD. SHIHAB SHAHRIAR KHAN

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PERSONAL	**Date of Birth**: December 6, 1995 **Place of Birth**: Mustafapur, Madaripur **Citizenship**: Bangladeshi

EDUCATION	**Barisal Cadet College** SSC GPA-5.00 *2012* Science **Barisal Cadet College** HSC GPA-5.00 *2014* Science

SKILLS	**Language** - Fluent in English **Computer Skills** - Microsoft Office **Programming Skills** - Python, C, C++, Java, HTML, CSS, Javascript

SHUVO SAHA

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PERSONAL	**Date of Birth**: December 21, 1995 **Place of Birth**: Tangail, Tangail **Citizenship**: Bangladeshi

EDUCATION	**Willes Little Flower School and College** Edexcel International GCSE, GPA-5.00 May 2012 **Willes Little Flower School and College** Edexcel International Advanced Level, GPA-5.00 May 2014

SKILLS	**Language** - Fluent in English **Computer Skills** - Microsoft Office **Programming Skills** - C, C++, Java, HTML, CSS, Javascript, PHP

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PERSONAL	**Date of Birth**: December 30, 1997 **Place of Birth**: Nishindara, Bogra **Citizenship**: Bangladeshi

EDUCATION	**Bogra Zilla School, Bogra** SSC GPA-5.00 *2012* Science **Notre Dame College, Dhaka** HSC GPA-5.00 *2014* Science

SKILLS	**Language** - Fluent in English **Computer Skills** - Microsoft Office, Adobe Photoshop **Programming Skills** - C, C++, Java, HTML, CSS, Javascript, PHP

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PERSONAL	**Date of Birth:** September 02, 1996 **Place of Birth:** Dhaka **Citizenship:** Bangladeshi

EDUCATION	**Viqarunnisa Noon School and College** SSC GPA-5.00 *2011* Science **Viqarunnisa Noon School and College** HSC GPA-5.00 *2013* Science

SKILLS	**Language** - Fluent in English **Computer Skills** - Microsoft Office **Programming Skills** - C, C++, Java, HTML, CSS, Javascript, PHP

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PERSONAL	**Date of Birth**: October 10, 1996 **Place of Birth**: Jaleshwaritola, Bogra **Citizenship**: Bangladeshi

EDUCATION	**Bogra Cantonment Public School and College** SSC GPA-5.00 *2012* Science **Government Azizul Haque College, Bogra** HSC GPA-5.00 *2014* Science

SKILLS	**Language** - Fluent in English **Computer Skills** - Microsoft Office **Programming Skills** - C, C++, Java, HTML, CSS, Javascript, PHP

CHAPTER 7: BUDGET

a. Cost breakdown

EXPENSE	CURRENT BUDGET (TK)
COMMUNICATION	**500**
1. RICKSHAW RENT	**250**
2. MOBILE CALL COST	**250**
SOFTWARE	**0**
REPORT PRINTING	**300**
TOTAL	**800**

b. Mode of payment: Cash

CHAPTER 8: CONCLUSION

About two centuries ago, civilization took a radical turn on the wake of industrial revolution. Change is again taking place in the 21st century because of ICT revolution. By becoming a part of this revolution, Bangladesh, as a developing country, has found remarkable opportunities to alleviate poverty. Proper use of information technology can lead to the achievement of expected skills. Technology can play a vital role in the eradication of corruption by bringing in transparency in the state machinery. More attention will be given to prospective areas of export such as software, data processing or call center services industry including supply of skilled manpower in information technology.

We hope we can collect informed opinion from all stakeholders (students, teachers, professors and government) on the current state of ICT education, collect informed opinion from all stakeholders on how to improve the current state of ICT education, communicate findings to all stakeholders involved and recommend beneficial policy changes.

We hope we can find answers of our questions and can find some ways to solve the problems of ICT education in Bangladesh.

REFERENCES

- (2017, March 06). Retrieved from Government to set up 2000 computer labs: http://www.thedailystar.net/city/govt-set-2000-computer-labs-165892
- Access to Information (A2I. (2011). *Strategic Priorities of Digital Bangladesh.* Access to Information (A2I) Programme Prime Minister's Office.
- ICT4E-SHSP. (n.d.). *ICT for Education in Secondary and Higher Secondary Level Project.* Ministry of Education, Bangladesh .
- *Information and Communication Technology Book, HSC.* (2012).