CALL for the Digital EFL/ESL Generation

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Abstract

Using technology in the English as a Second Language (ESL) / English as a Foreign Language (EFL) classroom is the general trend. There are a variety of kinds of technology devices used in the classroom and a computer is the most popular technology used in the classroom. Computer - assisted language learning (CALL) is a general and popular method in the ESL/EFL classroom. A computer plays a crucial role in the classroom because a computer enables teachers and students to have access to all types of material such as text, audio, and video information with ease. In addition, CALL has many advantages to meet the needs of new generation called *digital native*. Research shows the benefits of CALL in EFL/ESL learning in terms of motivation, interaction, student autonomy, ubiquitous learning and student-centered lesson.

Keywords: CALL, EFL, ESL, technology, computer, motivation, interaction, ubiquitous

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We can easily see the people on the streets that send text messages, check their Facebook pages, listen to music, download movies, or talk to friends on Skype all on their smartphone while walking. If we look around carefully, we find that we are living with the help of various kinds of technology such as televisions, PDAs, tablet PC, smart phones, computers, etc. The classroom situation is not much different. Compared to the traditional classroom relying only on blackboard, chalk, or textbook, we now see many classrooms with the cutting-edge devices such as computers, LCD monitor with a projector, electronic boards, etc., let alone high-tech classrooms: It is assumed that teachers could not deal with far too many miscellaneous duties as well as preparing for classes or assessing their students without a computer. For example, it has become a common practice that teachers use MS Word and PowerPoint to make a lesson plan and deliver it and Excel to process students' records. The reality is that teachers require the ability to not only teach students, but also to use high-tech devices.

These days, teenagers are called digital natives who are accustomed to digital devices such as computers or smart phones (Palfrey & Grasser, 2008; Rosen, 2007, as cited in Legutke, 2012). Students as well as classroom settings are rapidly changing, and teachers need to change to meet the demands of the rapid change. Therefore, it seems to be valuable to research the use of technology in the classroom. This research paper will explore the history of the use of technology, the advantage and disadvantage of the use of technology, a teacher's role and implication for effective use of technology in the classroom, while being limited to the ESL and EFL classroom.

The History of Use of Technology in EFL/ESL

Technology devices in the classroom include a variety of equipment, and a computer is regarded as the most often used technology device in classrooms. Can we imagine designing,

preparing and delivering lessons without the help of computers nowadays? Of course it is assumed that we could, however, it might bring much inconvenience into class. For example, it is assumed that the majority of the teachers use a computer when they make a lesson plan with MS-word or PowerPoint. Without them, they need to handwrite the lesson and prepare pictures, a CD player, etc. which can be solved easily with the help of a computer. Furthermore, students cannot experience what Skype, Facebook, email or You Tube are like in class.

Thanks to development of technology from the 1980s, CALL has been playing an important role in teaching EFL/ESL learners. Initially, a computer was used as a supplementary tool that helped with teachers' instruction and communicative interactions. However, CALL is nowadays regarded as an essential tool to promote learners' independent learning and to inspire learners' involvement with English learning anytime and anyplace thanks to the characteristic of CALL which allows learners to get access to a computer ubiquitously (Fotos & Browne, 2004). In addition, Nguyen (2008) claims that the lesson is more student-centered thanks to the Internet-based CALL because the Internet is both a teaching and learning a tool at the same time.

Considering the important status of CALL, where it plays a crucial role in ESL/EFL learning, it is valuable to review CALL in terms of its history and future. According to Levy (1997), CALL has been defined as "the search for and study of applications on the computer in language teaching and learning" (as cited in Fotos & Browne, 2004, p. 1) and Fotos and Browne (2004) claim that CALL is currently used for in a variety of instructional situations.

Warschauer (as cited in Szendeffy, 2005) described three historical stages of CALL: Behaviorist (1960s~1970s), Communicative (late 1970s~early 1980s), Integrative (late 1980s~present). The followings show the historical change of CALL.

The first phase of CALL is called behavioristic CALL (Kern & Warschauer, 2000, as

cited in Fotos & Browne, 2004). This term prevailed in the 1960s and 1970s and was involved with the structural linguistics, the audio-lingual method, a behaviorist model of language learning that was based on the common concept that learning language was the result of new habit formation with repetitive drill-and-practice. Therefore, CALL in this period was made up of programs for drill-and-practice and was regarded as a supplement to classroom instruction (Fotos & Browne, 2004). In other words, CALL was viewed as just an additional tool to teaching language providing simple mechanical drills.

At the end of the 1970s, a communicative approach that focused on learner's communicative competence- "knowing when and how to say what to whom" (Larsen-Freeman & Anderson, 2011, p. 238) in actual context emerged against behaviorist approaches that emphasized formal language use instructions rather than meaningful language use. CALL in this stage tried to get involved with more possibilities for learner interaction focusing on communicative competence rather than mastery of discrete language forms isolated from context. That was why this period was characterized as communicative CALL and CALL provided contents related to communicative competence such as language games, text reconstruction, cloze test, and puzzles (Kern & Warschauer, 2000; Underwood, 1984; Arschauer, 1966, as cited in Fotos & Browne, 2004). In addition, many research books and professional organizations and publications on CALL boomed. For example, we see the Computer Assisted Language Instruction Consortium (CALICO) or *CALICO Journal* in this period (Fotos & Browne, 2004, p. 5).

In the early 1990s, CALL was viewed as stimulus for " students' motivation, critical thinking, creativity, and analytical skills…" (Fotos & Browne, 2004, pp. 5-6) which were related to a cognitive model of language. The most often used programs were "word processors,

spelling and grammar checkers, desktop publishing programs and concordancers" (Warschauer, 1966, as cited in Fotos & Browne, p. 6) which helped students' understanding and management of the target language. The current phase of CALL is characterized as integrative CALL based on "the Internet, local area networks (LANs), multimedia, and linked resources called hypermedia" (Warschauer, 1966, as cited in Foots and Browne, 2004, p. 6). Students use a dictionary, do their assignments, study four language skills, take an online test, receive prompt feedback, and get access to multimedia resources with ease. Namely, learners can do almost everything that has something to do with language learning using a computer and teachers can do almost everything that is involved with language teaching at the same time. Kern and Warschauer (2000) point out that CALL in this stage is highly interactive and individualized and emphasizes content supported by components of how to teach students specific skills (as cited in Fotos & Browne, 2004).

Fotos and Browne (2004) claim that there are two prominent features in current integrative CALL. One is focus on person-to-person interaction for creating meaningful learning as in e-mail exchange program, role-playing games, simulation games and online real-time learning. The other is the role of Web-based activities in language learning and teaching is crucial in that it enables teachers and learners to get involved with more authentic and meaningful context. Furthermore, many researchers note that a shift from a teacher-centered classroom to a student-centered classroom occurs and the students has get more involved with the lesson content and process with regards to CALL (Murray, 2000; Warschauer, 2003, as cited in Fotos & Browne, 2004). According to Pelgrum (2001), a teacher's role shifts from controlling the whole instruction to letting students find appropriate instruction considering their learning styles and strategy, and a student's role changes from passive learners to

autonomous and independent learners who are in charge of their own learning (Fotos & Browne, 2004).

Lastly, it is noted that CALL activity includes the use of multimedia including courseware on CD-ROM or online and CALL involves the Internet. The main CALL activities that are discussed in this paper will be involved with the Internet.

The Advantage of CALL in EFL/ESL

It is believed that EFL/ESL learners need a large amount of language input and negotiation to acquire or learn English. A computer in the classroom could play a decisive role and bring great benefits in language teaching and learning because a computer provides a variety of language input and negotiation through email, chatting, online conferencing and discussion, etc. (Kim, 2008). Kern (1995) and Warshcauer (1997) argue CALL in the classroom could facilitate student participation and communication (as cited in Kim, 2008).

Generally, technology in class is beneficial because it can make students motivated for learning. Nemtchinova (2007) claims that technology benefits young learners because it develops their physical abilities and fine motor skills compared to traditional lecture-driven lessons. Nemtchinova (2007) argues that technology in the classroom enables students to get motivated and to produce a positive attitude to learning through a variety of text, pictures and sounds. Similarly, Nguyen (2008) claims that teachers and learners do not need discrete devices such as books, tapes or VCRs which include a text, audio, and video information because they can get access to all types of material with a computer which is multifunctional.

Additionally, Nemtchinova (2007) points out that technology offers learners meaningful and authentic context. To be specific, teachers can create a meaningful context for students to communicate and to get involved with authentic activities with the help of technology. Li &

Hart (2002) claim that teachers and students can get access to more authentic material with ease thanks to the computer network technology (as cited in Nguyen, 2008). For example, they can access the up-to-date English newspaper or magazine on real-time basis from all over the world. Furthermore, technology enables learning to occur ubiquitously in the classroom and out of the classroom.

Lastly, Torlakovic and Deugo (2004) report that the EFL/ESL learners in the CALL group show a great improvement in their production with the help of special CALL for teaching adverbs and they believe that it is the result of student independent learning and practice with immediate feedback provided from CALL (as cited in Joy et al., 2009). The more specific advantages of technology in language skills and language areas are following:

Listening and Speaking

Levy (2012) claims that it is easier to use technology to support students' development of listening skills thanks to digitized audio and video with the help of a technology device. Frommer (2006) argues that the goals of listening in ESL/EFL learning is "distinguish and learn the sound of the L2, the prosody of the language, including intonation, rhythm, and stress, in order to extract meaning" (as cited in Levy, 2012, p. 280). In addition, he points out that students "need to sample and understand authentic, natural speech in a variety of contexts…" (as cited in Levy, 2012, p. 280). Levy (2012) states that technologies have contributed to complete these listening goals.

There are a variety of technology devices or programs to facilitate listening: Window Media Player, Audacity, You Tube, video clips, MP3 files, Streaming audio and video on the Internet, Skype, Facetime, Web sites for listening practice for ESL/EFL learners, Goldenwave, etc. Audacity and Goldenwave are used to edit sound files, so we can delete or modify the raw

sound file as teachers want according to the learning objective. In the case of You Tube, teachers can choose appropriate video clips considering the objectives, content and students' language proficiency level. Then they can download a video file from You Tube using a You Tube Downloader and they can play or insert it into other programs like PowerPoint.

We can find classrooms where traditional cassette players or CD players are still used. It is assumed that the use of cassette or CD players might be limited in terms of authenticity compared to You Tube or video clips, though cassette or CD players are easy to manage in a classroom. Furthermore, the listening material with technology allows teachers to modify it as they want with ease while the traditional devices do not.

As to speaking, there might be overlapping aspects with listening. For example, we can use an MP3 file for a listening lesson, and we can use it for a speaking lesson, too. Specifically, teachers might give students an assignment to record their speaking activity and send it to the teacher by emailing or uploading onto designated sites on the Web. Similarly, teachers can design a speaking activity as well as a listening activity. Levi (2012) states that recent speaking interaction online includes a variety of forms including "audio interaction such as audio blogs and voice e-mail"(p. 282). For example, Hsu, Wang, and Comac (2008) use audio blogs for speaking from managing oral assignments, to interacting with learners, to evaluating learners' performance (as cited in Levy, 2012).

Another way teachers might use technology is to present a speaking prompt using a video clip. For example, if the speaking objective is giving advice, teachers might present a video clip with the situation where advice is needed. Specifically, instead of presenting a prompt such as *give advice to the man who failed the job interview*, teachers show students a video clip with somebody who failed a job interview in it and a prompt might be *give advice to*

the man who failed the job interview from the video clip. Literally, these two speaking prompts look alike, the latter provides much stronger input and facilitates students' speaking because teachers give more authentic context.

Vocabulary and Reading

According to Stockwell (2007), the technology in use for vocabulary includes "courseware, online activities, dictionaries, and corpora and concordancing" (p. 281, as cited in Levy, 2012). When we actually search *vocabulary* as a key word in the Internet, many sites related to vocabulary are listed endlessly such as dictionary, word games, vocabulary worksheet, crossword puzzle, etc. Levy (2012) introduces some valuable vocabulary sites like the *Compleat Lexical Tutor* (www.lextutor.ca/), which shows the breath of online vocabulary applications that have been created and *Wordchamp* (www.wordchamp.com) that provides all about a word such as a definition, an audio pronunciation, and a translation.

We happen to see many useful tools that are involved with vocabulary while searching the Internet. Some sites as in *Hot Potatoes* provide useful tools to make crossword puzzle, scrambled words, and word search, so teachers do not need to spend much time to make it and what they have to do is enter words in a designated section according to the directions on the website.

As to reading, Chun (2006) claims the Internet supplies a large number of reading materials for extensive reading (as cited in Levy, 2012) and Levy (2012) agrees that the World Wide Web includes lots of authentic reading material and introduces *Linguascope* (www.linguagescope.com) that provides online materials for reading activities. In addition, many sites offer reading comprehension as well as reading material with diverse levels, learners can develop their reading skills and assess their reading comprehension at the same time. In

addition, many sites for ESL/EFL teachers as in *Dave's ESL café* offer useful tools related to reading, which allow teachers to save time and energy to make materials for reading activity.

Writing

Levy (2012) argues word processing programs are one of the most accepted tools for writing equipped with multi functions such as incorporating audio or video files and linking to another resource with ease. The learners and teachers can get access to writing material as they can as in previous language skills or areas. For example, teachers can use not only word processing programs, but also email, texting on the phone, blog, Facebook, Twitter, PowerPoint, writing studio, or other writing programs provided by numerous Websites. However, Levy (2012) shows that "a number of writing tools are readily available for more personal, informal kinds of writing"(p. 281) and points out that the majority of the technologies are involved with "the online constructions of texts (word and image), social networking, and electronic learning environments built around Web 2.0" (p. 282).

Fotos and Browne (2004) suggest that EFL/ESL teachers ask students to write essays with a word processor, to email each other the essays or to post them on a LAN. Then teachers let student discuss and give some feedback on each other's writing. It is assumed that emailing, posting, and discussing students' writings encourage EFL/ESL learners' motivation for writing English rather than learning writing from the textbook in the classroom because they are involved with real communication through interactions. Similarly, Jonassen et al. (1999) point out that CALL can enhance student participation and interaction in learning by the process of exchanging, discussing and negotiation of the target language material and make independent EFL/ESL learners by letting them participate in learning on their own (as cited in Kim, 2008). Szenedeffy (2005) introduces basic text manipulation using a word processor: Students will

correct a paragraph with jumble and incorrect punctuation while learning to manipulate text such as selecting, moving, cutting, copying, pasting, inserting and replacing with the word processor.

The Disadvantage of CALL in EFL/ESL

It is necessary to think about the advantages of technology in the classroom. Without teachers' careful concern and planning, the class using technology is apt to be an isolated class without any interaction between a teacher and students or between students. Therefore, teachers need to pay attention to organize activities focusing on interaction.

Another problem is that students tend to rely too much on technology, especially on the Internet whenever they have an assignment or problems to solve rather than thinking by themselves. Therefore, teachers should pay special attention to students to make them think critically instead of relying on information flow on the Internet.

In addition, students as well as teachers need some basic knowledge or skills to keep up with technology. Therefore, teaching about using technology should be prepared with teaching language, too. For example, given a writing task to submit through email, students are required to have knowledge and skills about how to use word processing and how to email it first. If students have to take an IBT-type writing test, they should be taught how to type on the keyboard in a speedy way and how to operate the program first.

Finally, the majority of teachers might have experienced that they were embarrassed with the malfunction of a computer in class, which blocked the flow of the lesson. It is no problem if teachers handle the technology malfunction easily, however, the technology malfunction is seriously problematic above teachers' ability in class, it might result in unsuccessful teaching.

Teacher's role in CALL

Considering the rapidly changing educational environments, we need to recount the role of teachers under the era of technology where the role is very different from the traditional teacher-centered classroom. Therefore, it is necessary to think about a teacher's role and practical ways to help teachers who are in need with regard to technology or CALL.

First, the teacher's role should not be viewed as a controller, governor, or judge on students' performance anymore as in traditionally teacher-centered classroom. Rather, teachers should promote students' independent learning and facilitate students' motivation with the help of CALL in an appropriate way.

Second, it is hard for one teacher to manage students with mixed level in a traditional classroom. However, teachers facilitate learning according to students' level with the help of technology. For example, as to reading, teachers can provide appropriate reading texts and comprehension tests using the related Internet sites or software according to students' level. To be specific, MS-WORD has a function to analyze the text in terms of words counts and estimated difficulty level, which might be useful to teach mixed-level students in class.

Lastly, no matter how physical classroom conditions change, teachers should keep in mind that we emphasize learners' communicative competence. We should not make students live in a virtual world without contacting with the real world. In other words, the basic objective of teaching is make students communicate with other people in a real world. Namely, it is preferable not to rely only on technology while teaching and learning. Rather, teachers should remember that technology is just a supplementary tool to make teaching and learning perfect.

It is assumed that teachers who do not have knowledge about operating technology might be overwhelmed and discouraged and might be less confident with digital native learners

in class. Then, we need to think about how to help and support teachers who are in need in terms of using technology.

First, since the educational settings are equipped with high technology devices and learners are digital natives, teachers need to be acquainted with the basic CALL skills. They can acquire the skills through professional training programs as well as by themselves. It is believed that government or education related institutions need to open programs to actively train teachers providing professional knowledge and practices throughout their careers rather than criticizing or condemning them.

Second, teachers need to have a professional eye for selecting and adapting information as well as for choosing an appropriate technology device. For example, though computers have multiple roles in CALL, it does not mean that computers are panaceas for every situation. In addition to helping teachers get accustomed to operating technology devices, the institutions that are involved with teacher education should teach teachers how to adopt or reject information and technology devices according to the objectives of each lesson. In other words, teachers should have an ability to take advantage of technology, instead of being slaves or subordinates of rapidly changing technology.

Lastly, it is noted that Foots and Browne (2004) quote, "Technology will not replace teachers; teachers who use technology will replace those who don't" (p. 7). Namely, teachers are still main players in teaching though the teacher's role is different compared to the traditional class.

Suggestions for Effective Use of CALL in EFL/ESL

Technology in class, especially internet-based CALL is a strong tool for students' motivation for learning. However, teachers need to pay attention to elicit successful learning

from the motivation. In other words, teachers should not let students immerse in computers just for fun. It is noted that teachers should create and design the lesson to link the motivation to successful learning with interaction and critical thinking using the advantage of CALL.

Teachers need to pay attention to the fact many English proficiency tests are Internet Based Test (IBT)-type test such as iBT TOEFL or PTE Academic, etc. In addition to that, the Korean government is planning to implement an Internet based English proficiency test named National English Aptitude Test (NEAT) focusing on communicative competence in 2015. The use of technology in EFL/ESL ranges from planning the lesson to assessing students' performance. In other words, technology is involved with the whole process of EFL/ ESL teaching and learning. Therefore, teachers need to enhance the knowledge about the use of technology in EFL/ESL.

Furthermore, it is assumed that the future technology such as tablet Personal Computer (PC) will replace the status of a computer in the classroom soon. Meurant (2010) claims that the iPad is likely to be influential on EFL/ESL education thanks to the characteristic of the iPad: the integrated multimedia and telecommunications that are crucial factors to language learning. In addition, the iPad is free from space as well as time. Moreover, the iPad does not require computer labs while functioning like a computer, so an iPad can be used at any place in a more practical way than a computer. It is reported that a number of universities including George Fox University and schools in America and worldwide are handing out iPads to their students and faculty already (Meurant, 2010).

Lastly, EFL/ESL teachers should always remember that technology itself is not crucial, and what is more important is how to use and adapt technology in an appropriate way considering the lesson objectives and students' profile.

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