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Asia-Pacific Journal of Information Technology and Multimedia

Jurnal Teknologi Maklumat dan Multimedia Asia-Pasifik

Vol. 7 No. 2-2, December 2018: 79 – 87

e-ISSN: 2289-2192

PEDAGOGICAL ISSUES OF USING ICT APPLICATIONS IN IRAQ

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ABSTRACT

This paper investigates the pedagogical factors affecting the implementation of ICT applications on teaching and learning English from the instructors' point of view. It also discusses the instructors' practices in using online tools for English departments. Using a mixed method approach, this study selected 57 instructors from various universities in Iraq to be involved in the survey and 7 respondents were selected for in-depth interview. The study has shown that the instructors have demonstrated positive attitudes towards ICT application in EFL classroom as they claimed that the technology helps in creating conducive environment for effective teaching and learning. However, in order for the universities in Iraq to use ICT applications comprehensively, there is a need for the teachers to be trained to use computers, online facilities, graphic and multimedia, electronic communication, video and animation in classroom environment.

Keywords: ICT Applications, EFL, online tools, pedagogical factors, educational technology

INTRODUCTION

Nowadays, the rapidly changing world pinpoints the importance and the effect of technology in all aspects of human life including all walks of learning and education. The institutions of higher education in developed countries have embedded technological innovations into their learning educational system. As such, developing countries will be under too much pressure to be able to compete in the international markets and need to strive to embed appropriate technology in their curriculum and learning system, particularly in the institutions of higher education (Warschauer & Healey, 1998). Many universities have adopted technology and integrated it into the curriculum and there is no exception for English language programs for teaching and learning (Al- Adwan et al, 2013).

Digital technology is often presented as the driving force of the transformation of education and carries positive overtones that information and communication technology (ICT) will contribute to this transformation "for the better" (Fisher, 2006). Along with the rapid development of ICT, this has led to computers becoming part of daily life and has pushed ICT and computers into classrooms at all educational levels during the last three decades.

Computer technology refers to the development of software to assist people to timely and effectively complete tasks. Up-to-date technology offers many methods of enhancing classroom teaching and learning. New technologies have the potential to upkeep education across the curriculum and deliver opportunities for efficient student-teacher communication in ways in which in the past was impossible. ICT in education has potential to transform teaching. The review of literature shows that the researchers have highlighted the importance of technology for language teaching and learning. However, there is a lack of study involving both instructors and students in related to their perceptions on computer technology in language teaching and learning.

PROBLEM STATEMENT

English language has crucial role in communication and interaction in both developed and developing countries. As a developing country, Iraq puts emphasis on the learning of English language in which the students are required to start learning it at an early age. However, according to Education First (2017) for English Proficiency Index for Companies, Iraq was found to be in the lowest rank in English language proficiency with the proficiency index of 38.12%.

Computer technology has been around for more than two decades; however, teachers are not familiar with technology and rarely use the technology in education (Ahmed, Puteh-Behak & Sidek, 2015). New syllabus and curriculum, with the integration of technology use, are also needed to cater to the needs of Iraqi EFL students. There are several studies conducted in Iraqi context that focus on EFL (Ahmed, Puteh-Behak, & Sidek 2015; Borg 2016), but there are limited studies focusing on the effectiveness of both instructors and students in using computer technology, including the internet for language teaching and learning. There is a paucity of studies on the pedagogical issues in the use of technology, concerning instructors and students' attitudes towards using computer technology and facilities in EFL class, the use of online tools, and technology-infused language teaching and learning environment.

Hence, it is important to investigate the pedagogical factors affecting the implementation of ICT applications on teaching and learning English in order to improve the effectiveness of using ICT applications in the classroom.

AIMS OF THE STUDY

The purpose of this study is to investigate the pedagogical factors affecting the implementation of ICT applications on teaching and learning English from the instructors' point of view. Besides that, this study is also to discuss the instructors' practices of online tools in classroom teaching and learning sessions.

RELATED WORKS

The technology used to teach or learn has the power to improve students' learning and motivation while providing opportunities for students to gain access to learning platforms and websites to be able to communicate with other students using the English language vocabularies they have learnt. By implementing hybrid language teaching and learning, which is the combination of traditional face-to-face physical classes and the use of technology, instructors must teach students the learning strategies on how to use technology independently to ensure their success (Salinas, Cabrera, & Ríos, 2012). Technology has fostered learning settings where language and cultural learning and teaching become student-centered; the content is more tailored to the student's use, as the student learns not only the second language but also technology.

The advent of technology has contributed to the development of CALL and has enabled it to satisfy the needs of ESL/EFL learners in different contexts (Levy & Stockwell, 2006). CALL also changes the pedagogy and the EFL and second language acquisition paradigm where computer is considered a supplement to teaching and learning in the classroom. Unlike teachers, computers are able to perform regular training, as well as to provide immediate feedback. Furthermore, computers enable students to learn at their own pace (Plass & Jones, 2005). Nevertheless, the most critical issue of technology use in language teaching is associated to lack of preparation and training of instructors.

In relation to the pedagogical perspective, factors such as spirit, self-awareness, and students' creativity are important in teaching foreign languages. Other pedagogical factors, such as appropriate teaching models, are also deemed important in ensuring success of language teaching/learning. For example, the Communicative Language Teaching is an EFL model that emphasises interaction as both the means and the goal of foreign language learning. Teachers can merge technology into these various techniques and models in different stages of language learning situations to deliver more colourful and stimulating lectures, adapting them to suit the students learning factors. According to Reinders & Thomas (2012), learning a second language with various tools is one of the most dynamic areas in the education system. Effective use of technology takes into account language pedagogy practices to use any kind of technology to support and enhance language teaching and learning (Hoopingartner, 2009).

Rafiee and Purfallah (2014) examined the perceptions of 60 EFL instructors of CALL. The findings show that many instructors had no competence to handle basic computer functions. Almost 50% of the participants had no clear idea about CALL. Most of the instructors had positive practices towards CALL for language learning. They used computer to provide visual and audio materials as supplement. In terms of instructors' experiences and perceptions on the use of technology in foreign language teaching, the instructors agreed that the use of technology could make their teaching more effective and better at meeting the varying needs of the students. They also acknowledged that instructors nowadays are, and should be, competent in using technological devices.

METHODOLOGY

In order to obtain a broad picture of the instructors' point of view on the pedagogical factors affecting the implementation of ICT applications on teaching and learning English, an interview and a survey were conducted. This study applied both quantitative and qualitative methods. Fifty-seven English instructors from different universities in Iraq were selected to participate in this study. In selecting the instructors as samples, purposeful sampling was used in which the samples were based on these two characteristics; 1) years of experience and 2) technology use in teaching language. Questionnaires were sent to the 57 instructors via email. Out of the 57 instructors, seven were selected to participate in the interview. The rationale for the purposeful selection of instructors is that they are information rich for the present study as they have used CALL in their language teaching. The data was analysed through thematic analysis and comparative technique where data were compared and grouped together according to categories.

FINDINGS OF THE STUDY

A theoretical model was formulated based on Computer Technology Teaching & Learning, CALL (Chapelle & Douglas, 2006; Hanson-Smith, 2003), Teaching and Learning English as a Foreign Language, EFL (Wang, 2009) and attitudes toward technology use (Gardener & Lambert, 1972; Warschauer & Healey, 1998). The model enabled the identification of patterns that give answers to what pedagogical factors affecting the implementation of ICT applications in English language teaching and learning from the view of the instructors.

TABLE 1. Findings of Pedagogical factors affecting use of technology

Statement	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Mean SD
I enjoy using computer devices for language teaching	3.5%	1.8%	14%	47.6%	33.3%	4.05(.93)
I use electronic dictionary (ies) for foreign language teaching	3.5%	3.5%	10.5%	43.9%	36.8%	4.05(1.00)
Internet connection are too expensive to use for teaching	5.3%	36.8%	33.3%	17.5%	7%	2.84(1.01)
A computer technology is not available at university	10.5%	42.1%	17.5%	24.6%	5.3%	2.12(1.11)
I don't have sufficient computer skills to teach	22.8%	38.6%	22.8%	12.3%	3.5%	2.35(1.07)
I need more web sites that I can use to teach.	3.5%	10.5%	19.3%	52.6%	14%	3.63(.97)
I need more technical support to keep computers/internet working	3.5%	7%	15.8%	49.1%	24.6%	3.94(.996)
Bandwidth (internet connection) too slow for teaching	3.5%	21.1%	22.8%	42.1%	10.5%	3.35(1.04)
Having computer is expensive to teach with technology	8.8%	47.4%	21.1%	19.3%	3.5%	2.61(1.01)
I need more training	7%	14%	14%	45.6%	19.3%	3.56(1.16)
Overall means						3.30

Table 1 indicates that 47.4 % of the instructors agreed that they enjoy using computer device for teaching English, while 43.9 % of participants agreed to use electronic dictionary for foreign language teaching. 36.8% of the instructors disagreed that the internet was expensive to use for teaching. 47.4% of the participants disagreed that having computer is expensive to teach using technology. Additionally, 42.1 % of participants disagreed that the computer technology was not available in the university. Likewise, 38.6% of the instructors disagreed that they do not have sufficient computer skill to teach. These percentages demonstrate positive attitudes from the instructors on the use of technology in pedagogy. They enjoy using computers, as well as the electronic dictionary. The internet and the computer are found to be affordable and computer technology is always available. They also believe that they have sufficient computer knowledge. Hence, they agreed to the improvements as described by the following percentages. Meanwhile, 52.6% of the participants agreed that they need more websites they can use to teach. Besides, 49.1 % indicated that they needed technical support to keep computers /internet working. Likewise, 49.1 % of the instructors agreed that bandwidth (internet connection) is too slow for teaching. Lastly, 45.6% of the instructors agreed that they need more training in computer technology.

As indicated in Table 1, data analysis shows that two items equally have the highest mean value (4.05) ‘enjoying using computer devices for language teaching’ and ‘using electronic dictionary (ies) for foreign language teaching’, while the item with the lowest mean score (2.12) is ‘A computer technology is not available at university’. The justification is that teaching by using computer technology is now a trend among instructors and electronic dictionaries are also among the most utilised computer tools for language teaching and learning (Rafieea & Purfallahb, 2014). The explanation for disagreeing to the idea that ‘computer technology is unavailable at university’ is that nowadays computer technology is prevalent in universities all over the world including Iraqi universities (Mahmoudia et al., 2012).

TABLE 2. Instructors' Practices in Using Online Tools for English Department

No.	Statement	Not all useful	Not useful	Neither	Useful	Very useful	Mean (SD)
1	Reference books in digital format	5.3%	1.8%	1.8%	59.6%	31.6%	4.11(.93)
2	Videos and animations	1.8%	1.8%	5.3%	50.9%	40.4%	4.26(.79)
3	E-mails	3.5%	21.1%	21.1%	56.8%	15.8%	3.77(.88)
4	Forums and discussion boards	1.8%	1.8%	7%	47.4%	42.1%	4.26(.81)
5	e-books	5.3%	0.0%	8.8%	54.4%	31.6%	4.07(.94)
6	Audio	3.5%	3.5%	1.8%	52.6%	38.6%	4.19(.91)
7	Podcast	5.3%	3.5%	15.8%	43.9%	31.6%	3.93(1.05)
8	Animation	5.3%	1.8%	7%	50.9%	35.1%	4.09(.98)
9	WhatsApp	5.3%	14%	14%	42.1%	24.6%	3.67(1.15)
10	Skype	8.8%	5.3%	19.3%	36.8%	29.8%	3.74(1.20)
Overall means						4.00	

Table 2 shows the online tools the instructor's practices on effective online tools for pedagogy. Most online tools are deemed important by the instructors. However, the most useful tools for classroom use in teaching language would be videos and animations (91.3%), forum and discussion boards (89.5%), and audio (71.2%).

IN-DEPTH INTERVIEW ON THE PEDAGOGICAL FACTORS OF USING COMPUTER FOR TEACHING LANGUAGE

In accordance with the purpose of this research and in-depth responses obtained from the respondents, the researcher reached four major themes as follows:

1. Facilitation of learning.
2. Efficiency and improvement in learning.
3. Adoption of e learnings tools.
4. Learning efficiency with online learning environment.

Based on the interview, all the participants demonstrated that they have used computer and other technological assistances for teaching and facilitating teaching/learning sessions. One of the significant results of the interview is that the English instructors use technology devices mostly for their personal purposes more than teaching purposes as instructional tools where it is consistent with the findings from previous studies conducted by Wozney, Venkatesh & Abrami (2006).

The instructors also stated the positive aspects of pedagogical implication in using computer to facilitate teaching and learning process, where one of the instructors (Instructor A) claimed that:

“Computer technology allows to develop teaching strategies, thus helped to support good knowledge and teaching program”

Instructor C also has had the same opinion as he/she explained that the use of integrated computer technology aids effective teaching process by stating:

“Integrated computer technology allows instructors to adopt student-centered methods which mostly preferred by EFL instructors than teacher-centered methods. It helps to allow instructors to be facilitators rather than dispenser of knowledge and promote students to be active rather than passive learners. Integrating computer technologies helps to spend less time lecturing to the whole class”

Instructor C also emphasised the importance of some tools in teaching, as he/she stated:

“I used computer to give lectures by using images and animation in the teaching materials and make the whole session more interesting. I believe that this method allows the classroom to be more interactive and productive”

Instructor G stated that computer technology can facilitate the teaching process productively and easily where they can understand the message delivered easily.

“Computer technology make the students more educated and more open to the world. Second, it also helps students to speak fluently by watching and listening to native speakers. Finally, computers facilitate their research and give them more chances to get important information from their study”

In-Depth Interview on Instructor’s Practices on Online Computer Technology Tools

All the respondents agreed that the use of computer technology tools is effective. However, instructors’ pedagogical beliefs emerge as a major factor that affects the implementation of computer technologies in language teaching process. When the specific conditions of the country (Iraq) are taken into consideration, it can be clearly argued that almost all of these instructors have come from an educational system, which is too mechanical and instructor-centred. Hence, they still hold strongly to the traditional way of teaching, yet accepts the importance of technology by implementing it in the teaching process through collaborative learning.

In this interview, the instructors have explained the usefulness of online computer technology tools on teaching and learning and highlighted the importance of online technology on collaborative learning, by stating:

“Blended learning is one of the most useful methods which can be used in teaching language learning. I prefer it because it allows me to use both traditional and online instructions”

The instructors also highlighted the importance of online technology on collaborative learning, social engagement, and language learning, by stating:

“Used to present the video and create collaborative learning”

“It is use for collaborative learning and social engagement with other students from different countries through the social media like Skype and Facebook, also effective for online interview”

“I would use phonetics/phonology lab to explain sound patterns and give different examples said by native speakers”

DISCUSSION

This study shows that the instructors view the efficiency and the attractiveness of computer technology as the pedagogical factors that affect the implementation of computer in teaching/learning English. The finding is consistent with Jin and Deifel's (2013) study that examined the EFL students' application and attitudes towards bilingual online dictionaries. The study demonstrated the importance of online technology in speaking, listening, writing, and reading. Hence, educators should help EFL students to learn how to effectively use online dictionaries.

Likewise, Riasati et al. (2012) discussed the benefits and issues of using technology in language learning. The analysis on the practice shows that the integration of technology into language instruction is fully supported by the instructors. The study then highlighted the importance of accessibility, computer training, students and instructors' attitudes as important factors when using technology for language teaching and learning. Trainings offered to the educators on the use of computer technology will ensure that they are well equipped with adequate knowledge to take advantage effectively of the system to provide effective teaching in this era of digitalisation.

In language learning, online tool is known to be effective in language development, which includes grammar, vocabulary, listening, and speaking. According to Mahmoudi et al. (2012), listening to internet video or audio enhances students' vocabulary development and boosts their listening skills. Today, the advent of online technology, such as YouTube, has provided means of acquiring language development through watching videos or films, whereby learner can learn grammar, vocabulary, listening, and speaking. In this study, more than 50% of the instructors rated reference books in digital format, videos and animations, e-mails, e-books, audio, forums and discussion boards, Podcast, WhatsApp and Skype as useful tools for teaching English.

The findings also show that the instructors did show interest in using computer technology for language teaching and learning. Majority of the instructors are eager to use technology, some of the teachers stated that their knowledge of computer technology is limited and can be considered at a basic level and insufficient to use different kinds of online tools effectively. Hence, extra training in terms of the use of online tools in learning and teaching purposes should be conducted. There is no severe issue of technology accessibility though infrastructure in the school needs to be improved. The study also shows that the instructors are aware of the importance of computer-mediated tasks and online tools for cooperative and collaborative language learning; however, they need to be trained in order to utilise them efficiently.

Ideally, CALL activities should cater to learners' different preferences, needs, and interests. The findings of this study also affirm that CALL activities must be purposeful and real-life engaging with different preferences. Thus, instructors should carefully select suitable tools, task and activities, which involve the principles of behaviourism (drill and practice), cognitivism (cognitive and critical thinking), and constructivism (for constructing meaning using social networks providing social context for language learning). Besides that, both instructors and students also need to be trained to benefit from both online and offline computer technologies for language teaching and learning more effectively.

Although computer technology can be used as a teaching tool in an EFL classroom, instructor should not just stop at using it as a tool to transfer instructional material and rehearsal but also as a medium for learning, discovering, sharing, and creating knowledge. The findings also show that similar to the instructors, most of the English language students are not sufficiently trained to use computer technology in learning situations. It can be understood that

there is a need for ongoing trainings and assistance in helping English language instructors to employ computer technology effectively in teaching/ learning situations.

CONSLUSION

The outcome of this study highlights the importance of computer technology to create conducive learning environment. Despite facing some challenges, which range from the needs for intensive training and technical know-how, limited skills of using technology, most interviewees agreed that the effectiveness of computer technology in creating conducive environment for learning is enormous.

In enhancing the effectiveness of the usage of computer technology for teaching and learning, the instructors must have a positive attitude towards this matter and ready to improvise the teaching techniques and strategies in classroom. Hence, further training on the use of computer technology training for both students and instructors must be conducted in order to provide practical, interesting, and impactful learning process.

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Received: 31 July 2018

Accepted: 1 September 2018

Published: 24 January 2019