

## **MODERN TECHNOLOGY DEVICES IN EFL TEACHING**

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### **Abstract**

This paper aims at making a review of positive experiences that used modern technology devices in classrooms of English as a foreign language around the world. Some modern technology devices will be reviewed, they are: Tablet PCs, smartphone and iPads. For this review, four articles by researchers from different countries were selected in order to obtain positive reports on the use of modern technology devices in EFL classroom. Despite modern technology devices are still rare and not being popular in some areas in Indonesia, the use of that kinds of device as a learning tool is being largely developed in Indonesia and other countries and it has shown good results so far.

**Keywords:** *Modern Technology Devices, EFL, Teaching*

### **1. Introduction**

Technology plays an important role in teaching and learning process, especially for EFL teaching. “The use of technology in teaching becomes more important in present times, because teachers also have to be able to keep up with the technological knowledge of their students” (Richards, 2014, p.2). With the improvements in technology and its use in EFL classrooms, the roles of the EFL teachers are also changing (Zhu & Wang, 2006). Within this change, the knowledge of technology use is a must for foreign language teacher candidates in many teacher training programs (Barzaq, 2007) and teacher educators (Moradkhani, Akbari, Ghafar, Samar, & Kiany, 2013). Besides, the aim of profesional development is seen as helping teachers make meaning of technology integration in teaching to regulate its influence on edcation (Barzaq, 2007).

As a matter of fact, EFL teachers perceived technology use very beneficial in many research and teaching contexts. For example, teachers in Iran had positive attitudes toward using technology to augment language learning through a

computer-oriented instruction (Mollaei & Riasati, 2013). Korean EFL teachers were found to be seeing computer technology as a useful teaching tool that could easily boost means of teaching by providing students with a variety of language inputs and increasing students' learning capabilities in real-life contexts (Park & Son, 2009). Furthermore, the advantages of using modern technology devices in EFL classroom were listed as providing authentic materials for learners, making students meet native friends online, and assisting teacher-student communication (Chong, 2011).

Although teachers had positive attitudes towards integrating technology in teaching EFL students, a number of challenges have also been quoted. For example, Chinese EFL teachers used technology chiefly for teacher-centred drives, such as instructional supply, and rarely utilized technology for student-centred tasks. Likewise, most of the Libyan teachers confronted difficulties related to time restriction and lack of managerial support (Emhamed & Khrisnan, 2011). Iranian EFL teachers were also found to be suffering from some complications in employing Computer Assisted Language Learning (CALL) in language classrooms because of the teachers themselves, facilities too use, learners (Hedayati & Marandi, 2014), lack of online services and resources, lack of interface in online teaching, cultural oppositions to online teaching, teachers' inadequate knowledge of online teaching (Dashtestani, 2014) and lack of technological devices that can be used for teaching (Kazemi & Narafshan, 2014).

Age was also found as a variable in technology integration in foreign language classrooms. According to Rahimi and Yadollahi (2010), a lower technology anxiety had resulted better integration of technology in EFL classrooms; and as older teachers had higher levels of technology anxiety than younger teachers, they were more hesitant to incorporate technology into their classes. It is also reported that external factors such as time constraints inadequate technology, inflexible school programs and textbooks, and lack of managerial care affect the execution of CALL in a negative way. On the other hand, internal factors such as

teachers' inadequacy in technology use, technological knowledge, and views on technology integration also influence teachers' choices to use technology in their classrooms (Park & Son, 2009).

## **2. Theoretical Background**

### **2.1 Historic Background and Terminology**

In recent years, the improvement of modern technology devices, such as mobile phones and tablet computers, has received great interest in the field of education. In a study using Technology mediated learning provides foreign language educators with the means to increased exposure to the target language within the classroom by providing offline as well as online resources. In addition, blended learning settings extend the learning environment to the online sphere and engage learners beyond the classroom (Conrad & Donaldson, 2004).

There have also been numerous research projects related to the usefulness of modern technology devices for students in an EFL environment. Ono and Ishihara's (2011) study reported that although initially they imagined that it would be difficult to type on an iPod Touch due to its limited screen size, the devices were indeed effective in improving students' language skills. Baleghizadeh and Oladrostam (2010), in an attempt to help students overcome anxiety related to whether they could use English with grammatical accuracy, had 40 EFL students in Iran record themselves speaking in English on their mobile phones during class. In a study in Taiwan, Lu (2008) reported that when students learned vocabulary by texting on their mobile phones, they were able to obtain significantly higher scores on a posttest measuring their understanding of vocabulary than those who studied using a traditional paper method.

### **2.2 What are Modern Technology Devices?**

More recently, devices requiring electricity, such as television, videos, and computers, have increased in popularity as teaching aids in the classroom. Since the

birth of the internet, computers and tablet computers in particular have become more common not only in regular classrooms, but also in EFL classrooms, where a global network allows a wealth of knowledge to be brought to students almost immediately at the touch of a button. The use of touch-screen computer tablets appears to have brought many advantages to the classroom. Simpson (2012), for example, suggested that the introduction of iPads into an American elementary school resulted in students being more enthusiastic in their study, and that this did not wane, even months after the tablets had been lent to students.

Mobile learning devices, as defined by Sharples, Taylor and Vavoula (2010), brings this online dimension of language courses to the face-to-face dimension. With the availability of broadband access and Wi-Fi networks, learners and educators can connect to the Internet when they need too. They can search for information, read course notes, consult references, share links as well as contribute to the on-going lesson and instructor modes to support. With online and offline reference tools, the learners can verify and refine their work. Predictive text input and automated translators provide them with an immediate feedback (Godwin-Jones, 2012). Checking structures maintains the learners' engaged with the task.

### 3. Some Positive Experiences

In this part of the article, the aim is to describe and analyze four positive experiences concerning the use of modern technology devices in EFL classrooms around the world. The four articles used for this paper were chosen because they all have positive experiences in EFL teaching using modern technology devices as a learning device in common. The articles are presented in chronological order in an attempt to follow the progress achieved by the use of technology brought into education. The articles are the following:

1. iPads in the Foreign Language Classroom: A learner's Perspective, by Cecile Gabarre from University Putra Malaysia, Serge Gabarre from University Putra Malaysia, Rosseni Din from University Kebangsaan

- Malaysia, Parilah Mohd Shah from Universiti Kebangsaan Malaysia, Aidah Abdul Karim from Universiti Kebangsaan Malaysia (2014).
2. Effective Use of Tablet Computers in EFL Pedagogy, by Adrian Leis from Miyagi University of Education (2014).
  3. Tablet PCS as Instructional Tools in English as a Foreign Language Education, by Assist. Prof. Dr. Perihan SAVAS from Middle East Technical University Turkey (2014).
  4. Shape Shifting Smartphones: Riding the Waves in Post-Secondary Education, by Peggy Jubien, University of Alberta, Canada (2013).

The first experience is presented by Cecile Gabarre from University Putra Malaysia, Serge Gabarre from University Putra Malaysia, Rosseni Din from University Kebangsaan Malaysia, Parilah Mohd Shah from Universiti Kebangsaan Malaysia, Aidah Abdul Karim from Universiti Kebangsaan Malaysia. The title of the article is “iPads in the Foreign Language Classroom: A learner’s Perspective”. The article had been published on 3L: The Southeast Asian Journal of English Language Studies, volume 20 (1): 115-128. This research aimed to explore how mobile tactile devices can be used in classroom settings to enhance language learning particularly by promoting flexible and active learning opportunities as reported in Chen (2013) and Lys (2013). Mang and Wardley (2012) stressed the need to integrate the technological set-up within a pedagogical framework. Therefore, the current study used the technological learning content framework (TLCK) from Chai and Tsai(2013, p. 45) to explore the iPad’s contribution to the learning experience. In their review of the literature on the technological pedagogical content knowledge framework from Koehler and Mishra (2009), Chai and Tsai recommended investigating the learners’ educational experiences with the integrated technology to assess the appropriateness of the technological set-up with the learning outcomes. A narrative qualitative design was adopted to provide a secure and private environment to encourage disclosure, thus generating a deeper understanding of the determining factors leading to the learner’s motivation towards using the iPad and to the processes involved thereafter. This study involved

two researcher as participant. The two researchers had taught this learner over three consecutive semesters and a good teacher-student relationship existed. The study was conducted in a Malaysian public university. The French courses were delivered in classrooms as well as in computer language laboratories. The classrooms were equipped with a computer connected to the internet and to an LCD projector. The language laboratories consisted of tables of four computers connected to a class network and to the internet. All the computers were monitored from the teachers' computer station and connected to an interactive white board Emilie owned an iPad 2, Wi-Fi and 3G enabled with 16 GB and her laptop was a Toshiba PORTEGE T210-1026R equipped with an Intel ®Pentium 1.33 GHz processor and 2048 MB DDR3 1066MHz SDRAM. In-class observations were used to collect data on how the iPad influenced the participant's learning process technologically, pedagogically, and socially. Observations, informal discussions and field notes were used to design the one-on-one interview protocol and to triangulate the findings. The interview has conducted two weeks after the participants had received their iPad.

The analysis comprised the three-dimensional space narrative structure established by Clandinin and Conelly (2000): interactions, continuity and situation. Interactions encompassed the social interactions between the participant and the rest of the class (face-to-face and virtual) as well as the human-machine interactions. Continuity was divided in three chronological phases describing the participant's perceptions of the past, present and future regarding the influence of the iPad on their life. The situation consisted in the contextualization of the information emerging from the participant's narration.

In terms of mobile learning, the participant described her iPad as more practical than her laptop. It was easier to carry because it was sleek and weighed less. It was also faster to start and to connect to WIFI. On the other hand, smart phones were seen as tempting. They were described as real phones as opposed to tablet computers which used 3G only to connect to the internet. Regarding the

iPad's perceived ease-of-use, the participant was truly challenged by the iOS interface. She had to get used to transferring files through email and kept on discovering new applications and features every day. However, her technological acceptance was high because she had chosen the iPad. Emilie provided valuable insights on how the learners were carrying out individual tasks such as listening comprehension or collaborative work. Tablet computers are versatile and thus, have the potential to engage learners by keeping them interested, challenged and motivated. Classroom activities should also make use of all features of the devices: brainstorming, interactive presentation, handwriting annotations, podcasting, and multimedia content. Course content and applications could be pushed to the learners' devices for revision purposes. In the same way, learner created content could be pushed to the lecturers for feedback and future sharing in a peer learning approach (Morgan & Toldedo, 2006).

Furthermore, the technological challenges faced by this learner were intricately linked to her specific situation, i.e., as being the only learner equipped with an iPad with a limited prior knowledge of the iOS interface. Therefore, there is a need for further research on the usability and utility of tablet computers from other manufacturers.

The second experience is presented by Adrian Leis from Miyagi University of Education. The title of the article is "Effective Use of Tablet Computers in EFL Pedagogy". The article had been published on JALT 2013 Conference Proceedings. The aim of the study was to answer the following research questions:

1. Does using tablet computers in teacher training improve participants' views about these devices as teaching tools?
2. Does using tablet computers in teacher training improve participants' views if these devices as tools for learning a second language?

The participants in this study were 38 (20 male, 18 female) Japanese university undergraduate and graduate students whose goal was to become an English teacher at either the elementary school or junior high school level.

Results indicated that the training did in fact bring about such results, with students indicating they were more prepared to use these devices in class. By making use of more authentic classrooms in future studies, it is hoped that further understanding will be gained about whether the use of technology such as tablet computers results in not only a more comfortable teaching environment for instructors, but one in which students are able to make strong progress in their language studies.

The third research is presented by Assist. Prof. Dr. Perihan SAVAS from Middle East Technical University Turkey. The title of the article is “Tablet PCS as Instructional Tools in English as a Foreign Language Education”. The article had been published on TOJET: The Turkish Online Journal of Educational Technology, volume 13 issue 1, January 2014. The main purpose of the study presented here was to find out the perceptions of 40 volunteer prospective EFL teachers on the effectiveness of the use of tablet pcs in relation to EFL.

The participants of the study were 40 prospective EFL teachers who were sophomores in a state university in Turkey. All were enrolled in an EFL B.A. program at a foreign language education department in which the medium of instruction was English. All participants were given consent forms before the study began and only the volunteer participants took part in the study. Nine of out 40 participants were males whereas the rest (31) were females. The average age of the participants was 20. In addition, all participants were in a methodology course in which they were being trained on how to teach speaking, listening, and vocabulary in English.

The data collection took place in one full academic semester in three phases and mainly via two surveys.

PHASE I \* pre-tablet PC use survey was administered before participants used tablet PCs in relation to EFL

PHASE II \* participants in groups of three received one android 4.0 based tablet pcs and visited google play store for EFL materials/tasks and wrote down the ones they preferred to use in teaching english

PHASE III \* Post tablet PC use survey was administered after participants used tablet pcs in relation to EFL.

The results of the study have several implications for researchers and educators who wish to use tablet pcs in relation to teaching EFL. First of all, the results show that prospective teachers can develop more positive attitude toward the use of tablet pcs in teaching EFL as they gain more experience in using these instructional tools. This finding was in line with Tingerthal's (2011) suggestion that technical problems that teachers face when they start teaching with tablet pcs become less problematic in time as the instructors get used to using tablet pcs and it becomes a part of their regular teaching routines. In addition, it is possible that the examples and sample tasks and materials of EFL in google play provide the prospective teachers a more detailed understanding of the possibilities that tablet pcs can provide in instruction. Learning by and through examples and sample activities is extremely important for prospective EFL teachers as they have less actual teaching experience in a real classroom. If teacher educators wish to utilize tablet pcs as instructional tools in EFL, it is essential that prospective teachers are given training and experience in using these devices.

In addition, the results of the study can imply that there should be more tasks, materials, and applications in teaching Writing skills in English via Tablet PCs. Software designers and researchers in the field of Instructional Technology can do more research and projects to develop more writing applications that can be used with an EFL classroom in mind. To do this, software designers, researchers, EFL teacher educators, and prospective as well as in-service teachers can work in collaboration to design more tasks/materials that would meet the needs of EFL learners and maximize the potential of tablet PCs as instructional tools.

To sum up, in this study it was seen that the participants developed more positive attitude toward the use of Tablet PCs in relation to EFL as they gained experience in using tablets. This study was carried out in one academic semester and with 40 participants in one BA program at a state university. More research is required across different institutions profile of prospective teachers over a longer period of time.

The last experience is presented by Peggy Jubien, University of Alberta, Canada. The title of the article is “Shape Shifting Smartphones: Riding the Waves in Post-Secondary Education”. The article had been published on Canadian Journal of Learning and Technology, volume 39(2), 2013. This study received formal review and approval from the University of Alberta’s ethics review board. The only criterion to participate was that students had to own and use a smartphone. The purpose of the study was to examine students’ everyday use of smartphones, particularly as they related to educational tasks. Data for this study was collected during semi-formal interviews that lasted for approximately one hour. Most of the participants brought their smartphones to the interviews and they both described and demonstrated how they used their phones during the meetings.

By considering one object, the smartphones, and the ways that it is assembled together with other human and non-human actors in post-secondary, it is possible to learn more about how the socio-material is influencing educational practices. Studying smartphones’ use shows us that there is no clear separation between students’ personal and school lives and that the threads or actor-networks to observe the ways that smartphones are influencing and changing learning practices. We can learn about how accessing and gathering information, receiving feedback from instructors and collaborating with other students changes when students use smartphones and we momentarily notice some of the concealed actors that assemble together in the networks. We can also reflect on the ways that smartphones act as a fluid and fire objects and consider how they can be described as protean objects. Using this new terminology calls attention to how smartphones

are continually going through a process of shape shifting and how time seems to speed up and the ways that virtual and physical spaces can be briefly be fused together. These understandings raise important questions for educators and administrators that need to be further explored and reflected on, as smartphones and tablet computers are integrated into all levels of education.

#### **4. Conclusion and Remark**

After reading and analyzing the four studies about using modern technology devices around the world, it was possible to notice that after the first attempts of using modern technology devices in classrooms, more educators are willing to help develop this learning tool. The articles framed the use of modern technology devices from a very similar approach. The researchers described their methods very carefully and all of them seemed to have similar point of views on how to develop a course using those kinds of devices.

They all agreed that more research should be conducted and there are still many things to be discovered, but there is no doubt teachers now have powerful tool in their hands. It seemed that with the increasing need to learn a foreign language, teachers and students are more willing to find out better ways to make the complex learning task easier and more effective, and the teaching of a foreign language, as well. Although considering the use of modern technology devices very demanding for the teacher, and a task that requires a very well prepared educator, researchers considered it as a great opportunity for class improvement.

With computer technology developing rapidly in the 21<sup>st</sup> century, there can be a danger that these tools can become the center of the English lesson, undermining the role of the teacher. The author does not agree with that idea and stresses that the most important considerations for learning must be the people in the classroom: the teachers and the students. However, the advantages that modern technology brings to the classroom as an aid for teachers must also be considered in EFL teaching. With previous research showing some inclination amongst

teachers toward hesitation to use technology in the classroom, it was hoped that using tablet computers in the training of university students studying to become English teachers would help them feel more comfortable using tablet computers in EFL classes.

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