The Benefits of Using ICT in the EFL Classroom: From Perceived Utility to Potential Challenges

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Abstract

Research has shown that the use of Info-Tech in the EFL classroom can improve and enhance students' language acquisition and substantially motivate them to continue their learning and stimulate their creativity and passion. However, the challenges and barriers that many EFL teachers and professors encounter while attempting to incorporate ICT in their teaching have triggered debates and growing concerns about the real utility of ICT use in the language classroom. So, do these benefits provide tangible evidence for the improvement of English language teaching and learning or are they just knickknacks that are beautiful rather than useful? Does the use of ICT in the EFL classroom boost learning and provide an environment for a more productive and varied learning? Research findings show that the use of information technology in the language classroom boosts autonomous learning, maximises targeted outcomes, motivates learners and helps them improve their performance in the EFL classroom. However, using ICT without careful planning and well-defined objectives will more likely be a waste of time and effort.

Keywords: ICT; English language teaching; Blended learning; Utility and efficiency

1. Introduction

Research has shown that the use of instructional technology and ICT in particular in the English language classroom can improve and optimise students’ language acquisition and substantially motivate them to continue their learning and stimulate their creativity and passion. Technology in language learning can boost variety and increase the diversity of learning environments and opportunities and enhance the quality of the learning experience by making class content more varied and accessible to almost each individual learner; thus ensuring more participation and engagement among learners (Pennington, 1996).

Curricular integration of ICT offers access to a set of electronic facilities such as interactive video, the Internet, email and the World Wide Web. These ICT tools can help learners acquire linguistic skills, establish contact and interaction with other language users and broaden their minds about different cultural practices, values and contemporary lifestyles in countries where English is used as a mother tongue or as a second language. ICT-aided teaching is believed to create more liveliness and interaction in the EFL classroom.

Incorporating Info-Tech in language teaching gives students a large number of benefits to broaden their opportunities in successfully learning a foreign language. These advantages range from enhancing motivation to promoting autonomous learning, fostering critical thinking skills, encouraging innovation and creativity, establishing interaction, boosting communication, promoting research and cooperative learning in the language classroom and boosting students’ performance on written class assessment. (Dodge, 1995; Warschauer, 1996; Dornyei, 1998; Joyce, 1998; Reksten, 2000; Greenfield, 2003; Hui-Fang, 2007; McMinn, 2008; Abu Naba'h, 2009; Ilter, 2009; Hussain, 2010; Seiltad, 2012; Azmi, 2014).

1.1 Research problem

The challenges and barriers that many EFL teachers and professors encounter while attempting to integrate ICT in their teaching have triggered substantial debates and growing concerns about the real utility of ICT use in the language
classroom (Blake, 2008; Erben et al, 2009; Padureau et al, 2009). So, do perceived benefits of ICT use in the language classroom provide palpable evidence for the improvement and optimisation of English language teaching and learning or are they just ornaments that are beautiful rather than useful? Does the use of ICT in EFL classes bring about positive changes into the classroom and provide an optimal environment for more varied and productive learning?

1.2 Research method

Document review has been used as a secondary research method for evaluation and investigation of the research problem. This review of research documents is not meant and can by no means be exhaustive and definitive. It is true that the use of the computer in language teaching and learning dates back to 1960s, but it was not until 1994 and particularly with the emergence of the Internet that serious consideration of incorporating computers in language teaching has become a big concern to educators and researchers. The review considers and examines the literature produced over the last two decades (1990-2014) especially after the advent of advanced language teaching computer software and interactive web applications. The dynamic nature of information technology and the Internet in particular makes it difficult for a comprehensive analysis of its effects to stay up-to-date. The review will systematically ignore research literature produced before 1990 and after 2014.

The review considers research-related materials from different geographical areas namely North America, Europe and South East Asia where instructional information technology is more advanced and research is more abundant. The review also includes studies from the Arab world which hosts and promulgates almost the same cultural values and pedagogical trends and practices that determine educational and schooling policies in our country.

2. Results & Discussion

2.1 Enhancing motivation and engagement in the language classroom

Motivating students in the language classroom is not always an easy function to fulfil because it involves a multiplicity of psycho-sociological and linguistic factors (Dornyei, 1998). Most foreign language professionals acknowledge the importance and utility of motivation to optimise language learning and maximise targeted outcomes. So to what extent can information technology increase motivation and involve students more in their learning? Many researchers argue that information technology can influence students’ motivation to learn and can increase their interest and attention and ensure more involvement and engagement in the classroom (Warschauer, 1996; Reksten, 2000; Jay, 2006; Kassim et al, 2007; Ilter, 2009).

Students are more likely to display positive attitudes when computers are used in the classroom. They are more motivated and interested to communicate with native speakers from other countries (Warschauer, 1996). The use of ICT may provide a learning environment where motivation is maintained and enhanced. The investigation of the impact of technology use in EFL classrooms has shown that EFL effective activities can be enhanced by means of technology. Students insisted that their teachers should use technology in the classroom. This has increased and maintained their motivation and engagement and involved them more in the learning process (Ilter, 2009).

The use of blogs, podcasts and digital videos as class content increases motivation and engagement in the language classroom. Jay (2006) investigated the use of blogs to motivate students to write; and demonstrated the importance of giving students a true audience and the utility of writing for a global audience as well. McMinn (2008) from the Hong Kong University of Science and Technology has chosen to explore the impact of podcasting on students' motivation in the language classroom. He has concluded that podcasting, the publishing of audio or video files via the Internet, helps teachers make maximum benefits of classroom time through the use and integration of authentic material and simulated environments in the foreign language learning curriculum. The use of podcasts provides motivating authentic learning material. Podcasts, he continues to argue, give learners more opportunities to hear speech from the particular social group that they wish to learn about and perhaps identify with.

One more study devoted to the investigation of the effectiveness of using ICT to enhance motivation in the language classroom is the one conducted by Kassim et al (2007). She found that the use of ICT in language classes allows students to develop positive attitudes towards language learning. Most participant students believe ICT motivates them in gaining more interest in the learning process. By increasing the amount of authentic material in the classroom (blogs, podcasts, and digital videos) and providing students with appropriate skills to approach authentic material, teachers promote meaningful interaction, raise students’ interest and motivation; and ensure more participation and
engagement in the classroom.

Given these claims, there seems to be little dispute about the potential benefits of ICT use on motivation and engagement in the language classroom. However, the introduction of ICT materials as class content requires the use of advanced cognitive processes which may, and against the expected outcomes, de-motivate low achievers and those whose learning style is far more adapted to a teacher-dominated classroom.

2.2 Promoting learners’ autonomy and centeredness

The use of a computer by teachers in the classroom has also brought about a change in the role of the teacher, taking him or her from the role of a lecturer to a facilitator of learning. Thus, helping students become more independent and more self-sufficient (Murray et al, 2005). Recent foreign language teaching approaches and methods have been part of a broad reform that supports and extends students’ participation and ensures more involvement in their learning.

Information technology and computers in particular have been used to implement a large set of innovative teaching practices in the language classroom. Standards-based approach, competency-based approach, project-based learning and task-based learning have largely benefited from web technology and helped students develop a set of learning strategies and styles that promote autonomous learning and offer platforms for more individualised learning.

Advocates and supporters of ICT in language teaching argue that unlike traditional instruction, Computer-Assisted Language Learning (CALL) fosters learners’ autonomy and helps them develop individual learning strategies (Murray et al 2005). This advantage pre-supposes an exchange of roles in the language classroom. A critical factor in the success of the experience is the change of culture among students, teachers and parents. A teacher is no longer expected to be the only provider of knowledge in the classroom and students are required to play a new role. They need to take ownership of their learning and contribute to its construction and organisation (Lee, C., 2005).

Instructional technology is introduced as a facilitator of this exchange of roles and a tool that many students are actually using to become autonomous learners. Lee, C. (2005) has found that “The more a teacher employs instructional technology, the less teacher-centred and the more students-centred a classroom will become” (p.81). Technology-enhanced classrooms have been found to promote discovery learning, learner autonomy and learner centeredness.

In many parts of the world, teachers of English assign project work to students as a way to enhance and boost classroom learning. Most students use the Internet as a research and resource tool. This enables them to take charge of their learning through participating in real world projects (Reksten, 2000). Multimedia applications and programmes allow students to do a reading assignment in the target language, use a dictionary, study grammar and pronunciation related to the reading material, take a comprehension test on the reading content, and receive immediate feedback, all within the same programme. This will be enough to maximise targeted outcomes and offer more opportunities and facilities for autonomous learning.

A dynamic class environment makes teaching more flexible and adaptable and creates classes featuring activities and tasks such as project work, cooperative learning and peer tutoring that allow students to develop and control their learning, thus leading to a less teacher-dominated learning environment and encouraging personal initiatives and more individualised learning (Kassim et al, 2007).

Web-based teaching and web quest in particular is believed to promote autonomous learning and help students develop efficient learning skills and strategies. The term ‘web quest’ was coined by Bernie Dodge (1995). He defines it as an inquiry-oriented activity in which most or all the information used by learners is drawn from the web. Web quests are designed to use learners’ time well, to focus on using information rather than looking for it and to support learners’ thinking at the levels of analysis, synthesis and evaluation (Smith and Baber, 2005). The outcome of such a task is usually a presentation or a report which requires students to invest great individual efforts and use pre-acquired skills and knowledge. This boosts achievement and reinforces autonomous learning as well.

Many empirical studies from different schools, colleges and universities have all concluded that the use of ICT in the English language classroom enhances independent learning skills (Kassim et al, 2007). Students have largely benefited from the use of hypermedia in classes. They have gained greater control over their learning because they can go at their own pace and do activities on their own (Padurean and Margan, 2009). However, ICT-enhanced environments should not be seen as a magic medical solution prescribed for the language learner to acquire super autonomous learning skills and competencies. Students have different learning styles and some of them may feel more comfortable and at ease in teacher-dominated classrooms.
2.3 Boosting interaction and communication

Information and communication technology has promoted and enhanced interaction and authentic communication among English language users and learners. Other methods and approaches would simply not offer the ease and speed of communication that ICT can now allow. It is true that there is no substitute for face-to-face communication, but learners do not have the time or the money to travel and learn from students in other parts of the world. A simple Internet video or audio link can allow language users to exchange information and ideas, discuss issues and engage in authentic conversations and exchanges (Rank, 2011). Technological innovations and the web in particular have not only the potential to enhance the quality of education, but can create new learning spaces and facilitate interaction as well (Lee, C. 2005).

Chapelle (2003) argues that computer-mediated communication “constitutes a kind of virtual immersion setting for those who choose to participate in it” (p.35). In keeping the common wisdom suggesting that if one wants to learn English, they should go live in a place where English is spoken, many Internet websites for communication among English learners offer opportunities for conversation and interaction with other English speakers. New technologies also have the potential to transform task-based language teaching into active learning by bringing students together to communicate, interact and construct knowledge (Thomas, M., 2010).

Both synchronous and asynchronous computer-mediated communication systems have a large set of advantages to offer. They may enhance the collaborative learning experience by moderating social pressures associated with face-to-face participation such as, turn taking, dominating discussion and fear of reprisals and cognitive inertia (Cohen, E. 2002). Language learners do not feel coerced to produce immediate feedback and take enough time to formulate appropriate responses. De Ramirez (2010) argues that “web based platforms can also provide a safer, more anonymous space in which to practice English. Beginners can be reticent and uncomfortable speaking in class sharing their writing with peers in a face-to-face situation” (p. 3).

Web technology and Internet video links in particular allow exposure to non-verbal communication as well. Facial expressions, gestures and posture, which are culturally overloaded, enable learners to make appropriate interpretations of different speech acts and help them develop a sense of communication commonality (Lee, L., 2009). This allows them to avoid blenders that may impair communication. Moreover, computer-enabled communication provides teaching environments that support learning conditions and back up meaning-oriented communication. Learners maintain a balance between fluency and accuracy and develop their intercultural communication skills to engage in successful authentic conversations and exchanges with native speakers. This makes of text-based chat a powerful and efficient mediating and learning tool (Lee, L., 2009).

However, synchronous communication and interaction has its limitations and failings as well. Online chat is a fast-paced exchange similar to face-to-face communication that places pressure on learners to produce foreign language in a timely fashion (less waiting time and quick responses and reactions). As a result of the spontaneity and authenticity of the situation, learners tend to write briefly and informally with abbreviations, unconventional punctuation and unusual misspelling (Lee, L., 2009). Computer-enabled communication does not allow users to take advantage of social aspects of oral interaction such as body language and prosodic features. Learners resort to express their feelings and emotions using emoticons and smiley faces. These electronic illustrations may help users express themselves and exchange messages but they are of no value when it comes to language learning development and improvement of performance on written class assessment. They may even cause inappropriate and careless usages of the language.

2.4 Enhancing multisensory delivery and authenticity

Another potential benefit of ICT use in the English language classroom is the abundance of authentic teaching material. Evans, C. (2009) states that “The Internet provides a wealth of information which can support and extend pupils' knowledge and skills within English lessons” (p.43). CALL software stimulates the natural language learning process, focusing on listening comprehension, reading comprehension, speaking and writing which all offer authentic and real world content. They provide learners with real life images, written text and voices of native speakers (Reksten, 2000).

The use of blogs, wikis and podcasts to publish students’ assignments and classroom achievements for potential authentic readers increases students’ motivation and interest in learning. When learners know that their submissions have a purpose and are meant for someone to read, they are more likely to participate and produce. De Ramirez (2010) suggests that “publishing student work to the World Wide Web is a means of providing an authentic global audience for classroom productions. When students write or speak for a broader and more international audience, they pay more
attention to polishing their work” (p.1). EFL teachers in many parts of the world encourage their students to use blogs, videos, wikis, podcasts and social networking media to publish classroom productions. This makes English language learning more purposeful and motivating.

Moreover, students feel more engaged and motivated when authentic material is used to support learning and when their teachers use cues such as sound, pictures and videos. The use of blogs has brought a large set of potential benefits. Blogs’ authenticity as a communicative medium and as a rich source of reading texts expose learners to authentic language and linguistic experiences and allow them to benefit from an appropriate language teaching environment (Richardson, 2008).

Multisensory delivery is another advantage of using ICT in the English language classroom. Well-designed applications present content in a variety of media formats, providing sound, text, graphics and video, and allow students to use their own individual learning styles (Reksten, 2000). Multimedia is one very good answer for teachers looking to address students’ different learning styles. Multimedia is a combination of text, video, sound, and graphic animation. This allows students, whether they tend to be visual, auditory, tactile or kinaesthetic learners to always benefit from the use teaching material in the EFL classroom (Reksten, 2000).

Multisensory delivery not only has the potential to cater to different learning styles but also enables students to grasp difficult concepts through visual multimedia formats available on most Internet websites (Reksten, 2000). A simple interactive video link would alleviate the burden of bringing real objects into the classroom and engaging in useless explanations and illustrations of intangible language input.

Multimedia-enabled class delivery offers a high degree of flexibility in learning. The multimedia environment appeals to the senses of seeing and hearing which traditional teaching aids cannot provide (Rajeshwar, 2001). Shailaja (2001) backs up Rajeshwar’s argument and adds that “Hypertext provides a number of advantages for language learning. A more authentic learning environment is created since listening is combined with seeing in the real world and skills are easily integrated” (p.3). Moreover multimedia computer applications help keep track of students’ progress and provide them with immediate feedback (Rajeshwa, Shailaja & Damodor, 2001).

However, using ICT without careful planning and well-defined objectives will more likely be a waste of time and effort. ICT uses in English language teaching and multisensory delivery in particular have their limitations as well. The cultural component of teaching material can be challenging. Evans, M. (2009) argues that “The vast availability of original, authentic texts…..can provide instant contact and stimulus for the language learners. Nonetheless, such material, produced for native speakers of the language, can , for many language learners and their teachers , be viewed as ‘difficult’…..and the subject matter may relate to a culture of which the learner has little or no experience” (p. 3).

2.5 Boosting students’ performance on written class assessment

The question ‘Is there any research evidence on how ICT-enabled English teaching environments can enhance language learning and boost performance on written class assessment?’ has triggered considerable controversy. Research from different settings has investigated the effectiveness of ICT-based instruction in foreign language teaching. Findings suggest that the use of ICT-enabled English teaching environments has mostly generated improvements in students’ language skills, increased their interest in learning and boosted their language learning achievement.

Hussain (2010) investigated the effectiveness of technology-based learning environment on student achievement in English. The purpose of the study was to investigate the impact of an information technology-enhanced teaching environment on students’ achievement in English and see if there was a significant difference between the achievements of students who received and those who did not receive ICT-enabled instruction according to their performance on both pre-test and post-test. The results revealed that both high achievers and low achievers of the experimental group showed significant difference in the mean score. This shows that even low achievers benefited from the use of ICT in the language classroom. Researchers recommended that technology-enhanced teaching environments should be used to enhance students’ learning and that information technology should be part of the school curriculum.

Abu Naba’h (2009) investigated the same issue with grammar as a specific target language component. The purpose of the study was to see if there were any statistically significant differences between students’ performance mean scores from two different teaching and learning environments including both a conventional setting and a computerised one. Results show that there are statistically significant differences in the achievement mean scores between the experimental group who studied grammar (passive voice) using computers and the control group who received grammar classes (passive voice) through conventional instruction. The difference in scores was attributed to the experiment. The researchers’ possible explanation for the positive effect of computers on students’ achievement was that
computers enabled each individual to work according to their own pace and that CALL programmes catered to individual differences. Recommendations included a call for more research in other regions of Jordan to validate and generalise the results, as well as advice for EFL teachers to vary their teaching methods.

Joyce (1998) conducted research on the effectiveness of computer-based instruction on student learning of English. The researcher compared students’ acquisition of English structures based on the mode of instruction (computer-based instruction versus teacher-directed instruction). The purpose of the study was to determine whether there was a significant difference in the acquisition of a given grammar structure between students taught in a teacher-directed instruction and students taught in a computer-aided environment. The results show that computer-based grammar instruction is at least as effective as, and in some cases more effective than teacher-directed grammar instruction. Analysis revealed a significant difference between groups on the open-ended and fill-in-the blank immediate post tests but no significant differences were found between groups for the multiple choice post-tests. The conclusion was that computer-based instruction supported specific features and structures of the language.

Hui-Fang (2007) examined the effect of using email on the improvement of performance in writing, taking into account syntactic complexity, grammatical accuracy and lexical density. The purpose of the study was to assess the overall effect of email use on students’ writing performance to see if there was a significant difference between the frequency of email exchange and writing performance, and to investigate students’ attitudes towards email exchanges in EFL writing. Findings indicate that students made improvement on grammatical complexity and accuracy. The significant difference was attributed to the use of the corrective and communicative potentials of the email activity. However, there was a reduction in lexical density because students overused more corrective feedback. Findings also show that an increased exchange of email has a greater overall positive impact on writing performance and that most students show a positive attitude towards the use of email to improve their writing performance.

Greenfield (2003) investigated, through the use of a qualitative case study, secondary ESL students’ expectations and perceptions of a collaborative email exchange between students of an ESL class in Hong Kong and their counterparts from the State of Iowa. The email exchange was based on a researcher-designed instructional model, using well-established theories and methods of second language teaching, particularly, cooperative learning, communicative language learning, process writing and project-based learning. Findings show that participants enjoyed the exchange, gained more confidence in English learning and computer use, and felt that they made significant progress in language acquisition. They were, however, not quite sure in the pre-experiment survey as to whether it improved written class assessment-related skills such as grammar usage and discrete language functions. But, on the post-project survey, students clearly expressed their disagreement with the proposition that exam-related skills improved as a result of the project and lowered their expectations concerning the contribution of computer use and email exchange in particular to the improvement of performance in standardized exams.

Seiltad (2012), in turn, investigated the use of tailor-made YouTube videos as a pre-teaching strategy for English language learners in Morocco towards the implementation of a hybrid language learning course. One of the questions used to articulate the research was whether the hybrid environment would produce similar academic gains as the conventional classroom. The experiment has revealed that the use of YouTube videos to create relevant class content has proven to be an efficient teaching technique. Comparisons of final grades before and after the pre-teaching YouTube videos were implemented to see if there were any statistically significant differences among groups. The t-test gave a P. value of (.,.20), which, while showing some effect, is not statistically significant. However, the modest improvements in the students’ final grades encourage the use of web-enabled pre-teaching strategies.

Azmi (2014) research study’s main objective was to investigate and assess the impact of Info-Tech use on students’ English language learning achievement (performance on written class assessment). The used research tool was a field experiment conducted over a period of 3 terms and involved two intact classes, G1 as an experimental group and G2 as a control group. The objective was to determine the extent to which patterns change over time and see if there was any research evidence for whether the use of ICT in the language classroom optimizes learning and helps students improve performance on written class assessment.

The observed patterns from all comparisons show that there is a slight difference between groups on pre-test; post-test 1 and post-test 2; however, the results from the t-test for equality of means outcome indicate that there is a statistically significant difference between high achievers of the experimental group and high achievers of the control group on post-test 2 (p = 0.009 < 0.05). The main implication of the research study is that ICT can be successfully used to maximize learning outcomes and boost students’ performance on written class assessment but only for high-achiever students. This suggests that serious efforts should be made to adapt the use of ICT to meet the requirements and the needs of low-achiever classes as well. It is true that ICT can be used to promote oral and receptive skills for most
students, but when it comes to productive written skills, high-achiever students are more likely to benefit from the digitalization of class content. Perhaps they have the required self drive and autonomous learning strategies and skills to benefit from what ICT can offer.

3. Conclusion

Most reviewed studies reveal and demonstrate through research that the appropriate implementation of information technology in the language classroom promotes learning, enhances interaction and communication, boosts autonomous learning, maximises targeted outcomes, motivates learners and helps them improve their performance in the EFL classroom. The use of appropriate pedagogies and methodologies can then make a difference, bring positive changes in the EFL classroom and turn classrooms into open digital environments of learning. However, using ICT without careful planning and well-defined objectives will more likely be a waste of time and effort. ICT uses in English language teaching and multisensory delivery in particular have their limitations as well. The cultural component of teaching material can be challenging and confusing. Moreover, an appropriate use of ICT in English language teaching and multisensory delivery in particular requires adequate training and pedagogical planning. Blake (2008) insists that "Teachers inexperienced in using technology often harbour the belief that merely transforming an activity into a web or CALL format will guarantee its success for students. Again, any activity without adequate pedagogical planning technologically enhanced or not- will produce unsatisfactory results with students, even if it’s attractive from a multimedia point of view" (p.11). Poor pedagogical planning is likely to undermine the use of ICT in the EFL classroom.

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