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DIGITAL TRANSFORMATION IN EDUCATION: A QUANTITATIVE ANALYSIS OF USING ICT TOOLS AWARENESS AMONG THE STUDENTS IN BANGLADESH

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Abstract. *There has been a paradigm shift from traditional teaching methods to digital pedagogy in the teaching-learning process worldwide. Consequently, significant changes are visible in curriculum development and classroom teaching to integrate technology in many developing countries. However, understanding the importance of technology in classroom teaching, Bangladesh government has initiated different projects, particularly to make the teachers skilled in using ICT devices in classroom setting. Therefore, the study aims to investigate students' awareness of using different applications for their academic purpose. The study adopted quantitative survey method where 500 participants from government, semi-government, and private schools of urban, semi-urban, and rural areas were participated. Results indicates that majority of the students' participants are aware of various types of ICT tools. It also suggests that majority of the participants use different software for their foreign language learning purpose.*

Keywords: *Information and Communication Technology (ICT), English Language Learning, Students Awareness.*

Introduction

ICT has made a remarkable revolution in the field of education. There has been a paradigm shift in the teaching-learning process and significant changes concerning curriculum and pedagogy. Everyday advancement and proliferation of ICT have exponentially enhanced the potential of ICT in honing students' creativity, enhancing students' critical thinking capability and productivity and making teaching autonomous and interactive simultaneously.

The ministries of education across the world have also realized the potential of ICT and the benefits of integrating ICT into their education system. In addition to this, the well-known researcher, Dudeney, noted that national ICT policies can serve several crucial functions. They provide a rationale, a set of goals, and a vision of how education systems run if ICT is integrated into the teaching and learning process, and

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they are beneficial to students, teachers, parents and the general population of a given country (Dudeney, 2010).

Moreover, understanding the significant role of ICT in education, Bangladesh made a vision of “Vision 21” to improve the quality of education by integrating ICT into its education system (Khan, 2012). In light of this, the Bangladesh government has taken several initiatives to implement ICT in classroom teaching to stimulate the changes. ICT in classroom teaching has been made compulsory in secondary schools in Bangladesh (Ministry of Education (MoE) Bangladesh, 2003).

Although the concerned organizations have taken several initiatives and introduced policies to promote and implement ICT in the classroom, there have not been significant studies on the awareness of using ICT devices by the secondary school students for language learning purpose

Literature Review

ICT in Education: Global Context

Gracemary Wambui Mbogo, Onunga Dolly Anne & Miriam Njeri Kirathi (2014) conducted a study on evaluation of the implementation of Information Technology in Secondary Schools in Kenya. Results indicate teachers’ eagerness to use Information and Communication Technology (ICT) in their teaching methods to enhance their effectiveness of instruction. Likewise, Hadi Salehi & Zainab Salehi (2012) carried out a study on the challenge and barriers of integration of ICT in English language teaching at where thirty high school English teachers have participated from all the educational district in the city of Isfahan, Iran. Results indicate that teachers are familiar with ICT device but they face some challenges, such as insufficient technical support, little access to Internet and ICT prevent English teachers to use ICT in the classroom. Albirini & Abdul Kafi (2006) carried out an exploratory study in a high school in Syria, which shows teachers positive perceptions towards ICT in education. Likewise, Ghasemi, Babak, and Masoud (2011) conducted a study ICT: New wave in English language learning /teaching, which highlight the potentiality of ICT in Second language learning. At the same time, Hafizoah Kassim & Zuraina Ali (2007) carried out a study on the Use of ICT in the Implementation of Student-Centered Learning (SCL). Result shows that ICT enhances the language learning opportunity for the learner and makes the classroom to be a place of student-centered learning. Granger and his colleagues (2002) carried out a study among four schools in Canada and identified that to the successful implementation of ICT integrated English Language Teaching relies not only on the availability of computers but also on the enthusiasm and dedication of the instructors.

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ICT in Education: Bangladesh context

In order to become a “Digital Bangladesh” (Khan, 2012) and to ensure quality Education through using ICT devices, Bangladesh government has taken several initiatives. As a part of initiatives, ICT division has announced its policy ‘National ICT Policy 2009’ and based on this policy ‘National Education Policy’ has been rephrased in 2010. For this, UNESCO has been providing its maximum support to the Government of Bangladesh (GoB) to adopt ICT in Education. After realizing the potential of ICT in Education, different private organizations and NGOs are extending their hands in integrating ICT as an innovative approach to Education. BRAC (Bangladesh Rural Advancement Committee) and Grameen Bank particularly have taken some initiatives in using ICT for education such as In-service secondary teachers’ ICT training program, Gonokendros (Union Library), and Computer-Aided learning. In addition to this, National Education Policy (NEP) 2010, has been working on; the promotion of ICT enabled teaching and learning, professional development of teachers to enable them to use ICT in teaching, ICT literacy for students, introducing ICT enabled education-related services and, also ICT use in education administration.

The integration of ICT in Education has brought a significant change particularly, in English Language Teaching (ELT) as discussed in (Dash & Kuddus, 2020). To stimulate the changes, Bangladesh government has taken several initiatives to implement the use of ICT in classroom teaching. Especially, the government has already focused on ICT based ELT in Education rather than just ICT literacy. The National Education policy (NEP) 2010 emphasizes the use of ICT to improve the quality of education. At the same time, NEP 2010 identifies some strategies for using ICT in all the level; primary, secondary and higher secondary.

The existing literature shows that a significant number of initiatives have been taken by the government and the non-government organizations of Bangladesh. However, there is a paucity of studies showing the awareness of students towards using ICT devices for language learning purpose.

1. Research Objective

The objective of the study is to investigate the current status of using ICT by the secondary school students of Bangladesh for English language learning purpose.

2. Research Methodology

Keeping the objective in mind, a survey questionnaire was designed to investigate the actual awareness of using ICT tools by the secondary school students.

Participants

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For the purpose of the study, a total number of 500 participants were invited to participate from government, semi-government, and private schools of urban, semi-urban, and rural areas of Bangladesh.

Instruments

This study adopted a quantitative approach with close ended questionnaire. The Questionnaire was administered randomly to the students of various secondary schools of Bangladesh. The questionnaire was divided into two sections: a) participants background b) participants’ awareness of using ICT devices their language learning purpose.

Procedure

The questionnaire was distributed among 500 students and all the responses were obtained. The response from the participants were quantified and was analyzed by SPSS 20 program to interpret the data and to draw conclusion.

Analysis and Interpretation of Data

Data indicates students’ awareness and usage of ICT devices for language learning purpose, how frequently they use computers and the internet, and what applications and software they use for their English language study purpose.

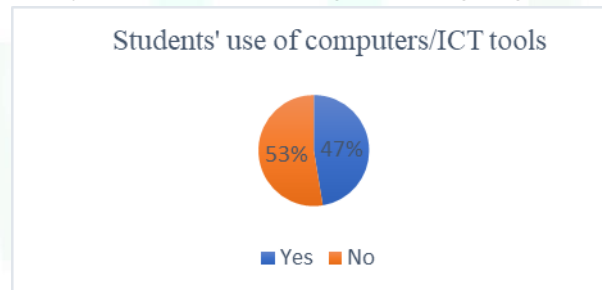


Figure 1: Students’ use of computers for learning purpose.

For item 1, the above figure-1 shows that 53% of the total student participants do not use computers in any form whereas 47% use for their language study purpose.

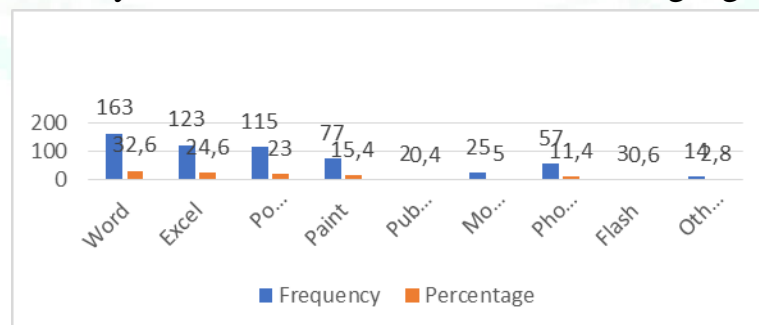


Figure 2: Students awareness and use of computer applications for learning purpose.

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In order to explore deep into their awareness of ICT tools and applications, item 2 of the questionnaire tries to elicit information about their usage of various computer applications and the result reveals that 32.6% of the students use MS Word, 24.6% use Excel and 23% of the students are familiar with PowerPoint for learning purpose. The results also indicate that the students are less aware of other applications like Publisher and Movie maker and others.

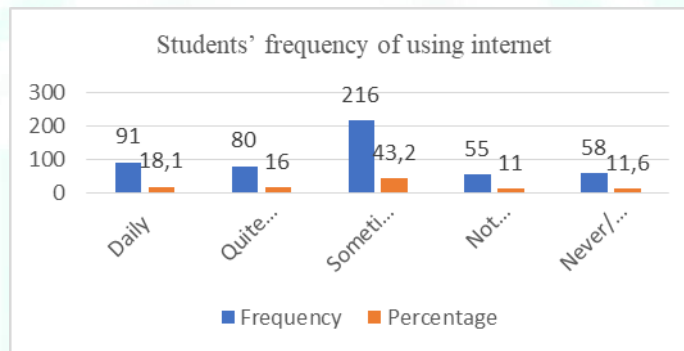


Figure 3: Students' frequency of using internet for learning purpose.

For item 3, figure-3 shows that only 18.2% of the total students use the internet daily, 16% use quite often, and 43.2% use sometimes for their language study purpose. It is also important to note that 11% never or hardly use the internet.

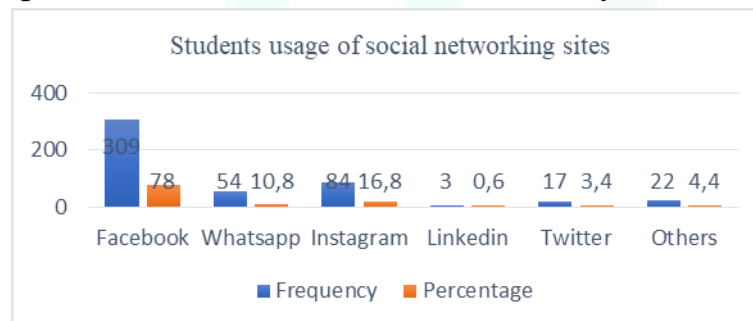


Figure 4: Students' usage of social networking sites for learning purpose.

For item 4, Section B, 'students' usage of social networking sites' figure-4 shows that 78% are using Facebook, 10.8% use WhatsApp, and 16.8% use Instagram for their study purpose.

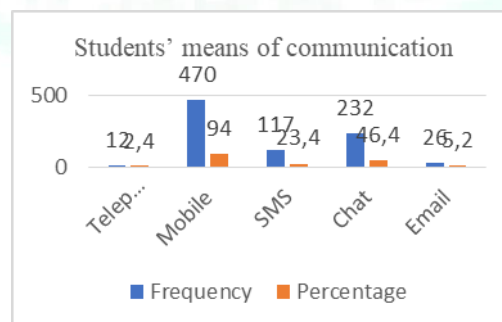


Figure 5: Students' means of communication for learning purpose

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Fig-5 shows that among 500 student participants, only 2.4% use the telephone whereas 94% use mobile phones, 23.4% use texting for communication purposes, 46.4% use chat, and 5.2% use emails for their language learning purpose.

Limitation of the Study

As far as limitations of the study are concerned, there are certain limitations in the survey that was done for the status of using ICT devices by the secondary school level students' language learning purpose. The target population of the survey was limited to only secondary school levels in Bangladesh. The present study is limited to students from government, semi-government, and private schools in urban, semi-urban, and rural areas of Bangladesh. Therefore, investigation to other different schools may come with different results.

Conclusions

The significance of this research lies in its contribution to knowledge enhancement, particularly the generation of helpful information about using ICT devices by the students of secondary schools in Bangladesh. With the knowledge of the current status of using ICT devices by the secondary students may help the educationist, policymakers, decision-makers and the stakeholders in planning the course of investments and training activities for both teachers and students of the secondary schools of Bangladesh. One of the significant implications that arise here is that the integration of ICT in English language learning requires the full support of the Government of Bangladesh for the ground level implementation of ICT in the secondary schools of rural, urban and semi-urban locations of Bangladesh. It may also provide insight into the gap in the actual application of ICT between the rural/urban and government/private schools, irrespective of the active initiatives being taken by the government.

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