Addressing Impact of Technology in English Language Teaching at Secondary Level Education in Bangladesh

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Abstract—In this technological age, integration of multimedia technology with traditional teaching methods is considered as a key promoter of creating effective teaching and learning atmosphere across the globe. Comprehending its importance, the present study aimed at investigating the effectiveness, adaptation, and contribution of technology-based ELT in different domains of English language alongside its key challenges at the secondary level (6-10 classes) education in Bangladesh via analyzing English teachers and learners’ responses against it. The data collected from twenty-five randomly selected secondary schools located at Khulna and Dhaka, Bangladesh following classroom observation, questionnaire, FGD, SGD, and PA where data were analyzed by IBM SPSS Statistics 20. The results highlighted that technology integrated ELT had a stringent contribution to improving teaching-learning atmosphere ever than before via creating an interactive environment along with drawing and retaining students’ attention throughout the class. Comparatively young teachers (36-45 years) were found more interested over old groups (56 or above) to enjoy using these modern tools in ELT classes. Students were found highly motivated to ELT classes equipped with multimedia technology as they could visualize the subject matter with reading. Key challenge filtered from the study pointed, teachers required adequate prior training to operate the multimedia and to prepare subject contents using AV tools. Majority of respondents believed, the use of technological tools with conventional methods not only inspires students’ creativity but also leads the students to create new knowledge, and thus, helps develop a capable future generation open to face any global challenges.

Keywords — Classroom, ELT, multimedia technology, secondary level education.

I. INTRODUCTION

Globally technology has become an inseparable part of education enhancement wherein the introduction of newer technological tools such as multimedia projector, laptops, web 2.0, google meeting, skype, zoom, Microsoft team, etc. in teaching-learning system is changing and taking over the paradigms of conventional education rapidly. Technology-based teaching in the classroom helps tailor instruction to students with different abilities involving quick sharing and building of knowledge via inducing a participatory atmosphere (Wu & Zhang, 2010; Asselin & Moayeri, 2011). To Keep pace with advanced education system of developed world Bangladesh is also trying heart and soul to improve its teaching-learning quality at different levels of education such as university (undergraduate and graduate), higher secondary (11-12 classes) and secondary (6-10 classes) levels via adopting modern technological tools of multimedia projector and laptop in particular. The demand of technology-mediated education system is growing day by day in Bangladesh as it plays a pivotal to draw the attention of the learners via showing educative videos or animations (Haque & Akter, 2014). The word multimedia evolves from the Latin word “multus” implying numerous and “media” meaning middle or center. It is a form of communication using multiple forms
of media for the exchange of information (Shilpa and Sunita, 2016). In 2014 Bangladesh government started providing multimedia projectors and laptops in every government secondary school to fulfill the motto of “Digital Bangladesh” alongside to smoothen the walkways of quality education (Anonymous, 2014). As a result, government secondary schools started using those technological tools in classroom environment on small scale as they did not have enough prior training to operate them. As a foreign language, using conventional methods teaching English language is quite tough and the teacher needs to be motivated enough to drive monotony and anxiety of the students away, which is only possible when different audio-visual aids such as video clip of English conversation can be presented before the students. Cunning (2001) reported that using multimedia projector in English language teaching supplies stimuli to the students for better understanding of a given subject matter. Koksal (2004) also stated that use of videos in multimedia projectors helps the students guess, think, and arouse inquisitiveness about the information of a topic. The traditional teaching method of English language teaching (ELT) is practiced for a long time in Bangladesh which is useful, but not sufficient at the present technological time. Multimedia technology has already added a new dimension in university education, and it is believed to be helpful to improve the traditional pedagogy practiced in secondary and higher secondary levels in Bangladesh. The widespread use of technology-enhanced multimedia instruction could help teachers to meet the goals of effective foreign language teaching especially English in 21st the digital century (Ketsman, 2012; Saglam & Sert, 2012). Considering the significance of multimedia-based teaching on the students, the present study was designed to measure the effectiveness of multimedia technology integrated English language teaching at secondary level (6-10 classes) education of Bangladesh in terms of extent and willingness of the contacted English teachers to use technology, motivation of students to the technology and key challenges they faced to operate the technology in ELT.

II. METHODOLOGY
The survey data for this study were collected following different survey methods of which classroom observation and questionnaire were predominant. Classroom observation included physically examining student responses to the effectiveness of multimedia integrated English language teaching at different classes (6-10 classes) of secondary level education of Bangladesh while the English teachers were provided with questionnaires to answer. The survey questionnaire encompassed a variety of close-ended with few open-ended statements to get specific information pertinent to the effectiveness of English language teaching equipped with multimedia technology on creating a better interactive learning atmosphere in the classroom. A total of 50 in-service teachers and their students from randomly selected 25 government high schools (dedicated to 6-10 classes) of Khulna and Dhaka divisions, Bangladesh took part in questionnaire responses. English teachers of different age groups (25-35, 36-45, 46-55, 56, and above years) were chosen for this survey to investigate the discrepancies in their opinion about multimedia mediated English teaching. The questionnaire was prepared in the form of statement numbering twenty-six. Apart from questionnaire interviews via random sampling, other approaches such as participatory appraisal (PA) tools like large group discussion (LGD), focus group discussion (FGD) and cross-check interviews with key information (KI) were practiced in the study. Beside primary information, secondary data regarding the effectiveness of multimedia equipped teaching were collected from the Directorate of Secondary and Higher Education, Ministry of Education, Bangladesh. The collected data were compiled, coded, summarized, and processed for statistical analysis. The statistical analysis of collected data was comprised tabular description technique and adjudged to eliminate all possible errors and inconsistencies. Entire data analyses were performed computer-aided analysis software IBM SPSS Statistics 20 (IBM Corporation, Armonk, NY, USA).

III. RESULTS AND DISCUSSION
3.1 Use of multimedia technology in different domains of ELT
Data on the extent of technology use in different domains of English language teaching (Fig. 1) revealed that teachers used technological tools maximally for teaching presentational skills (100%) followed by grammar skills (80%) and lowest (66.7%) in boosting vocabulary knowledge preceded by interpretive skills (73.3%) such as reading and summarizing in the foreign language. Increased use of technology in different domains of English language could accelerate students’ participation regarding communication and knowledge building. Koehler (2009) suggested that multimedia-based instruction helps teachers teach English grammar language and students learn and apply them in real-life situations. Likewise, computer-
assisted teaching expedites quick learning of vocabulary using graphics, sound, texts, videos in ELT classes (Iheanacho, 1997). Also, nowadays web-based technology named web 2.0 is being widely used in online teaching for improving interaction, communication, collaboration along with the creation of new knowledge and development of technological skills (Asselin & Moayeri, 2011).

![Fig. 1: Extent of technology usage in different domains of English language teaching](image)

### 3.2 Teachers age versus technology usage in ELT

The range of using multimedia technology-based instruction varied with ages of the respondents (Fig. 2). Of 50 English teachers of different age groups, 13.33% of teachers with age group 25-35 used technology in ELT classes at maximum level followed by age group 36-45 comprising 53.33% of teachers using technology at optimum level while 13.33% of teachers with age group 56 or more used technology in ELT classes at minimum level. The above analysis showed that young teachers were more interested in using multimedia technology for teaching English in the classroom environment than the aged teachers. But it is necessary for all of them to use the technological tools extensively in classroom to teach English language as it would significantly enhance teaching quality via creating a participatory environment (Young & Bush, 2004).

![Fig. 2: Percentage of English language teachers by age using technology at different levels in English language teaching](image)

**Fig. 1: Extent of technology usage in different domains of English language teaching**

**Fig. 2: Percentage of English language teachers by age using technology at different levels in English language teaching. Maximum level indicated using technology at 80% or above classes, optimum 61-79% classes, moderate 41-60% classes, and minimum less than 40% classes.**
3.3 Acceptance of technology equipped teaching system

Results pointed out that the acceptance of technology-aided ELT (English language teaching) systems relied on their adaptation and efficiency in facilitating teaching-learning process. Based on responses to five statements along the x-axis (Fig. 3), majority of respondents (86.67%) belonging to 25 selected cities’ secondary schools (6-10 classes) of Khulna and Dhaka divisions, Bangladesh were found quite adaptive with multimedia technology of which 86.67% of the respondents were found efficient in using this technological tool in ELT. Majority of respondents (80.00%) believed that technology-aided teaching was way better than conventional teaching in drawing the attention of the learners and creating a participatory environment. Only 40.00% of the respondents thought that the old teaching system (blackboard) was not bad for teaching English at the secondary level (6-10 classes) education of Bangladesh as teachers outside the cities were not so technically sound or trained as city teachers. A substantial part of English teachers (93.33%) in selected 25 secondary schools of two cities in Bangladesh firmly believe that technology-aided teaching intermingled with tradition blackboard teaching could bring a dynamic positive change in creating an improvised learning environment at secondary level education in Bangladesh more than ever before, which matched to suggestions of Chen & Liu (2012).

Fig. 3: Teacher’s acceptability of technology equipped teaching system regarding its varied perspectives.

3.4 Evaluation of respondents’ view on the role of technology in ELT classroom

Fig. 4 depicted teachers and students (%) responses (poor to excellent = 1-5) to ten important survey statements pertaining role of technological tools (multimedia projector and laptop) in ELT classrooms at secondary level (6-10 classes) education in Bangladesh. For the first survey statement - how it would be if there were more advanced instruments and facilities could be added to the conventional ELT teaching system in the classroom environment. Majority of the respondents 40 and 33% answered in scale of very good (4.0) and excellent (5.0) regarding the necessity of technology in ELT, no fair (2) or poor (1.0) responses were not found. In terms of old teaching, 53.3% of respondents scored the method 3.0 meaning still holding a good position in ELT as the technological tools are not equally disbursed in every secondary school in Bangladesh, maximally limited to schools located in city areas. Regarding student perception on technology usage in ELT, 60% of them scored 4.0 meaning very good in creating a better interactive learning atmosphere in classroom environment. Against survey statement of technology adaptation, majority of teachers (60%) and students (53.3%) scored 5.0 (excellent) and 4.0 (very good) meaning they got well-adjusted with the use of technological tools in ELT classrooms. In addition, 60% of respondents (teachers and students) pointed that technology-based education had a significant influence (very good =4.0) in making ELT more enjoyable over the traditional system. Overall, all respondents (teachers and students) believe that at this scientific age technology-based instruction is a necessity, an important component, an integral part, an expectation, that should be used by every teacher to benefit...
their students, a way of engaging students in arousing and improving their learning interest and critical thinking ability to make ELT more meaningful.

Fig. 4: Respondents' views on technology use in ELT classroom at secondary level (6-10 classes) education of Bangladesh. Participants responses were measured on a Likert scale where 1 = Poor (P), 2 = Fair (F), 3 = Good (G), 4 = Very Good (VG) and 5 = Excellent (E).

3.5 Descriptive analysis of technological importance in ELT
The analyzed survey data revealed that technology-integrated teaching played a critical role in increasing the motivation of learners for the implementation of innovative ideas, helping learners to become active thinkers in the language learning process, and providing equal opportunities for students to learn and succeed. Teachers were convinced that multimedia technology-based instruction increased students’ motivation and created their desire and interest to learn English language via developing an enjoyable classroom environment with videos and animations. Susikaram & Phil (2013) reported that English teaching equipped with multimedia technology could bring the advantage of imparting language knowledge and enriched learning environment as compared to traditional teaching methods, analogous to the findings of Rüschoff & Ritter (2001). Result also underlined that students’ motivation towards multimedia technology-based ELT also forced the teachers to be equipped with because of their latent longing to be the best role model to their learners.

Increased level of teachers’ engagement in using multimedia technology in ELT classes helped them staying confident in the classroom environment.
Almost all respondents in the study confessed that multimedia technology not only enhanced students’ creativity but also assisted teachers in utilizing creative instruction, well supported by Huang & Liu (2000). Technology-enhanced multimedia assured students’ engagement and active participation in their learning. Students quoted that “use of multimedia technology in ELT makes our attention last until the class ends, we don’t feel boring at the class”. They all think that audio-visual (AV) system in multimedia technology is like a jet taking off just outside the door. Multimedia classes are more interesting than traditional because computer slides are projected on a big screen and allow us to realize the subject matter by seeing the relevant videos or animation. Most of the students do believe that they can learn better when multimedia technology is incorporated with conventional system rather
than talking and writing on board. Thao (2003) stated that the contribution of multimedia tools to teach English language cannot be ignored in this present age of technological advancement.

Technology-enhanced education can easily develop different ways of attacking the learners’ minds. Data showed that technology-enhanced multimedia helped develop the inquisitiveness of both active learners and passive learners for learning English as a foreign language in an effective way, well backed by Gilakjani (2012). Data also revealed that technology-enhanced multimedia allowed teachers to meet diverse student’s needs and implement instruction on individual students for their future betterment. Multimedia technology has played an important role in English language teaching, especially, in the non-native speakers of English (Chapelle, 2001; Pun, 2013). The introduction of multimedia technology in teaching EFL (English as a foreign language) in Chinese colleges satisfied not only the need of learning but also social development. On contrary, excessive dependence on multimedia-based education can also create a large gap between teachers and students resulting in weak teacher-student relations detrimental to society (Chen & Liu, 2012). However, English language teachers in Bangladesh demanded proper training on using multimedia technology to grant a variety of access opportunities for students in the language classroom. Teachers’ training in ICT skills is important to integrate ICT in English language classroom that can take the traditional learning system to a new height (Motteram, 2013).

The findings suggested that foreign language teachers were convinced that technology-based multimedia instruction paved the way of effective learning, supported by the findings of Nutta (1998). Ketsman (2012) underlined that technology-enhanced multimedia instruction is as effective for learning a foreign language so fruitful for native language subjects. Yet, technological innovation provides the opportunities to revisit and reintegrate the crucial old ideas into modern technology-based education that can improve overall language learning (Beatty, K. 2013). Considering the importance of technology-based education, majority of respondents (teachers and students) believe that technology is not luxury rather is a necessity to improve the teaching-learning environment at secondary level education (6-10 classes) of Bangladesh alongside to maintain the pace of educational advancement in developed countries. So, the integration of modern technological tools with conventional blackboard teaching systems could holistically bring a dynamic change in our education system wherein a diverse learner could learn any subjects with more enthusiasm and enjoyment ever than before.

IV. CONCLUSION

The use of multimedia technology in ELT classes at the secondary level education (6-10 classes) of Bangladesh played an important role to enhance foreign language learning and widening foreign language skills regarding vocabulary knowledge, grammar skills, and pronunciation alongside other domains of English. Also, helped the students boost up their technical skills via engaging them to play with these modern technological tools of education. The findings of the study also showed that majority of teachers and the students confronted some challenges to adjust themselves with operating this new system, so they demanded adequate training to be handy with this system. Almost all respondents suggested not to rely completely on modern technological tools rather integrate these technological tools with traditional teaching systems to create a better participatory classroom environment. To sum the study up, technology-based learning instruction builds bridges between students’ knowledge and the learning objectives via enriching teaching content, enhancing interactivity between teachers and students, aiding students retention of knowledge, growing their interest in the subject matter via illustrating the relevance of many concepts. Overall, all these positive attributes of technology-based education thus would help a teacher achieve his goal at the end.

REFERENCES

[1] Anonymous (2014). A Brief on Strategic Priorities of Digital Bangladesh. Access to Information. Prime Minister’s Office, Government of the people’s republic of Bangladesh, Dhaka, Bangladesh. From www.a2i.pmogov.bd
[2] Asselin, M., & Moayeri, M. (2011). The participatory classroom: Web 2.0 in the classroom. Literacy Learning: The Middle Years, 19(2), i-vii.
[3] Beatty, K. (2003). Teaching and researching computer-assisted language learning. Essex, England: Pearson Education Limited.
[4] Canning-Wilson, C. (2000). Practical aspects of using video in the foreign language classroom. The Internet TESL Journal, 6(11), 36-41. From http://www.tojet.net/articles/v313/339.pdf
[5] Chapelle, C. A. (2001). Computer applications in second language acquisition. Cambridge University Press, Cambridge, UK.

[6] Chen, E. C., & Liu, J. (2012). Applying multimedia technology to the teaching and learning of college English in China: problems and solutions. Journal of Information Technology and Application in Education, 1(3), 108-111.

[7] Gilakjani, A. P. (2012). The significant role of multimedia in motivating EFL learners’ interest in English language learning. IJModern Education and Computer Science, 4(4), 57-66. From http://www.mecs-press.org/ijme.cs/ijme.cs-v4-n4/IJMECS-V4-N4-8.pdf

[8] Haque, M. S. & Akhter, M. (2014). Challenges and Possibilities of Computer Assisted Assisted Language Teaching in Higher Education: Bangladesh in Focus. Harvest: Jahangirnagar University Studies in Language and Literature, 5, 73-91.

[9] Huang S. J., & Liu H.F. (2000). Communicative language teaching in a multimedia language lab. Internet TESL Journal, 6(2), 57-66. From http://iteslj.org/Techniques/Huang-CompLab.htm.

[10] Iheanacho Jr, C. C. (1997). Effects of two multimedia computer-assisted language learning programs on vocabulary acquisition of intermediate level ESL students. Doctoral dissertation, Virginia Tech, USA. From https://vtechworks.lib.vt.edu/handle/10919/29815

[11] Ketsman, O. (2012). Technology-enhanced multimedia instruction in foreign language classrooms: A mixed-methods study. Doctoral dissertation, University of Nebraska-Lincoln, USA, From https://digitalcommons.unl.edu/cehsedaddiss/108/

[12] Koehler, N. A. (2009). Pilot study of a multimedia instructional program for teaching ESL grammar with embedded tracking. Master’s Thesis, Iowa State University, USA. From https://lib.dr.iastate.edu/etd/10580/

[13] Koksal, D. (2004). To kill the blackboard. Technology in language teaching and learning. The Turkish Online Journal of Educational Technology, 3(3), 62-72.

[14] Motteram, G. (2013). Innovations in learning technologies for English language teaching. British Council, London.

[15] Nutta, J. (1998). Is computer-based grammar instruction as effective as teacher-directed grammar instruction for teaching L2 structures? Calico Journal, 16(1), 49-62.

[16] Pun, M. (2013). The use of multimedia technology in English language teaching: A global perspective. Crossing the Border: International Journal of Interdisciplinary Studies, 1(1), 29-38.

[17] Rüschoff, B., & Ritter, M. (2001). Technology-enhanced language learning: Construction of knowledge and template-based learning in the foreign language classroom. Computer Assisted Language Learning, 14(3-4), 219-232.

[18] Saglam, A. L. G., & Sert, S. (2012). Perceptions of in-service teachers regarding technology integrated English language teaching. Turkish Online Journal of Qualitative Inquiry, 3(3), 1-14.

[19] Shilpa, S., & Sunita, M. (2016). Positive Influence of the Multimedia in Primary Education. The International Journal of Indian Psychology, 3(2), 179-83.

[20] Susikaran, R. S. A., & Phil, M. (2013). The use of multimedia in English language teaching. Journal of Technology for ELT, 3(2).

[21] Thao, V. T. (2003). The contribution of multimedia tools to EFL settings unfamiliar with technology. Asian EFL Journal, 5(3), 1-14.

[22] Wu, J., & Zhang, Y. (2010). Examining potentialities of handheld technology in students’ academic attainments. Educational Media International, 47(1), 57-67.

[23] Young, C. A., & Bush, J. (2004). Teaching the English language arts with technology: A critical approach and pedagogical framework. Contemporary Issues in Technology and Teacher Education, 4(1), 1-22.