

The Use of Information Technology (IT) in Language Teaching & Learning

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Abstract: *In the era of globalization, both Information Technology (IT) and English play a vital role in communication. IT creates an environment where communication is possible across the borders within a second. On the other hand, English is the dominant global language which is used to spread messages around the world. As technology prevails in all areas of life to make the things easy, language teachers and learners can also depend much upon it. This paper brings into focus the use of IT in English language teaching and learning. The purpose of the work is also to identify how IT relates to English language learning at tertiary level. Besides, it indicates the possibilities of using IT beyond language classroom. For the study two questionnaires were designed to survey and it was conducted among language teachers and learners. In spite of having some limitations to implement IT in language classroom, teachers and learners expressed their positive attitudes towards it.*

1. Introduction

In the last few decades, computer based Information Technology (IT) has entered significantly into most of the areas of our lives. Like all other fields, this technological change has added an endless possibility in the process of language teaching and learning. The overwhelming growth of using internet and personal computer has created a new field of research and that is the application of Information Technology (IT) in English language teaching and learning. Today, language teachers have to apply their thinking to use and integrate new, emerging technologies in every vicinity of language teaching. And it has also been a fact that in most of the developed countries, Information Technology (IT) is used to make teaching and learning more effective.

The buzzword IT is defined as “the technology involved with the transmission and storage of information especially the development, installation, implementation and management of computer systems within companies, universities, and other organizations.” (The American Heritage Dictionary of the English Language, 2005). Though IT is a mechanics of transferring information, a language teacher and learner may consider it as an influential tool because of its capability of showing visual images or text on a large computer screen. Computer, internet, e-mail, cell phones, multi-media projectors, tape recorder and laptop have opened a new horizon for language teachers and learners. By using IT in language learning, learners can easily enhance their communication skills as they will have real information, opinion and live exchanges between students through visual and audio support. Moreover, IT provides a good number of teaching aids which help learners not only to improve motivation but also to sharpen their memory. For language teachers and learners, the challenge is how to use and integrate the emerging technologies effectively and creatively to reach the optimum of the goal. Therefore, the present study has tried to find out the teachers’ and learners’ expected role for using IT in language teaching and learning and it is an outcome of different literature review. Different books, journals, reports, related web pages were considered helpful during the work.

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2. Computer Assisted Language Learning (CALL)

Computer technology has been included as a language learning tool since 1960 and the use of this technology in language learning and teaching is the process known as 'Computer Assisted Language learning'(CALL). This process can provide plenty of facilities including mail, real time chat capabilities that can be used to convey instruction or to conduct online seminars and collaborative working on language learning. CALL can also facilitate group discussions and to enable conversation between teachers and learners, irrespective of time and place constraints. Computer-assisted language learning is defined by Wikipedia as 'an approach to teaching and learning foreign languages where the computer and computer-based resources such as the internet are used to reinforce and evaluate material to be learned'. CALL becomes a field of study where language learning process and technology blend together to create a new shape of knowledge. CALL promotes collaborative learning through interaction. According to Rivers (1987, as cited in Richards & Rodgers, 2001, p.21), interactive perspective is that "the students achieve facility in using a language when their attention is focused on conveying and receiving authentic messages."

Ravichandran (2000) has observed that CALL brings an ample opportunity for language teachers and learners. CALL is a system where students can learn language through enjoyable activities, games, interaction. Even, computer's word-processor and PowerPoint program can be very helpful to improve respectively the students' writing activities and imagination. Besides, animated graphics are used in language classroom so that drills can not be taken as a boring practice. Thus CALL highly motivates the students. Ellis (1985) has mentioned two kinds of motivation. Firstly, after achieving learning goal, learners are influenced and motivated by the teachers. And secondly, the motivation builds up after receiving academic or communicative success that can be developed by careful selection of learning tasks both to achieve the difficult level of language and to promote inherent interest. Therefore, proper selection of the materials is very important to motivate the students.

Many students require individual practice and extra time to reach the goal and CALL provides additional and individual attention to those students. It also gives the students necessary guidance and adapts the material according to the level of the students. Shy or reserved students can be greatly benefited by CALL which is regarded as individualized and student-centered collaborative learning. Furthermore, computer can help to choose the students' most compatible learning style (Lee, 2000). Besides, CALL will save learning time more effectively in language class room because there will not be any hassle like paper distribution or copy return session.

3. Software and other tools

Various computer software have been developed that can check writing in terms of correction and style. One can write a rough draft using the computer's word-processing function. There are also other programs like Spelling Checkers, Punctuation and Grammar Checkers and Clear-Writing Analyzer that help to improve writing (Lasikar & Pettit, 2003). To improve learners' vocabulary, CPI published a CD-ROM series of

English Vocabulary. Learners who want to improve their reading skill, for them Clarity Software publishes a program called 'Read It' and there are also programs like storey board that can be an adventurous experience for a learner (Lindsay, 2000). Though a good number of software programs are available, it is important to choose a perfect software program that can improve learners' language skill. Eastment (1999) has listed all the essential ELT CD-ROMs, though he predicted that CD-ROMs would be replaced by super-density disk and internet. And now it is possible to collect the software from internet, either by downloading or giving a purchase order via internet.

The following web addresses may help the teachers and learners of English language to choose a software program and desirable materials from the web.

www.rosettastone.com

www.transparent.com/languagepages/english/english.html

www.english4today.com

www.ehow.com/how_2166817_choose-english-language-learning-software

www.english-friends.info

www.EasyreadSystem.com

www.auralog.com

www.Curriki.org

www.CompellingConversations.com

www.writingcentre.uottawa.ca/hypergrammar/grammar

www.readinga-z.com

Besides CD-ROMs and software, computer technologies include web-based courses, video and web conferences. Video technologies bring people from different corner of the world together in a string. These technologies are being used to support Distance Education. We require some tools to take advantages of video and web conferences. The tools used in these particular processes are collaborative software, internet or telephone network, webcam or video camera, computer, TV or projectors, microphones or telephones (Michales & Associates, 2008). These technologies make possible to have online professional courses for language teachers.

4. Internet

Internet provides a wide range of on-line application for the language learner. There are dictionaries, grammar practices, vocabulary quizzes, English language textbooks and workbooks, popular novels, literature, newspaper and magazines etc which are applicable to use in every level of studies. However, internet is the most popular study tool among teachers and learners especially who are at tertiary level. The reasons are explained by Toprakçı: "The Internet is probably the most important of these tools for university students. It provides students with the facilities and media in which they can communicate, research, access and share information. This technology is unique for students, instructor and administrators who feel the need to have access to increasingly

accumulating information, keep track of the world more closely and shape it, and who are the most important agents of the educational process.” (Toprakçı: 2007)

Furthermore, Lee (2002) argued that network-based instruction may help students to make a strong base of their linguistic skills. Thus it can promote self-learning strategy and eventually students can build self-confidence. Access to internet helps students to interact with their classmate or unknown person. Thus students’ communication skill develops automatically. Moreover, internet helps students to learn a language through cultural context. According to Rivers, “Effective communication is impossible without some understanding of the culture of the speakers of the foreign language that in language, developing understanding the people with whom one wishes to communicate and teaching students to read all kinds of material fluently in the foreign language.” (Rivers, 1968, p.11) To promote cultural understanding, a strong network system provided by internet is playing a very important role. Electronic mail, live chat, facebook are building a strong network around the world and at the same time it is creating a profound understanding among the people of different cultures.

Electronic mail, popularly known as e-mail is a speedy way of sending messages through internet. “Although it takes up only a relatively new domain of Internet space, by comparison with the billions of Web pages, it far exceeds the web in terms of the number of daily individual transaction made.” (Crystal, 2003, p. 426). Thus, it is playing a very important role in communication and English is the dominant language which is widely used in communication. However, Al-Salman (2007) found the declining use of English on the internet. Recently, besides English other languages are also used. Moreover, some non-standard varieties of English are being introduced for globalization. Still, it is true that English has attained global status and world-wide circulation for internet.

5. Mobile Assisted Language Learning (MALL)

Mobile Assisted Language Learning (MALL) is an approach to language learning that use mobile phone technologies such as MP3 players, MP4 players, iPods, PDA, palmtop computers through which students can enhance their language skill. Like CALL, this also brings an opportunity to work collaboratively with language teachers. In the year 2004, Duke University used iPods and this is one of the examples of using collaborative learning in MALL. The students in language courses used the iPods in various ways, for example, after completing an oral assignment the students would record themselves and the teachers provided feedback on their assignment. The students also used the iPods to record conversations in the language they were learning, downloading podcasts, store and listen to songs in the language they were learning (Wikipedia).

In China, BBC uses mobile phone as an aid to impart English Language. The users of the mobile phones receive a daily text message on their mobile phone containing an English phrase with the Chinese translation. After that, users can log onto Sina.com to listen to and read the phrase as part of a longer dialogue, and to read explanations about the language

(http://www.bbc.co.uk/pressoffice/pressreleases/stories/2003/09_september/02/chinese_mobile.shtml). Following the example, in our country an initiative has recently been taken by mobile company Sony Ericsson and BBC World Service Trust. It can be expected that a large number of

students using mobile phone in Bangladesh will be benefited (www.reuters.com/article/pressRelease/idUS64270+12-Jan-2009+MW20090112).

6. Teachers' Role

Some teachers are reluctant to use technological facilities. The basic problem, as Lindsay (2000) mentioned, is the need to adopt a technology and attitude to teaching. A teacher always wants to see himself/herself as an explainer. It is hard to change one to be a counselor or facilitator. However, it is language teachers' duty to facilitate students' access to the internet and make them feel that they are the students of a global classroom and they can communicate by maintaining a global standard. Teachers have to be one step ahead of the students to know what interest them. Ravichandran (2000) observed that many teachers who never touch computers will answer 'no' to technology, when they are asked the question if a computer can help learning second language. But the teachers who work with computers find an essential tool for second language learning.

Therefore, teachers should create a computer supported learning environment where learners are supported to think creatively and to develop personal ownership and application of the knowledge gained through this method. Teachers also need to have positive attitude toward electronic learning aids. Sometimes teaching, learning and testing materials such as matching, gap filling, rearrangement provided by IT are found to be limited and excessive or the recurrent use of those activities might cause boredom. Further, students may make an attempt to cheat if the teachers do not eradicate this possibility by changing the test pattern. So, teachers have to apply their creativity while designing their test pattern. Today, teachers are able to share their experiences by writing blogs in various websites. Those write-ups can develop teachers' own creativity.

7. Students' Role

Most students, who are familiar with computer, know how computers provide an endless source of exercise and practice activities. Many language learning programs also come with authority kits which allow designing additional exercises for students. It is also true that students are not always eager to learn by using self-access center where they are provided materials to study independently for their improvement. They should keep remembering that if they lag behind in the use of the tools, their efforts of learning the language are destined to be insufficient. Chapelle (2003) believes, the most of the English teachers would agree that students will need to practice English beyond classroom if they really want to enhance their communication skill. Technologies can be used to practice consistently outside the classroom. A student can find internet as a medium to express his/her creativity and interest to his/her friends that gradually develop his/her motivation. It also makes possible for the learners of different classrooms of the world to communicate through chat-rooms, e-mail, and discussion groups.

8. Present Scenario of using IT in Bangladesh

In Bangladesh, all the barriers that Lee (2000) identified are present and those are the common barriers on the way of developing CALL. Those are financial barrier, non-availability of computer hardware and software, lack of technical and theoretical knowledge, 'not acceptable' attitude towards IT. Engaging in CALL require integrity to keep pace with the rapid change. But in Bangladesh, the infrastructure is yet to be built up. So, our students and teachers do not get the facilities of high speed web connection in all places. At present, second language learning process demands self-access center where students can learn language beyond the classroom and the center must be technology based. Some institutions and universities of our country have already established English Language Lab and self-access center. But these facilities remain unreachable to the majority. When the concept of e-learning becomes popular in developed countries, in less developed countries like Bangladesh, it is still a dream because of inadequate infrastructure of IT. Yet, we can be optimistic because realizing the bright prospects of developing IT; Government of Bangladesh has declared IT as the thrust sector of the economy of the country. However, a favorable atmosphere is created by withdrawing customs duty and VAT from imported hardware and software. (Islam & Selim, 2006). This efforts will surely encourage the community belong to education sector.

We can start making a good use of the network infrastructure known as Edge and GPRS laid by the mobile operators, which are now available in Bangladesh. In addition, latest initiatives are taken for introducing mobile WiMAX frequencies to provide high-speed mobile wireless internet access throughout the country. We can easily integrate these technologies and utilize them for receiving a good result in language teaching and learning.

9. Questionnaire Survey

A questionnaire survey on using IT in language teaching and learning was taken among thirty-two teachers who teach English language at tertiary level and another questionnaire survey was taken on the same issue among one hundred students who are going to complete or have already completed English language course. They were selected from private and public universities in Bangladesh. The universities surveyed were University of Dhaka, National University, Bangladesh University of Engineering and Technology, Daffodil International University, Stamford University Bangladesh, State University Bangladesh, Northern University, Eastern University, and World University of Bangladesh.

10. The Survey Results and analysis

Each questionnaire contained five questions and for answering the questions the respondents had two options: 'yes' or 'no'. The following tables (Table 1 & 2) reflect the views of language teachers and students.

Table 1: Teachers' Responses

Questions	Yes	No
Do you think IT is helpful for teaching language?	87.5%	12.5%
Do you often collect your teaching materials from internet?	68.75%	31.25%
Do you think IT can help you to improve your teaching style?	62.5%	37.5%
Do you think students who use IT can perform better than others?	56.25%	43.75%
Do you suggest students to use internet?	81.25%	18.75%

Table 1 shows, 87.5% teachers thought that IT was helpful for teaching language; whereas only 12.5% teachers responded negative. To answer the second question, which was about collecting materials from internet, 68.75% teachers said that they collected teaching materials from internet. On the other hand, only 31.25% teachers did not collect materials from internet. The third question asked the teachers "Do you think IT can help you to improve your teaching style?" and 62.5% respondents were positive while 37.5% answered negative. The fourth question was about the students' competence level after using IT and 56.25% teachers thought that students who use IT could perform better than others. The fifth question asked the teachers, "Do you suggest students to use internet?", and 81.25% teachers replied positive while 18.75% teachers responded that they did not suggest their students to use internet.

Table 2: Students' Responses

Questions	Yes	No
Do you use computer and internet as a tool of your study?	85%	15%
Do you enjoy classes with technological equipments?	93%	7%
Do you think IT can help you to improve English language skill?	70%	30%
Do you think materials collected from internet are interesting?	79%	21%
Do you like learning from web rather than book?	52%	48%

Table 2 exhibits that 85% students used computer and internet as a tool of their studies; and only 15% students answered that they did not use computer and internet. Secondly, 93% students responded that they enjoyed classes with technological equipments and only 7% students showed negative attitudes towards IT. Thirdly, the students were asked, "Do you think IT can help you to improve English language skill?", 70% respondents were positive to answer the question, whereas 30% respondents replied negative. Fourthly, 79% students responded that materials collected from internet were interesting; but 21% responded negative in this regard. Finally, 52% respondents said that they liked learning from web rather than book, whereas 48% respondents preferred book based learning.

From the survey, it has been found that both teachers and students from different universities of Bangladesh are interested in IT based language teaching and learning. It is also clear that teachers and learners are ready to welcome every change that IT will bring

in future. But, we should also remember that this survey is entirely based on the capital city where students and teachers get an easy access to IT. In many places, computer and internet connection have not been reached. Regular power supply is not assured to the citizens of Bangladesh. Yet, there is a scope to be hopeful on the matter that Bangladesh has a quality infrastructure of mobile technology established by the private mobile operators that make every corner of the country reachable and that advantages can be utilized to impart knowledge to everyone. Language teachers and learners can also take this technological advancement as an opportunity in and beyond class room environment.

11. Conclusion

Information Technology (IT) which is the primary vehicle of the information age, has transformed the education system dramatically and it is persistent in the progress of new knowledge based society that ensures open access to information highway. Internet has provided such a technological basis that makes sharing of language teaching and learning materials very simple and easy. This broadly disseminated and sharable information can create a strong network between students and teachers. Our English language teachers and students should understand the large scale use of IT and try to accumulate and successfully utilize all the technological advantages they already have got. Educational policy makers should come forward to make an IT based knowledge society. Last but not the least, we will strongly recommend for establishing the strong IT educational infrastructure at every level of education. To develop a high-quality IT infrastructure we can follow bottom-up process that means to start from the primary level of education. Though it is like a mammoth task, once it is done, we will get an IT efficient generation with a good command of English at tertiary level.

References

1. Al-Salman, M.Saleh (2007). Global English and the Role of Translation, *Asian EFL Journal*, 9(4). Retrieved from World Wide Web:
http://www.asian-efl-journal.com/December_2007_EBook.pdf.html
2. Chapelle, A. Carol (2003). *English Language Learning and Technology*. John Benjamins Publishing Company. Retrieved from World Wide Web:
[http://books.google.com.bd/books?id=HNVWavVLTwkC&dq=Chapelle,+A.+Carol.\(2003\).+English+Language+Learning+and+Technology&printsec=frontcover&source=bn&hl=bn&ei=9K80SunLEI6SjAfGnoGeCg&sa=X&oi=book_result&ct=result&resnum=4](http://books.google.com.bd/books?id=HNVWavVLTwkC&dq=Chapelle,+A.+Carol.(2003).+English+Language+Learning+and+Technology&printsec=frontcover&source=bn&hl=bn&ei=9K80SunLEI6SjAfGnoGeCg&sa=X&oi=book_result&ct=result&resnum=4)
3. Crystal, David (2003). *The Cambridge Encyclopedia of the English Language*, 2nd Edition. Cambridge: Cambridge University Press.
4. Eastment, David (1999). Technology-Enhanced Language Learning: Hype or Gold Mine?, *Different Aegis Article*. Retrieved from World Wide Web:
<http://dspace.dial.pipex.com/town/square/ei11/tell.html>
5. Islam, Md. Tofazzal & Selim, Md. Abu Sadeque (2006). Current Status and Prospects for E-learning in the Promotion of Distance Education in Bangladesh, *The Turkish Online Journal of Distance Education – TOJDE*, 7(1), Article 10. Retrieved from World Wide Web:
<http://tojde.anadolu.edu.tr/tojde21/index.html>

6. Lee, Kuang-wu (2000). English Teachers' Barriers to the Use of Computer-assisted Language Learning , *The Internet TESL Journal*, VI(12). Retrieved from World Wide Web: <http://www.iteslj.org/Articles/Lee-CALLbarriers.html>
7. Lesikar, Raymond V. & Petit, John D. (2003). *Business Communication :Theory and Practice*. Delhi: A.I.T.B.S. Publishing House.
8. Lindsay, Paul (2000). *Teaching English Worldwide*. USA: Alta Book Center Publishers.
9. Michaels & Associates (2008). Distance Learning Technologies. USA: Michaels & Associates Docntrain, Ltd. dba Michaels & Associates. Retrieved from World Wide Web: <http://www.docntrain.com/view-resource.php>
10. Ravichandran, T. (2000). *Computer Assisted Language Learning (CALL) in the Perspective of Interactive Approach: Advantages and Apprehensions*, Paper presented at National Seminar on CALL, Anna University, Feb 10-12, Chennai. Retrieved from World Wide Web: <http://www.home.iitk.ac.in/~trc/call.pdf>
11. Rivers, Wilga M. (1968). *Teaching Foreign- Language Skills*. Chicago and London: The University of Chicago Press.
12. Rivers, Wilga M. ed. (1987). *Interactive Language Teaching*, Cambridge: Cambridge University Press Cited in Richards, Jack C. & Rodgers, Theodore S. (2001). *Approaches and Method in Language Teaching*, 2nd Edition. Cambridge: Cambridge University Press.
13. Ellis, Rod (1985). *Understanding Second Language Acquisition*. Oxford: Oxford University Press.
14. The American Heritage® Science Dictionary (2005). Houghton Mifflin Company. Retrieved from World Wide Web: <http://www.thefreedictionary.com>
15. Toprakçı, Erdal (2007).The Profiles of the Use of Internet for Study Purposes among University Students, *The Turkish Online Journal of Educational Technology – TOJET*, 6(3), Article 13. Retrieved from World Wide Web: <http://www.tojet.net/articles/6313.html>
16. Wikipedia, the free online encyclopedia. Retrieved from World Wide Web: http://www.en.wikipedia.org/wiki/Computer-assisted_language_learning
17. Wikipedia, the free online encyclopedia. Retrieved from World Wide Web: http://www.en.wikipedia.org/wiki/Mobile_Assisted_Language_Learning
18. Retrieved from World Wide Web: http://www.bbc.co.uk/pressoffice/pressreleases/stories/2003/09_september/02/chinese_mobile.shtml
19. Retrieved from World Wide Web: <http://www.reuters.com/article/pressRelease/idUS64270+12-Jan-2009+MW20090112>