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Exploring CALL Options for Teaching EFL in Vietnam

By

Nhon Thanh Dang

An Alternate Plan Paper Submitted

In Partial Fulfillment of the Requirements for the Degree

Master of Arts

In

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This Alternate Paper Plan has been examined and approved.

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Chapter I. INTRODUCTION

Context, General Problem, and Purpose

Using computers and the Internet in today's classes in general and in language classes in particular is very common. Information overloading, rapid changes in communication technology, globalization, and new knowledge-acquisition modalities make a computer-based learning environment more radical than ever. Referring to the plethora of information and texts on screen, Kol and Scholnik (2000) state that “digital is a natural development”, and due to abundantly available academic and non-academic texts on the Internet, “reading is becoming commonplace for students and professionals” (p. 68). Understandably, rapid evolution of communication technologies has changed the instruction and use of a target language, enabling new forms of interaction, authorship, and ways to participate in academic communities (Kern, 2006). Likewise, James (1996) describes, “Educational technology is often presented as a potential means for making the students’ learning experiences richer and the teacher’s job easier” (p. 20), and that “the idea of a computer cleverly extending students’ competence through meaningful and absorbing activities is one that permeates much of the literature on CALL [Computer-Assisted Language Learning]” (ibid.). According to Warschauer (2000), globalization and the increasing advent of new information technologies further the spread of English and change the way English is used. In other words, technology contributes to transforming or at least changing the ways teachers teach and the ways students learn, and allows them to have flexibility in the teaching and learning of English.

In Vietnam, English has been officially acknowledged as the most important foreign language since the late 1980s when Vietnam decided to implement the “doi moi” [renovation] policy (Do, 1999). Due to its expanding relations with foreign countries and move into a market-oriented economy, the Vietnamese government recognized English as an international language for business, commerce, computer science, and efficient use of the Internet. In fact, in Vietnam, the English language is widely used in foreign transactions.

In the education sector, despite the presence of other popular foreign languages in Vietnam today, English is considered the most important foreign language in K-12 education, colleges, and universities (Nguyen, 2002). Understandably, the fact that the teaching and learning of EFL has become extremely significant resulted in the mushrooming and extensive proliferation of many English-language centers throughout the country. However, the quantity and importance of EFL education have not been accompanied by a concomitant level of quality because Vietnamese EFL teachers have trouble coping with some existing problems. One of these challenges is teaching learners to use English to communicate with other people in real-world situations (Le, 1999).

Recognizing the gap in teaching and learning in general and in EFL education in particular, the Vietnamese Ministry of Education and Training (MOET) called for pedagogical renovation. To solve the problem of the lack of quality in EFL teaching, MOET invested in computers in schools and encouraged teachers to use computers in their teaching. MOET created a directive named 55/2008/CT-BGDĐT for all schools across the country to improve in education in general and the teaching of EFL in particular through application of computer technology in education from 2008 to 2012.

Specifically, in school years 2008-2009, MOET launched a movement of Information Communication Technology (ICT) applications in schools named ICT's application school year (Hoang, Tong, Hoang, & Nguyen, n. d.). This movement is considered a big step in ICT application in schools and is ongoing for the coming years. Additionally, MOET established the Department of ICT to implement the government policies of ICT applications in schools. Since then, many documents have been produced about teaching software, e-learning, e-mail, and other means of communication.

As mentioned, English language teaching in Vietnam has yet to meet the demand for competent English-speaking people despite recognition of the importance of English in the current social context. The low quality in EFL education could be caused by multiple factors including teachers' proficiency levels and their "traditional" teaching methods, the current grammar-reading dominated testing, students' learning motivation and needs, a language environment, limited materials and resources, and the lack of computer applications in the classroom.

Frankly, in Vietnam, the classroom represents the only environment for English language acquisition and practice. Pop (2010) suggests that technological tools should be used in such a context [like the one in Vietnam] because technology can "offer students a venue for additional interesting and engaging activities, ensure student-centeredness and autonomy as well as interaction and connectivity" (p. 1186). The author elaborates that "[technologies] provide [students with] opportunities to practice reading, writing, speaking, and listening outside the classroom walls at their own pace, in real life-semblance and safe environments" (ibid.). Apparently, CALL could be a solution to the above-mentioned current Vietnamese teaching problem for several reasons. First,

although CALL is not suggested as a replacement for the current EFL teaching and learning in Vietnam, in many ways it attempts to “compensate” for the shortcomings in teacher resources, language environment, and learner motivation. Also, CALL can provide an innovative addition to enhance the way teachers teach and the way students learn. In other words, CALL provides additional means for teachers and students to accomplish their tasks more effectively and efficiently. Furthermore, teachers’ CALL applications in the classroom appropriately respond to the Vietnamese government’s call for teaching innovations and capitalize on its investment in computers in schools. Above all, a CALL-based learning environment is considered part of today’s teaching contexts where students need to be instructed and equipped with computer literacy to prepare for the future (Bicknell, 1999; Pop, 2010; Sarica & Cavus, 2009).

As stated, developing an understanding of how best English might be taught in a Vietnamese EFL setting by capitalizing on available technological tools and resources is important and necessary. Therefore, the purpose of this Alternate Paper Plan (APP) is to select, introduce, and recommend Vietnamese EFL teachers for some common and effective options for teaching English as well as to assist them with using the common tools to enhance their teaching and help their students develop their English language acquisition and computer knowledge. The target students here are high school or university students who previously attended EFL courses and want to enhance their English. While ideal students would have some computer experience, they do not need to know the technology before taking English courses; rather, they will probably end up learning about technology while in the English courses they take. The CALL options suggested work in the context of a group of three or four students at a computer

connected to the Internet under the guidance of their teachers. While the suggested tools are believed to work in other situations as well, the outcome and impact from other contexts could be less desirable than the above-specified context. Before some effective options of CALL are recommended, an understanding of the term CALL needs to be addressed.

Definitions of Terms

What exactly is computer-assisted language learning (CALL)? There are many definitions. Levy (1997) describes CALL as a field that covers “the search for and study of applications of the computer in language teaching and learning” (p. 1). Egbert (2005) characterizes CALL as “using computers to support language teaching and learning in some way” (p. 3). According to Beatty (2003), CALL is defined as “any process in which a learner uses a computer and, as a result, improves his or her language” (p. 7). This definition is in line with ICT4LT (2001) in that CALL as tools are designed to promote language learning.

CALL is also related to several other terms, some of which overlap and others differ. Beatty (2003) made a list of terms peripheral to CALL, some of which are mentioned as follows:

- *CAI Computer-Aided Instruction* refers to learning at the computer, but not necessarily with a language focus. Although it may not be the intention of all those who use the acronym, the term *instruction* suggests a teacher-centered approach.

- *CAL Computer-Assisted Learning* refers to the learning of any subject (including language learning) using a computer. But in contrast to CAI, CAL emphasizes the learner.
- *CALT Computer-Assisted Language Teaching* is similar to CALL but with emphasis on the teacher.
- *CMC Computer-Mediated Communication* refers to a situation in which computer-based discussion may take place but without necessarily involving learning. However, opportunities for learning are inherently present, especially in situations in which learners need to engage in negotiation of meaning with native speakers of the target language or even with peers of non-native proficiency.
- *ICALL Intelligent Computer-Assisted Language Learning* describes software programs that attempt to customize feedback features that cater to individual learner's input.
- *TELL Technology Enhanced Language Learning* refers to any technology used in the classroom such as video, tape recorders or even entire listening labs.
- *WELL Web Enhanced Language Learning* refers to CALL that focuses on the WWW as the medium for instruction (pp. 9-10).

It is worth noting here Beatty's (2003) notion that it is difficult to describe CALL as a single idea because it has a broad range of activities and covers many issues such as materials design, technologies, pedagogical theories, and modes of instruction. While many existing and "emerging" definitions of CALL as well as those of other relevant

terms make it far from being well-defined, it is a good idea for CALL practitioners to consider Egbert's (2005) idea that CALL is "focused not on technology but on language learning, and that the words *enhanced* or *assisted* indicate that technology only facilitates the language learning process" (p. 4). Therefore, for convenience, the term CALL, which is interpreted broadly and is taken to encompass CAI, CAL, CALT, CMC, ICALL, TELL, WELL, and others such as technology, computerized classroom, or any activities implemented with computer use such as email, synchronous or asynchronous chats, bulletin boards, or mobile learning is mainly used in this paper.

According to Do (1999), knowledge of English will help Vietnamese students better their lives and develop their higher education. Therefore, many Vietnamese students want to have "more access to English through the mass media, the [online] availability of native speakers of English and English printed materials [because] this not only helps them study English more effectively, but also enriches their knowledge about the world" (p. 5). However, according to Peeraer & Van Petegem (n. d), Vietnam is at the initial stages of ICT integration, and studies and applications of CALL in education are embryonic and limited. Therefore, this paper hopes to meet the current needs of teachers, students, and CALL practitioners and to contribute to the teaching and learning of English in Vietnam.

Organization of the Paper

Chapter 1 has given a brief overview of the teaching and learning of English in Vietnamese educational settings as well as the importance of applying some common technological tools in the classroom to benefit students' learning as well as teachers' instruction. Following the current trend, I choose to use the term "CALL" for a learning

environment supported by computers and the Internet after mentioning other common terms such as CALL, CAI, CMC, ICALL, TELL, and WELL. Chapter II reviews uses of in English skills and areas in developed countries, in the developing countries of China, Malaysia, Taiwan, and Thailand, and then specifically in Vietnam. I end the chapter with some implications in terms of an analysis of benefits and challenges when applying CALL tools in ESL instruction. Chapter III reports on the context and factors affecting CALL applications in teaching EFL in Vietnam and mentions technology standards, criteria for selecting CALL options, as well as the rationale for the effective use of training sessions for teachers and students. Then some CALL options for teaching English skills and areas are suggested based upon a particular Vietnamese context. Chapter IV concludes with the reiterated benefits of CALL applications in the class in terms of linguistic enhancement and computer development. Some recommendations of technological currency for CALL practitioners are also included.

Chapter II. Literature Review

Introduction

Second language teachers have used technology to facilitate students' acquisition of a second language for a long time because of its potential benefits for language learning. In fact, many studies (e.g., Ravichandran, 2000; Warschauer & Healey, 1998) have found that using technology in ESL instruction has brought learners numerous benefits. In the past, we saw the uses of analog audios or videos on magnetic tapes like audiocassettes and traditional language labs. More recently, computers, multimedia labs, and the Internet have been increasingly applied to demonstrate "a valuable experience for the students and the instructor" (Kamhi-Stein, Bezdikian, Gillis, Lee, Lemes, Michelson, & Tamaki, 2002, p. 14). Applications of technology in teaching practice have a close connection with pedagogy and enable teachers to select an appropriate instructional approach. According to Warschauer and Healey (1998), the change in Computer Assisted Language Learning (CALL) corresponds closely with the language teaching approach. In other words, English as a second or foreign language (ESL or EFL) and CALL programs developed for language learning and teaching are integrally related.

While technology has offered teachers plenty of options to choose from and use in language classes, CALL practitioners might be confused about what technologies should be selected in teaching a certain language skill or area (Stockwell, 2007). Therefore, a review should be made to facilitate and ease decision-making regarding appropriate

technology choice from an ever growing list of options available. According to Stockwell's (2007) criteria of technology selection based on pedagogical objectives, institutional decisions, personal curiosity, and trends and fashions as well as other standards like user-friendliness and cost-effectiveness, this paper will selectively review studies that deal with the correspondence between the practical and effective technological options and the instruction of specific skills and areas of the English language.

The review will be grouped according to the uses of CALL in developed countries, in some developing countries including China, Malaysia, Taiwan, and Thailand, and then specifically in Vietnam. Levy and Stockwell (2006) suggest that although CALL "enhances globalization and international exchange of information, the practice of CALL itself tends to be localized, and the information and advice about which technologies to use and how they may be used often come from the people around us" (p. 218). The authors argued that CALL applications are "context-specific" (p. 234). However, the context of using CALL in teaching EFL in Vietnam is embryonic and quite limited. Peeraer and Van Petegem (n. d.) noted, "Vietnam is at the beginning of integrating ICT in education and lessons can be learnt from research in the West. Integration of ICT in education is a slow process and observations bring to light a certain path or steps which are taken in the process." (p. 7). Fortunately, the calls for teaching innovation by using and integrating technologies in the classroom have been made by the Vietnamese government in recent years to improve the quality of education in general and EFL education in particular. Therefore, exploring and applying CALL options in teaching to enhance the quality of EFL education is highly desired in Vietnam.

Uses of CALL Tools in ESL Education in Developed Countries

During the past two decades, the rapid expansion of the use of multimedia technology for language instruction has led to an increasing number of studies being conducted on CALL in developed countries such as the United States and Japan. Numerous studies have examined the effectiveness of technology use in language teaching as well as investigating technological options used for achieving learning objectives. Stockwell (2007) reviewed 206 empirical research articles from four journals (*CALICO Journal*, *CALL*, *Language Learning & Technology*, and *ReCALL*) from 2001 to 2005 to see what CALL options and language skill or area instruction went together. The author set up four criteria of selection, namely pedagogical objectives, institutional decisions, personal curiosity, and trends and fashions that generally concurred with Chapelle's (1998, 2001) criteria on CALL design and evaluation. According to Chapelle, the selection and uses of technology need to consider language learning potential, learner-fit, meaning focus, authenticity, impact, and practicality. In Stockwell's (2007) study, the CALL options are not only for ESL but also for other common languages.

The following section addresses studies on CALL options and instructions of skills and areas in the English language. As previously mentioned, the technological options are purposefully chosen according to Stockwell's (2007) four criteria and other additional standards such as practicality, user-friendliness, evidence-based effectiveness, and cost-effectiveness, and they are grouped into two main categories, namely language areas and language skills. Although an attempt has been made to identify one, no single technology is best suited for a specific area or skill. Therefore, an overlapping or integration of the tools for language areas and skills will be occasionally seen.

Language Areas and Technological Options

There are many technological tools dedicated to the instruction of language areas such as vocabulary, grammar, and pronunciation. The following, however, are selective computer programs that are used frequently and proven to have proven to provide positive results.

Vocabulary.

According to Nation (1990), vocabulary is one of the most important aspects in learning a second language, and this language area has been examined in many studies (e.g., Nation, 1990; Read & Chapelle, 2001; Sökmen, 1997). Similarly, vocabulary instruction, according to Stockwell (2007), attracted a wide range of studies from self-developed courses to hypermedia-enhanced learning environments, vocabulary glosses, and online vocabulary tester programs. Specifically, Al-Seghayer (2001) studied the impact of annotating difficult vocabulary found in a text with different modalities such as text, graphics, audio, and visual. Thirty ESL students from an English language institute at the University of Pittsburgh participated in the study by reading a text with glosses of unknown words through different modalities. The study reported that glossing with video helped learners build vocabulary as well as facilitated lexical recall because the video created a mental image and increased learners' concentration through their curiosity.

Becker's (2001) ideas of using clipart (at <http://www.clipart.com>) to help students anchor vocabulary by creating miniature pictures for a rebus, a story, or a riddle that uses pictures in place of words produced a positive result. The author said, whenever the students saw a picture inserted in a text, they would probably try to guess the missing words and came up with their own ways to remember them. Additionally, Becker said

clipart is also used as flashcards for numerous activities to assist students in vocabulary games.

More recently, Horst, Cobb, and Nicolae (2005) investigated whether ESL learners could expand on and retain their academic vocabulary using some online tools such as a concordancer, an online dictionary, and an interactive self-quiz web site (www.lextutor.ca). Fifty-four first year students of non-English majors at two universities, Quebec and Concordia in Montreal, Canada participated in a 13-week study. The authors found that students' vocabulary was developed through online interactive activities such as quizzes, database, online dictionary, and individual establishment of word bank entries. The online concordancer enhanced students' use of correct word collocations and encouraged deeper processing of new words through the rehearsal approach, namely the strategy of repeated practice to increase learners' memorization of the information. The authors believed that "the tools investigated in this study make a promising start on the program outlined by Sökmen (1997) for computer assisted vocabulary learning" (p. 106).

Tuzcu and Coady (2004) found that tutorial CALL facilitated students' lexical acquisition. A study of 56 intermediate-level ESL students in a university preparation course at the Defense Language Institute at Ohio University reported that students who used tutorial CALL learned a larger number of words than those who did not, and consequently increased their vocabulary stock. Understandably, the more the learners acquire vocabulary, the better they understood the text through bottom-up processes because "vocabulary and acquisition become paramount in reading comprehension" (Chun & Plass, 1997, p. 69).

In short, multi-modal annotation, clipart, tutorial CALL, and online materials such as concordancers, dictionaries, and interactive self-quizzes are said to help students learn vocabulary effectively. However, using these tools to teach grammar might not produce a desirable result because vocabulary and grammar are two different areas of language. The following addresses the uses of CALL options to teach grammar.

Grammar.

There are many CALL options to improve grammatical accuracy for ESL learners. Stockwell (2007) stated that studies on grammar using CALL involved online activities like the use of concordances, authoring software with manipulative activities, or courseware focusing on forms and functionality. The following addresses some of the technological tools frequently used to teach English grammar.

Allum (2002) conducted a comparative study to see whether traditional delivery or computerized delivery using *Hot Potatoes 5.2* (JQuiz/ JMatch/ JCloze/ JBC) to design activities enhanced learners' grammatical accuracy. The participants were thirty-three Japanese intermediate ESL students taking an 8-week course to improve their English before the academic year. The result was that the CALL group had greater grammatical accuracy and more control over their learning pace, and developed positive attitudes toward CALL-based environments.

While Allum found a positive result toward *Hot Potatoes*, Torlakovic and Deugo (2004) studied *Adverbial Analyzer* to examine whether and to what extent this CALL program could help ESL students learn English grammar, specifically adverbs, more easily and how to use it correctly in sentences. The authors compared a group under teacher-led grammar instruction and a group using the CALL system. According to the

authors, the software developers, the Adverbial Analyzer taught the users about different types of adverbs and their uses or possible positions in a sentence. The CALL-based group performed significantly better on posttests. The authors found that the benefits of CALL grammar instruction included frequency of exposure to a particular grammar area, students' control of their learning, and prompt and anxiety-free feedback. The authors said, "Considering the argument that explicit instruction aids implicit knowledge, we believe that CALL systems used for explicit grammar instruction aid the learning of L2" (p. 209).

More recently, Hegelheimer (2006) developed the *iWRITE* program for writing, and he investigated whether the software helped ESL students improve their writing through increasing their grammatical awareness and enabling them to self-correct grammatical mistakes in their own papers. After an 8-week study, the author reported that the participants, nine ESL undergraduate students, exhibited greater awareness of grammatical mistakes, diminished grammatical errors over time, and increased their confidence in writing.

In brief, ESL learners' grammatical knowledge could be significantly improved under CALL-based environments, especially using some of the aforementioned CALL tools such as *Hot Potatoes*, *Adverbial Analyzer*, and *iWRITE*. However, other CALL options would probably work well with other language aspects and skills. The following addresses CALL tools for teaching pronunciation.

Pronunciation.

According to Brett (2004), acquiring new sounds that are not in their native languages are one of the most challenging tasks for adult L2 learners because this aspect

requires additional time from learners and more attention from teachers, something that may not be feasible or practical. Therefore, it seems “natural to resort to the use of computers, to computer assisted pronunciation teaching to help learners improve this aspect of their pronunciation” (Brett, 2004, p. 103). In fact, with the development of technology and software dedicated to pronunciation, L2 learners have more opportunity to be trained to achieve a satisfactory level of comprehensibility and acceptability. Understandably, CALL pronunciation training helps learners avoid mispronounced sounds, word stress, and intonation of a second language.

Stockwell (2007) found that the most commonly used technological tools in teaching pronunciation were courseware that were commercially developed, self-developed, and open-source or freeware. Brett (2004) found that some programs were available and freely downloadable for teaching pronunciation and intonation such as *WASP* (Huckvale, 2003) and *PRAAT* (Boersma & Weenink, 2004) as well as some commercial but pedagogically oriented programs such as *VisiPitch* (Kay Elemetrics Corporation, 2004) and *SpeechViewer* (IBM, 2004).

To begin with, Brett (2004) specifically noted that the free *PRAAT* program (Boersma & Weenink, 2004) could provide feedback on articulatory changes reflected on the graph, and this graphical feedback improved the production of English vowel sounds that were not in Italian students’ native language. Obviously, their program could train ESL learners to familiarize themselves with the English sound system.

An empirical study on pronunciation training by Taniguchi and Abberton (1999) found that the use of interactive visual display with the *Laryngograph processor* greatly helped the CALL group to improve their English pronunciation. The findings also

reported that the additional presence of tone marks, a system detailed in O'Connor and Arnold (1973), helped the control group and the experimental group alike, but the CALL group improved their pronunciation or intonation in the materials without tone marks while the control group did not. The authors concluded that “[t]he highest achievement in the learners’ English intonation can be expected when both interactive visual display and tone marks are used” (p. 85).

Correspondingly, Levis and Pickering (2004) used Speech Visualization Technology to examine native English speakers’ intonation or pronunciation of sentences on the sentence as well as discursal levels. Two pairs of students at Iowa State University participated in reading isolated sentences and then sentences in the text. The Kay Elemetrics *Computerized Speech Lab* (CSL) was used to analyze the readers’ intonations. The findings reported effective intonation practice. The authors said, “This use of computer-based instruction may finally fulfill the decades-long hope of using intonation to effectively communicate meaning” (p. 520).

To promote autonomous learners who do not have to rely only on the teacher to check their pronunciation, González (2007) suggested using text-to-speech (TTS) applications, the computer-generated simulation of human speech tools that convert a written text to sounds. According to the author, the TTS applications allow students to practice the pronunciation of vocabulary they have failed to pronounce, listen to written articles from the web, or practice the pronunciation of texts written by them before recording. González found that students improved in their pronunciation over time, at the same time becoming autonomous learners. The author said, students “know where to go when they have problems pronouncing a new word, to prepare for oral presentations or to

record projects to be posted online” (p. 8).

In brief, all the studies suggested that CALL pronunciation training was just as effective as, if not better than teacher-led pronunciation instruction or non-CALL training, for non-native and native speakers alike. With the help of these CALL tools, students can listen as many times as they wish to pre-recorded control sounds, record their own voices pronouncing the sounds suggested in the list and, finally, assess their own pronunciation by comparing the graphic of the recorded sound to that of the control sound.

Language Skills and Technological Options

According to Levy and Stockwell (2006), CALL options used in teaching and learning language skills are rich and varied. The following are dedicated to addressing some of the typical CALL programs that have been frequently used and effectively proven to have positive results in teaching the four language skills of writing, reading, listening, and speaking.

Writing.

According to a database of comparison studies between computer-assisted and classroom second or foreign language instruction synthesized by Grgurovic (2007), writing studies made up the largest group ranging from computer applications such as word processors, browsers, writing software, course management systems, online activities, and corpora. This notion supports Stockwell’s (2007) review on CALL choice for teaching language skills and areas that “writing through CALL has taken a variety of forms” (p. 183).

Many studies (e.g., Arena & Jefferson, 2008; Halic, Lee, Paulus, & Spence, 2010;

Montero-Fleta & Perez-Sabater, 2010) reported that student writing skills could be significantly improved through blog-based activities. Arena and Jefferson (2008) categorized benefits of using blogs in terms of blogs as conversations, blogging for thinking skills, and blogging for authentic audience. Interestingly, Halic et al. (2010) found that blog writing could increase the interactivity and collaboration among students because they felt a “sense of community” (p. 2). More empirically, a study by Montero-Fleta and Perez-Sabater (2010) looked at two groups of Spanish intermediate ESL students with 18 members per group in a university Library and Information Management course. The experimental group was engaged in using blogs (www.blogger.com) to practice writing, and the control group received traditional lecture-discussion instruction. Each group received the same amount of time, namely three hours per week during the course. The findings reported that the benefits of blogging included students’ language improvement in accuracy, fluency, quality, correctness, motivation, additional improvement of reading, and a connected sense of community. The authors stated, “Writing for a purpose has encouraged them to produce language more fluently and be more concerned with correctness, which leads us to consider blogs as a potential tool for the development of linguistic skills” (p. 773). Obviously, these findings reveal that blogging could help students improve their writing skills.

It is worth noting here that to some people, blogs seem to be more personal, and they say that blogging limits the number of readers because of its “privacy feature”. Therefore, some educators like to use e-mail and/or word processor for teaching writing. Biesenbach-Lucas (2007) examined the effect of using e-mail by students, both native speakers and non-native speakers, to write to faculty. The findings re-affirmed that native

speakers used a better and more appropriate level of politeness than non-native speakers. However, the author found that non-native English speakers' writing improved in terms of politeness, flexibility of using lexical and syntactic modifiers, and linguistic accuracy produced via e-mail over time. Putting aside the use of e-mail, Pennington (2004) examined the benefits of word processor, and the author found word processor an "advanced writing tool and a facilitative environment for generating ideas and producing text, both as drafts and finished copy" (p. 71). Likewise, Levy and Stockwell (2006) argued that word processing still appeared to be one of the "strongest supports for composition writing" (p. 184).

Kaur and Hegelheimer (2005) as well as Yoon (2008) examined the effects of online materials such as online concordances and online dictionaries as well as the contributions of these available online resources to ESL learners' writing. Kaur and Hegelheimer (2005) found that an online *concordancer*, a program that scans large amounts of texts for specified words or phrases of scientifically determined uses in electronic form, could help students know the usage of a particular word and its grammar. The authors also found that an online dictionary helped students use words correctly and improve their writing. Likewise, Yoon (2008) conducted a qualitative study of six ESL students in an academic writing course at an American university to examine how corpus technology affected non-native students' development of writing competence. She reported that using the Collins COBUILD Corpus, a free online corpus, available at <http://www.xmarks.com/site/www.collins.co.uk/corpus/CorpusSearch.aspx>, helped participants develop linguistic knowledge and writing confidence. According to Yoon, corpora can be used not only to help students solve immediate linguistic problems but

also to encourage them to become more independent L2 writers over time.

In short, for writing skills, many CALL options can be used to provide avenues for learners to express ideas, revise, and edit their writing easily and effectively.

Reading.

Over the last few years, the use of computers in teaching ESL reading has been increasing because “reading is becoming commonplace for students and professionals” (Kol & Scholnik, 2000, pp. 67-68). Therefore, having strategies or techniques to screen-read as well as utilizing CALL tools as aids to enhancing the comprehension of information is essential. According to Stockwell (2007), many reading studies focused on self-developed as well as commercial courseware or online activities. Before addressing selected studies in detail, it is worth noting here that vocabulary acquisition has a close relationship with the increase of reading comprehension. Hence, CALL tools for teaching reading skills could overlap with those of vocabulary.

In terms of programs and software that can be used for teaching and learning reading for intermediate-level students, AlKahtani (1999) reviewed and examined the effectiveness of three software programs namely *Mac Reader*, *Storyboard*, and *Reading Galaxy* used to design reading activities. The participants were ESL students of 450-500 TOEFL score range, and they had difficulties with their reading comprehension, so they needed to be prepared for freshman-level English reading and other academic courses. According to AlKahtani, *MacReader* focused much on sentence and paragraph structures with six options in the program including read, timed-reading, paced reading, cloze, sentence jumble, and paragraph jumble. *Storyboard*, a program using cloze passages to develop both language skill and a linguistic understanding of the language, was mainly

concerned with text completion and vocabulary building and guessing from context.

StoryBoard, published by Wida software, consisted of two programs, one for students and the other for teachers with a main menu for each program respectively. *Reading Galaxy* had features that allow more interaction, sound, and music effects. According to the author, *Reading Galaxy* could be used for “various types of reading purposes such as vocabulary building, reading for specific information, and problem solving” (p. 8).

AlKahtani found using these programs to instruct students in reading very beneficial and effective because the software enabled the teacher to construct and facilitate the content and helped develop students’ reading comprehension and speed.

It is said that students’ reading comprehension could increase when they know more vocabulary, which can be acquired in many ways. Ercetin (2003) studied the effects of a dynamic visual advanced organizer that helped direct readers’ attention to the most important information and the effects of multimedia annotations for vocabulary that contribute to understanding a text. The author found that students preferred to read under multiple glosses, specifically annotations of graphics and videos. This result supported the findings in studies by Chun and Plass (1996, 1997) and Jones (2003) that visual and verbal annotations were better than just the verbal type because the computerized texts with glosses in multimedia formats could enhance vocabulary retention and reading comprehension. Jones (2003) concluded that students remembered vocabulary and recalled the passage best when they had access to visual and verbal annotations, and poorest when no annotations were available. Likewise, Chun and Plass (1997) said that learners could improve text comprehension through top-down processes resulting from the connections of “the visual and the verbal information into coherent mental

representation, for example, by using overview maps as visualization of structural information or an outline with headings” (p. 71).

More recently, Al-Seghayer (2005) investigated how ESL readers perceived the displaying of the underlying structure to see the interrelationship of information of a hypertext. Forty ESL learners (23 females, 27 males) in the English Language Institute at the University of Pittsburgh were asked to read one well-structured hypertext and one less-structured hypertext lasting 30 minutes each. The author reported that almost all participants liked reading the well-structured hypertext because it enabled them to develop a mental image of the text content and help them understand the main idea of the hypertext.

Without question, digital reading is a natural development because of the increasing availability of daily-life, academic, and professional texts on the Internet. To investigate whether online materials and exercises could improve learners’ reading comprehension through peer interactions and elaborative feedback, Murphy (2007) studied the attitudes and feedback of 225 Japanese students of ESL advanced and pre-intermediate groups who took online reading tests, including two multiple choice questions with 15 questions per test. The author found that the participants performed best on the follow-up comprehension exercises under peer interactions and elaborative feedback delivery.

In conclusion, with regard to using computer technology to teach reading, studies revealed that computer-based instruction facilitates students’ reading comprehension and increases their reading rate. Therefore, teachers need to use computers in their classroom to teach reading because of the benefits they bring to students’ performance.

Listening.

The development of self-developed courseware that involves sound, video, images, and glossaries, the uses of videotext and caption, and online activities has helped enhance the listening skills of ESL learners (Stockwell, 2007).

To begin with, Smidt and Hegelheimer (2004) investigated whether authentic web-delivered video and flexible listening strategy use helped ESL students improve their listening comprehension. Twenty-four ESL students from a listening course took pretests-posttests on vocabulary based on a 15-minute lecture about horticulture. The findings revealed that the uses of videotext and other visual materials like slides in a listening course helped improve students' listening. In addition, advanced and male students used more meta-cognitive strategies than the other groups. Interestingly, the authors also found students' vocabulary was acquired incidentally. According to the authors, this "welcoming" knowledge could result from the access and multiple uses of multimedia materials.

The multiple times of accessing materials and the availability of *Help* options of some programs could help learners develop their second-language learning. This notion was found in Pujolà's (2002) study where a Web-based program, *IMPRESSions*, was used to see how Help facilities promoted the reading and listening skills and learning strategies of 22 Spanish adult ESL learners at the University of Barcelona, Spain. The Help facilities included the dictionary, cultural notes, transcript, subtitles, play controls, and feedback. The findings revealed that for reading and listening skills, the Help facilities were of great value and catered for individual learner differences and for learner independence. Interestingly, Grgurovic and Hegelheimer (2007) found that students

preferred subtitles and used subtitles as the Help option more frequently than transcripts in multimedia listening materials. However, the authors suggested that transcripts should be offered along with subtitles because doing so benefits students of different learning styles and enables teachers to assign extra tasks as homework to students.

According to Levy and Stockwell (2006), the design of the task to cater for individual learner differences based on their learning styles and proficiency levels played an important role in improving their listening comprehension. Some ESL students can improve their learning when they listen to a text or watch a movie with captions. Yoshino, Kano, and Akahori (2000) examined the effects of captions on the listening comprehension of Japanese ESL students who were asked to watch four English videos with different caption conditions such as English captions, Japanese captions, without captions, and audio only. The findings reported that English captions helped students understand the movie much better as evidenced by rate of word recall and degree of information accuracy. Likewise, in Cross's (2009) study on the effects of listening strategy instruction on Japanese EFL learners' comprehension of BBC news videotexts, under the news videotexts condition, students gained better understanding and monitored their task performance.

Some other students, however, like doing creative activities when technology is offering them numerous ways to do so. Podcasting is one of the most current technological tools that infuse and stimulate learners, but the question is whether and to what extent podcasts can help improve students' listening. O'Bryan and Hegelheimer (2007) studied the effects of 14 podcasts about in-class learned concepts delivered to graduate and undergraduate ESL students in a 15-week listening course at Iowa State

University. The authors found that students considered podcasting an authentic input that motivated their learning. The authenticity factor was reflected by Levy and Stockwell (2006), namely that “Although there are still limitations with the technologies, they have shown great potential for authentic listening in language classrooms” (p. 181).

Additionally, podcasts “offer language teachers and students a wide range of possibilities for extra listening both inside and outside of the classrooms” (Standley, 2006, p. 2).

Most recently, some ESL educators use YouTube, the popular video sharing web site where any user can upload and share videos, in teaching ESL. According to Mohideen (2010), YouTube is one of the latest developments in the education world. The author suggests using YouTube in the classroom because it features native speakers in real-world situations and benefits learners when presenting them with a realistic learning experience. Additionally, Mohideen reports that the first thing people associate with YouTube is that it is an easy, convenient way to view music videos, television or movie clips. However, the author cautions that teachers search for appropriate content to show to the class. In summary, we can be confident that technology has offered great potential for students to improve their listening skills and other language skills.

Speaking.

According to Levy and Stockwell (2006), speaking is regarded as a challenging skill to teach through the computer. The authors suggested considering the design of speaking in terms of tasks including tasks requiring learners to speak, tasks aiding speaking skills through other skills, and tasks requiring computers to identify and respond to language input. Stockwell (2007) said that CMC technologies of various forms such as text chat, voice chat, and audio-conferencing, and other technologies like corpora or

software packages were the most commonly used technological tools for speaking instruction.

Jepson (2005) compared the repair moves between text chat using *e-English* and voice chat using *Voice-over Internet Protocol (VoIP)* called *HearMe* by PalTalk among ESL learners. The participants at an online English language school performed five 5-minute text chat sessions and five 5-minute voice chat sessions over five days. The author found that the repair moves of voice chat were much higher than those of text chat, and most of the repair moves were pronunciation-oriented. This notion reflected Levy and Stockwell's (2006) observation that "tasks peripherally assist the skills required for speaking through focusing on other skills" (p. 181).

It is worth noting here that text chat is one type of communication that has much more in common with oral discourse than written discourse. Weininger and Shield (2003) examined whether and to what extent MOO (Multi-User Domain Object Oriented) available at <http://schmooze.hunter.cuny.edu/> was considered an appropriate platform for face-to-face (FTF) interaction. Two groups of intermediate-level ESL students who communicated synchronously with each other through MOO to do two project-based tasks, namely the US-based GrassRoot MOO and the Canadian-based Achieve MOO, participated in the study. The findings reported that MOO was a useful arena for language learning and rehearsing using the second language for FTF interaction. Interestingly, the authors said, "Although it is realized through a written medium and shows some medium-specific characteristics, like NS MOO-discourse [native speaker Multi-User Domain Object Oriented], it does seem to have more in common with oral than written discourse" (p. 346). Miller (2001) suggested MOO activities that involved visiting a MOO to find

someone to talk to and conducting an interview. These activities were found to be useful for language acquisition.

Voice chat and audio-conferencing can also be used to teach speaking skills. Hampel and Hauck (2004) studied *Lyceum*, the audio-graphic conferencing software developed by Open University for teaching and learning (downloadable at <http://webscripts.softpedia.com/scriptDownload/Lyceum-Download-44893.html>) and found that *Lyceum* could increase learners' oral communication. The authors said that learners had a chance to practice speaking with native as well as international speakers, and they would build their speaking fluency and confidence over time. By the same token, Wang (2004) examined *NetMeeting*, an Internet-based video-conferencing tool integrating audio, video, and data conferencing developed by Microsoft (at <http://www.microsoft.com/windows/netmeeting/>) and discovered similar findings.

An empirical study by Peterson (2006) investigated Japanese EFL learner interaction in a 3-D virtual world (*Active World*) through *avatar* and text chat to complete various tasks such as negotiation, decision-making, jigsaw, and idea-exchange. The author found that participants used adaptive transactional management strategies, and the use of an avatar enhanced learner interaction during the projects. Correspondingly, Hazzard (2006) examined whether Korean ESL students were motivated to use more English and improve their computer skills with a project completed through *movie-making*. The finding reported that students became more confident in speaking and more aware of grammatical mistakes, and students developed their computer skills during the process of movie-making. According to the author, the participants communicated quite effectively and completed the project successfully, and the tools assisted in building

relationship among the students.

In conclusion, this section briefly reviewed some of the computer options that have been used in teaching areas and skills in English in developed countries, namely vocabulary, grammar, pronunciation, writing, reading, listening, and speaking. Although the CALL applications in developed countries such as Canada, Italy, Japan, Korea, Spain, the US, and many others are abundant and diverse, the CALL tools reviewed in the aforementioned section were purposively chosen based on the criteria offered by Stockwell (2007) as well as standards of sound pedagogy, user-friendliness, practicality, effectiveness, and cost-effectiveness. These criteria continue to be used to review CALL applications in some developing countries in Asia where studies of CALL are increasing substantially. CALL applications in the classroom in the selected Asian countries are considered a major innovation or a reform in education.

Uses of CALL Tools in Teaching ESL/EFL in Asian Developing Countries

Studies on CALL applications for teaching and learning English in Asia in general and Asian developing countries in particular are increasing substantially over time. Since Internet accessibility is no longer a barrier, many Asian developing countries have also “joined the game”, which has proven to bring encouraging and fruitful results to the countries. Some of the typical studies on CALL tools for teaching and learning in such Asian developing countries as China, Malaysia, Taiwan, and Thailand are purposefully chosen for review because of the number of CALL studies available as well as the cultural aspects and the traditional method of instruction in these countries are shared in the Vietnamese context.

Taiwan

It would be safe to say that among the selected Asian developing countries such as China, Malaysia, Taiwan, and Thailand, Taiwan has a good lead in terms of technology. A large number of CALL studies for ESL education have been conducted in Taiwan; therefore, technological options for language teaching and learning in Taiwan are chosen for review prior to studies being reviewed in other Asian developing countries. As previously mentioned, Taiwan is technologically proactive and considered the technological leader among Asian developing countries; however, few studies have been found, and most do not have a one-to-one correspondence between a technological tool and a certain language skill or area, as is the case with the studies reviewed in developed countries. Therefore, this section reviews some typical studies in Taiwan according to some present and available studies of CALL programs.

Like the studies on the role of corpora and concordances for ESL in developed countries, some studies in Taiwan (e.g., Ma, 1993; Sun & Wang, 2003) also examined the role and effectiveness of concordancing in EFL teaching and learning. Sun and Wang (2003) investigated the effects of the use of concordancers by two groups of Taiwanese EFL students, one group of 41 members learning English collocations inductively and the other group of 40 learning deductively. The findings revealed that concordancers helped improve English proficiency and encouraged the inductive learning approach. This contrasts with the Taiwanese traditional teaching method based on the deductive way that is considered a time-saving approach. The authors said that the inductive group tended to perform better on tests than did the deductive group because the former could discover patterns and adjust their misconceptions by observing multiple examples of real texts.

To examine the roles of annotations in acquiring new lexical items as well as to see which annotation best suited which learning style, Yeh and Wang (2003) compared three types of annotations, namely text, text plus graphics, and text plus graphics and sound. Eighty-two EFL first-year college students at National Tsing-Hua University participated in the study. The authors found that annotations in terms of texts with pictures were the most effective type of lexical annotation for Taiwanese students. According to Yeh and Wang (2003), Taiwanese EFL students were “not as strong when learning through auditory channels” (p. 140), and “therefore could have tried to memorize the orthography of English words without following auditory strategies” (ibid.). The findings concurred with Jones (2003) in that “students remembered word translations and recalled the passage best when they had selected both verbal and visual annotations” (p. 41).

One of the most noticeable CALL studies by Yang and Chen (2007) investigated the perceptions of Taiwanese ESL senior high school students using the Internet to complete class activities. The study looked at a class of forty-four 10th-grade male students and their teacher participating in a project named Advanced Joint English Teaching (AJET). The project had six Internet-based activities including group e-mailing, a Web-based course, an e-mail writing program, English homepage design, video-conferencing, and a chat room discussion. The authors found that “students liked and approved of learning English using the Internet, but had differing opinions about its benefits” (p. 860). Students generally opined that “e-learning is motivating and vivid,[but] traditional teaching styles can help to establish foundations” (p.875). According to the authors, of the six Internet-based activities students preferred

completing the web-based learning project to working with videoconferencing because the latter had problems such as blurred images, unstable connection, and slow speed. According to the authors, although teachers can experiment with a number of tools, they need to use the one(s) that interest and suit their students the most.

Peer review is known as one of the most common activities in writing because it helps students revise and refine papers. Peer review can be done on face-to-face (FTF) or computer-mediated communication (CMC) mediums. Ho and Savignon (2007) examined Taiwanese ESL learners' perceptions and attitudes toward two mediums of peer review to determine if CMC peer review might be better than FTF peer review. The authors found that computer-mediated peer review had positive effects on learner motivation, and special features such as *Track Changes* and *Spelling Grammar Checkers* were reported as being helpful and convenient.

In summary, CALL tools in EFL teaching and learning in Taiwan have been abundantly implemented and proven to benefit learners and instructors alike. Likewise, researchers and educators in some other Asian developing countries are increasingly getting involved in the CALL-based learning environment. The following addresses some CALL studies in China.

China

Studies on CALL applications in EFL teaching and learning in China have been increasing. Like the CALL studies in Taiwan, the studies in China do not have a one-to-one correspondence between a technological tool and a language skill or area either. Therefore, CALL studies reviewed here focus on online activities such as e-mail exchange and lexical acquisition through materials available and the uses of open-source

software like *Hot Potatoes*.

In line with many studies about email benefits, Greenfield (2003) examined the attitudes, perceptions, motivation, and effects of e-mail exchange between students of an ESL class in Hong Kong and one in Iowa. The participants completed a project in groups via e-mail exchange for 12 weeks. The result was that the students in Hong Kong gained confidence in English and computer skills, and improved their writing, thinking, and speaking as well. At the same time, the students in Iowa enhanced their computer skills and developed cross-cultural CMC exchange and understanding.

Vocabulary is widely known to be one of the most important aspects in learning a second language (Nation, 1990), but vocabulary at the same time is considered one of the biggest problems in the acquisition of a second language (Liu, 2009). Liu said that ESL learners tended to forget newly-learned words quite quickly, or they could not use those words in speaking and writing, in other words, productively. According to the author, the advent of CALL seems to “provide a new outlook for language teaching and learning, as well as vocabulary acquisition” (p. 60). The author reviewed a large number of recent empirical CALL studies on vocabulary and then addressed ways to make lexical acquisition under the CALL-based condition more effective. Liu (2009) suggested using newly learned vocabulary in context, exploiting some web-based vocabulary teaching models such as online dictionary or text chatting, as well as providing learning resources in multiple ways and under different annotation conditions.

The most recent study was Wang and Wu’s (2010) paper on using the open-source software, *Hot Potatoes*, to design some web-based learning activities. The findings reported that Hot Potatoes helped students reinforce the learned knowledge, integrate

extracurricular activities, and promote learner autonomy. The authors highlighted that Hot Potatoes could help students adapt to current web-based tests, the College English Test (CET) recently implemented in China. This paper's findings were in line with Allum's (2002) on Hot Potatoes in that the CALL group had greater grammatical accuracy and more control over their English learning pace.

In short, studies on CALL in China are increasing and addressing various aspects of teaching and learning English. The studies range from applications of CALL in instructing both language skills and language areas. Along with China, Malaysia is said to be highly engaged in integrating technology into education. The following addresses some CALL studies in Malaysia.

Malaysia

Some typical studies of CALL applications in Malaysia involve social networking such as email and Facebook and video game playing. Mansor (2007) explored the uses of email in ESL writing through collaborative learning. The finding was that email helped students interact collaboratively and potentially influenced their writing performance. The author said that email offered multiple possibilities to accelerate students' learning and promote their positive attitudes. This finding supported the findings of studies in developed countries such as Warschauer (1996) and Biesenbach-Lucas (2007).

An empirical study by Kabilan, Ahmad, and Abidin (2010) examined the effects of one of the most popular platforms for today's online social networking, Facebook, on ESL learning. The authors conducted a survey of 300 undergraduate students at Universiti Sains Malaysia (USM), Penang. The findings reported that Facebook could possibly be utilized as an online environment facilitating students' learning of English. However, the

authors cautioned that instructors integrate Facebook as “an educational project with pre-determined learning objectives and outcomes for the learning experience to be meaningful” (p. 179).

An interesting study by Baki, Eow, Wan Ali, Mahmud, and Hamzad (2008) evaluated the benefits and disadvantages of playing video games among the youth in order to determine if video game playing was considered a useful and educational tool in school and at home. The findings reported that playing video games might contribute to cognitive, social, motivational, and emotional development for student-video gamers. Students might learn some vocabulary and increase their reading comprehension by following the rules of the games. However, the authors cautioned that school and parental instruction and guidance were necessary to maximize the tool.

To sum up, selected studies on CALL in Malaysia for the most part focused on language development or linguistic literacy in terms of writing. In other words, emailing, Facebook, and video games were found to help students develop English learning. The following section is dedicated to reviewing some CALL studies in Thailand where CALL-based instruction is also increasing and highly encouraged in education.

Thailand

Although there might be many studies on CALL used for teaching and learning EFL in Thailand, the paper, as previously mentioned, is intended to purposefully select some studies that meet Stockwell’s (2007) and other standards. Therefore, the following addresses one of the typical studies of CALL application in EFL teaching and learning in Thailand, the study of using Weblog or blogging. Noytim (2010) investigated qualitatively the roles and potential value of employing Weblogs (www.blogger.com) for

learning English at a Thai university. The participants were in a Reading and Writing for Academic Purpose II course that met twice a week for 15 weeks. The author reported that students considered the blog as a tool to develop their EFL writing, reading, vocabulary, and documenting their learning experience. The author also noted that Weblogs might provide learning motivation and an opportunity for authorship and readership as well as the improvement of writing skills and other learning strategies. Noytim said, “Blogging reinforces English language learning in EFL contexts where learners have limited exposure to the target language” (p. 1131). The author’s finding was in line with previous studies that students were positive about blog use in improving ESL writing skills.

In summary, this section briefly reviewed some typical CALL studies in the Asian developing countries of Taiwan, China, Malaysia, and Thailand. As mentioned elsewhere, studies on CALL applications for teaching and learning English in Asian developing countries are increasing substantially over time. When Internet accessibility is no longer a barrier, many other Asian developing countries began to study the effects and benefits of integrating CALL in classrooms that proved to bring encouraging and positive results. However, the frequency, degree, and rigor of participation in studies among the countries have been uneven. In other words, some countries have invested in computer applications in schools much more than have other countries. The following will address the situation of applying CALL in teaching and learning English in Vietnam.

Prevalence of Using CALL in Teaching EFL in Vietnam

While the uses of multimedia computers and the Internet have grown rapidly in ESL/EFL teaching and learning settings worldwide, the scenario of CALL applications in education in Vietnam is just at the beginning stages (Peeraer & Van Petegem, n. d.). Bui

(2006) examined the effectiveness of using Computer-Mediated Communication (CMC) such as *Real-Time Pitch* and *Skype* to teach speaking to Vietnamese university students, a skill that has been considered the “weakest” skill for Vietnamese EFL learners. The findings were encouraging in that CMC improved students’ pronunciation and oral conversation. The author noted that “CALL appears to be the best choice for training in pronunciation” (p. 10) and that “Skype can be the place where [students] can meet and talk with foreigners to improve their communication ability in English as well as open their knowledge horizons” (ibid).

Learning English online and using learning management systems (LMS) are uncommon, if not new concepts in Vietnam until recent years. Le and Lin (n. d.) wanted to examine learning management systems and identify the most practical software for teaching English online at Vietnamese universities. The authors used descriptive and exploratory methods with the data collected from many literature reviews, analysis of books, the Internet, articles from journals, and conference paper proceedings. The findings reported that there were a few LMSes used in Vietnam higher education such as *EduNet*, the Education Network of Vietnam organized by the Vietnamese Ministry of Education and Training (MOET), *Moodle*, *Blackboard/WebCT*, and *BlackCT* (the merged Blackboard and WebCT). Interestingly, the authors said, “the popular software [which] is used in Vietnam universities now is *Moodle* which is a course management system designed to help educators who want to create quality online courses” (n. p). The authors explained that the reasons for the widespread use of the program at universities across the country were that “Moodle is open source and completely free to use” (ibid.) and user-friendly, and it allows other online tools such as *Skype* and *MSN* to be added so that they

have the feel of real classes on campus. The authors also addressed some difficulties implementing the ICT and offered some solutions.

Luu and Nguyen (2010) conducted a meta-analysis on teaching English grammar through games designed by using some applications of technology. The authors found that the benefits of instructional technology in teaching and learning grammar included effectiveness, motivation, more interaction, more language acquisition, and context-fitness to Vietnamese learner styles. The authors suggested using games in lessons as a means to motivate and immerse learners in grammar lessons.

Currently, very few empirical studies of CALL and applications of technology in EFL teaching have been found in Vietnam. However, some studies such as Quach's (2005) report on the Internet and e-learning, Peeraer and Van Petegem's (n. d.) study about factors influencing ICT integration, or Peeraer, Tran, and Tran's (n. d.) paper on policy analysis of integration of ICT in education are found.

From the scenario of the limited applications of CALL in teaching and learning practice in the current context, Vietnam needs to speed up, invest, research, and explore more about CALL applications in the classrooms to get the benefits that technological tools can bring. The following section will address implications in terms of the benefits of integrating CALL tools after having reviewed the applications of CALL tools in teaching English skills and areas in developed, selected developing countries, and in Vietnam. Simultaneously, the section will also mention some of the common barriers and challenges that could arise when applying CALL.

Implications for Integrating CALL Tools in ESL/EFL Instruction

It is widely known that CALL studies have been increasing in number. The section above discussed the selective and representative studies of CALL tools in developed and Asian developing countries. As can be seen from the review, in spite of limitations, CALL tools benefit the teaching and learning of the English language.

The benefits of CALL were examined in many studies (e.g., Ravichandran et al., 2000; Warschauer & Healey, 1998). According to these studies, the advantages of the CALL-based environment included motivating students to learn more and gain real-world experience, enhancing communication and interactivity, learning with authentic materials and audience, promoting learner autonomy, receiving prompt feedback, promoting critical thinking skills, and opening multiple learning avenues, possibilities, and opportunities. More importantly, the classroom under the CALL-based learning environment was learner-centered, and the role between the teacher and students were switched. The teacher was no longer a purveyor of knowledge, but a facilitator, monitor, resource, participant, scaffold, and evaluator. Students in this environment were active learners, working and searching to find the knowledge they wanted. These experiential learners would make themselves understood after building their own explanation of how language works (Warschauer & Healey, 1998). One more benefit that CALL offered was the flexibility of learning (Kiliçkaya, 2007). According to Kiliçkaya, with CALL, students could learn anywhere, anytime, anyhow, and anything they wanted, which suited their needs and styles. The view of better accommodation for the needs and characteristics of individual learners was reflected in Chun (2001). She concluded that “one of the emerging principles in learning with hypermedia is the importance of

individual differences in learning styles and learning strategies” (p. 392). Interestingly enough, their personal learning styles would not conflict with other classmates’ but fine-tune or even improve in collaborative tasks or activities. In brief, CALL brings multiple benefits both inside and outside classrooms.

However, instruction under the CALL-based environment has also revealed some barriers and challenges in terms of institutional contexts, financial barriers, availability of computer hardware and software, technical and theoretical knowledge, accessibility of Internet, users’ attitudes, and proficiency and skills of computer use (Lee, 2000; Peeraer and Van Petegem, n. d.). Bax (2003) addresses the two common fallacies regarding people’s perceptions of *awe* toward computers’ super-powers and ways of using computers separated from affecting factors such as institutions and learners. More critically, Keengwe (2007) argues that just because technology tools are available do not mean that teachers have to embrace and integrate them into classroom instruction, so “the challenge for researchers lies in the need to qualify the use of computer technology to support student learning” (p. 171).

To integrate (Levy & Stockwell, 2006) and normalize CALL (Bax, 2003) in the classroom requires multiple variables. According to these authors, one of the most influential determinants is the educational institution in terms of its culture and practice. In other words, the teacher-users need to have a larger and holistic outlook as well as consider the possibility of making use of the chosen options that fit their institutions.

Fortunately, the barriers and challenges could be solved with proper training and experience sharing, which will be detailed in the following chapter. Levy and Stockwell (2006) said that language teachers should be able to identify the opportunities and

constraints in their contexts of operations and find ways to overcome the barriers.

It has been admitted that using CALL tools in teaching practice has brought more benefits than disadvantages. The remarkable advantage of computers is not only in helping to promote users' literacy of the English language but also in developing their computer literacy, which is considered life-preparation skills and knowledge for the future (Bicknell, 1999; Pop, 2010; Sarica & Cavus, 2009). Likewise, talking about the importance of technological integration in the classroom, Mitra expressed his opinion on *ScienceDaily* (Mar. 3, 2009) that:

Technology should not be seen as a threat to teaching but an asset. Computers cannot replace good teachers but they can get a high standard of education into the schools where they are needed most while still allowing teachers to live where they want to (n. p.).

Along with the aforementioned reasons, the current teaching and learning contexts in Vietnam as well as the government's call for applying technological tools in education to improve the quality of EFL education makes CALL highly desirable. The following section is dedicated to recommending some CALL options for teaching English that are believed to meet the needs and competencies of learners and teachers because the suggested tools are selected based on criteria and standards as well as the current contexts in Vietnam.

Chapter III. Explorations of CALL Options for Teaching EFL in Vietnam

Context and Factors Affecting CALL Applications in Vietnam

In Vietnam, English is considered the most important foreign language because of its great impact on many aspects of Vietnamese life. For instance, first, English is a school subject at all levels and an advantage for professional development. Second, knowledge of English helps people obtain better job opportunities because a growing number of foreign companies operating in Vietnam use English to communicate with Vietnamese employees. Additionally, learning English is considered the shortest way to gain knowledge from the media and the Internet. Because English is an international language for business, global integration, computer science, and the efficient use of the Internet, the Vietnamese government as well as the Ministry of Education and Training (MOET) has asked and encouraged its people to learn English (Do, 1999). However, EFL teaching and learning in Vietnam is of low quality because of a large number of constraints (Le, 1999; Nguyen, 2002; Peeraer et al., n. d.). According to Peeraer et al., the challenges in EFL teaching in Vietnam include difficulties in implementing practices that address student needs, motivation, class size, communicative teaching strategies, student-centered lessons, and student autonomy. Besides these challenges, Vietnamese EFL teachers' qualifications and the current reading and grammar-focused tests have made EFL teaching less effective. Above all, as Peeraer et al. stated, "The lack of an English environment was a huge challenge" (p. 9) in teaching EFL in Vietnam.

While many Vietnamese teachers may long for a more comprehensive approach of EFL teaching that suits the Vietnamese context, many studies report that using computers and the Internet in the classroom could counteract the current problem. Unfortunately, Vietnam is at the initial stages of Information Communication Technology integration (Peeraer & Van Petegem, n. d.), and so studies and applications of CALL in education are limited. When implementing technology in education in general, and in EFL instruction in particular, Vietnam has faced some challenges regarding policies and mechanisms, a distribution level of Information Communication Technology (ICT), funding, intended users' proficiency and attitudes, and technology use capacity. The following section details the factors affecting the applications of computers in the classroom.

First, in terms of policies and mechanisms, the Vietnamese government's directive named 55/2008/CT-BGDĐT and its investment in ICT in schools as well as MOET's guidelines on promoting teaching, training, and applying ICT in education do not match the reality of EFL teaching (Peearer et al., n. d.). Likewise, some studies (e.g., Hoang et al., n. d.; Quach, 2005) reported that there are no policies and mechanisms to encourage teachers to apply technology in teaching and learning in schools.

Second, according to Hoang et al. (n. d.), although all schools across the country were connected with free Internet in 2010 through the help of *Viettel*, a communication and information technology company, ICT equipment and software applications are not evenly distributed in many areas. For example, schools in big cities are equipped with many devices and broadband Internet access while the availability of equipment and Internet is limited or nonexistent in schools in rural and mountainous areas.

Third, as Levy and Stockwell (2006) say, applying and integrating ICT in schools requires institutional support, especially funding. The lack of ongoing financial support for ICT infrastructure as well as the lack of funds for training ICT applications to management staff and teachers has made technological applications in EFL teaching in Vietnam more difficult (Hoang et al., n. d.).

Fourth, many Vietnamese EFL teachers, especially older teachers not only have moderate computer proficiency but also hold different perspectives on computer applications. They think, in the words of Hubbard (2008), “they have been successful in the past, they will aim to continue along the path” (p. 177). Therefore, many language teachers have not changed their teaching approach substantially throughout their careers despite chances for in-service renewal. Some of them are even afraid that computers and the Internet, specifically tutorial language programs, will replace their jobs as teachers (Hubbard & Siskin, 2004; Ravichandran et al., 2000).

Finally, Peeraer and Van Petegem’s (n. d.) study on factors affecting ICT integration in Vietnamese education reports that it is the users' computer-proficiency, confidence, skills, and attitudes as well as the non-manipulative factors of gender, age, and school subjects, rather than the barriers of the Internet access that affected ICT application in EFL teaching in Vietnam. Likewise, as Quach (2005) points out, although all Vietnamese universities have an Internet connection and each school has a website, the actual level of Internet use in educational institutions is low. This is compatible with Hoang et al.’s (n. d.) findings that the ICT application capacity of Vietnamese teachers and administrators, especially older people, is limited.

As mentioned above, some disadvantages could probably hinder or at least cause difficulties in applying CALL tools in EFL teaching in Vietnam. However, the advantages could counteract the barriers. One of the first and foremost benefits is the government's investment in computers in schools. The fact that all the schools across the country were connected to the Internet for free in 2010 supports the applications of computers in education. Second, that the capacity and potential of applying and exploiting computers did not meet expectations could result from multiple reasons. One of the reasons could be the lack of proper training for the intended computer users. As Peeraer et al. (n. d.) said, most Vietnamese EFL teachers have little or no formal training on how to use technology. Some teachers could apply several programs in teaching because they were self-taught or participated in short-term training courses. Also, students were not sufficiently guided to know how to apply ICT for learning (Hoang et al., n. d.). Therefore, a key task to making full use of computer application programs is "to promote the training and use of human resources for the application and development of IT" (Peerear et al., n. d., p. 7). Finally, Vietnamese people in general, and teachers and students in particular, are traditionally open, receptive, and fond of learning new knowledge. This Alternate Plan Paper, therefore, proposes an appropriate response to the current situation by suggesting some CALL options that allow Vietnamese EFL teachers with high, moderate, or low computer proficiency to exploit the present technological resources to promote their students' English-language learning.

One of the most important factors that can make CALL applications in the classroom possible is the training for intended CALL users, teachers and students. Before issues of training for intended CALL practitioners are addressed, I would like to specify

the technology standard or the desired learning context that the suggested CALL options should be applied to, and the criteria for selecting and using the CALL options effectively.

Technology Standards and Criteria for CALL Option Selection

Technology Standards and Desirably Applied Context

As mentioned previously, the current technological context in Vietnam is at the initial stages, and technology is unevenly distributed across the country. Therefore, the technology standard suggested in this paper applies to the setting of three or four students working at one computer connected to the Internet. In order for the teacher to teach in this class, an LCD projector and a computer with speakers are also expected to be available for use. Although a situation of three or four students for each computer is less desirable than that of one student per computer, this meets the current Vietnamese setting in terms of technological infrastructure. However, it is worth noting here that some of the recommended CALL options could work well in other contexts such as a classroom equipped with one computer with or without Internet access and an LCD projector. The teacher can use suggested tools to download the content of web pages, store them in a flash drive, and then bring them to the classroom. However, the suggested options are believed to produce a better result when applied in the specified context.

Additionally, the applications of the suggested CALL options are appropriate for high school or university students who previously attended EFL courses and who want to improve their English in a CALL-based teaching environment. Therefore, the intended users, teachers and students, need to have basic knowledge of computer skills.

Criteria for CALL Option Selection

Levy and Stockwell (2006) note that “there are many reasons to choose a particular technology for use in language-learning environment, some of them prompted at an institutional level, and some of them due to local conditions and knowledge” (p. 219). The authors, however, when making choices of new technologies, highlight six main points regarding hardware and software requirements, namely compatibility, institutional support, ease of technology learning, scope of use, and expected lifespan of a certain technology.

It is also a good idea to consider McGee and Diaz’s (2007) suggestion that “determining an instructor’s teaching style can help in the selection of the technologies and environments that are most likely to be a good fit with the instructor, the course content, and probably the learners” (p. 36). Understandably, teachers often use technological tools that are familiar to them, and that fit their instructional methods.

Stockwell (2007) also states that the range and applications of technologies continue to grow rapidly, so that it is easy to lose track of developments in technology in CALL. Understandably, deciding to choose appropriate technology that fits the classroom is not an easy task. However, the author advises CALL users to focus on four major reasons, namely pedagogical objectives, institutional decisions, personal curiosity, and trends and fashions when choosing technology.

Stockwell’s (2007) criteria for selecting software are in line with those of Egbert (2005), who additionally notes that CALL tools, both authoring tools and materials available online, need to be unbiased and offer many options that allow the intended users to choose the options at their proficiency level. The following addresses more specifically

the criteria of selecting and recommending CALL options in teaching EFL in Vietnam. The criteria are grouped into two categories, namely websites and authoring tools.

Criteria for selecting websites or materials available online.

Before discussing the criteria for selecting websites, it is worth noting here that although the literature review does not address the uses of websites in ESL teaching, exploring ready-made materials from dedicated websites to teach and have students practice their writing, reading, listening, and speaking as well as grammar, vocabulary, and pronunciation is vitally important and necessary in an EFL context like Vietnam. Therefore, the suggested CALL options intend to involve and introduce some dedicated websites after considering the criteria of selection.

Regarding the criteria for choosing and recommending the websites, this paper follows Egbert's (2005) notion of evaluating web pages. First, the author considers the owner or producer of the websites. These websites should be researched and published by universities or trustworthy organizations. Additionally, as Egbert (2005) states, websites or available materials need to have a high level of accuracy, authenticity, currency, objectivity, and coverage.

It is safe to say that the criteria for selecting a website for use have much in common with those of an authoring tool. However, using website materials is completely different from using authoring tools because the latter requires additional computer experience or a certain level of technical proficiency of the intended users. The following addresses this issue.

Criteria for selecting software programs.

With regards to the criteria for selecting and recommending CALL tools for teaching English in Vietnam, the paper synthesizes the ideas of Egbert (2005), Levy and Stockwell (2006), McGee and Diaz (2007), and Stockwell (2007). Specifically, the criteria involve pedagogy-driven instead of technology-driven factors, institutions, technological ease or user-friendliness, effectiveness, cost-effectiveness, and appropriateness for the Vietnamese context. The following further details these criteria.

First, in terms of the pedagogy-driven criterion, the suggested CALL options are chosen to meet learning goals based on sound pedagogical principles. In other words, knowing what teachers are going to do and what students need and prefer to do in expected activities before introducing technologies is an integral part of instructional planning.

Second, examining the criterion of the effectiveness of a particular technology for use is made based on the findings and reports of empirical studies by many researchers in the field. For example, the teacher's use of a certain tool may be the most effective way to help students understand a point, or a certain tool facilitates students in their learning.

Third, institutional factors regarding long-term financial support for new hardware and software, training, technical support, and policy that encourage computer applications in the classroom are also taken into consideration. Additionally, the availability and accessibility of the tools for use are examined. However, most of the suggested tools are cost-effective and free of charge or are known as open-source.

Finally, the user-friendliness criterion, on the one hand, considers how easy a certain recommended CALL tool can be for intended users to experience and operate. On

the other hand, the user-friendliness factor also looks into the intended users' expected technical proficiency for a particular CALL option, which is rated on a 3-star scale with 1 star (*) for tools requiring low technical proficiency, 2 stars (**) for moderate technical proficiency, and 3 stars (***) for high technical proficiency.

It is noted that intended users do not need rigorous computer training in order to be able to operate a certain tool. However, some CALL users might learn more quickly and apply the tools more effectively than do others, and some tools with multiple features might require more time and practice to master than other tools. The following section will address a rationale for effective CALL use in terms of training the intended users, namely teachers and students.

CALL Training for Teachers and Students

It is widely agreed that effective ICT teacher training is considered an important pillar for successful integration and sustainability of ICT in education. Warschauer (2003) cautions that it is important not to think of providing the ICT equipment and infrastructure alone as the solution, but rather to include the offering of training to intended users to make sure they develop the required computer knowledge. In other words, training and building teachers' technology know-how is a crucial step toward enabling technological integration in the classroom. Therefore, "research to inform the design of effective ICT teacher training is urgent, and given the demand, it is important to know how provision may be scaled up, possibly mobilizing computer-based training (CBT) and distance learning that has proved successful" (Davis, Preston, & Sahin, 2009, p. 861).

As mentioned elsewhere, Vietnam's capacity for using computers and the Internet in education has not been met because of the intended users' lack of computer training. This situation causes teachers to be confused when they begin to use software and techniques in their teaching. There are many ways that teachers can develop their computer knowledge to use the technological tools comfortably. One of the most common ways for teachers to learn about computer use and the availability of technology options is attending teacher conferences. At these conferences, teachers of low or moderate computer experience will be guided, and views of "how educators have learned about technology, how they use it in their teaching, how technology is perceived as effective practice, and how educators spread use to others" (McGee & Diaz, 2007, p. 36) will be shared. This notion concurred with de Szendeffy's (2005) in that "these [CALL] conferences include paper presentations, workshops, poster sessions, and software fairs that give details of successful approaches and activities" (p. 14). Additionally, de Szendeffy suggested some resources for teacher training for computer use, namely affiliating with Information Technology (IT) offices for technical support, attending basic computer classes, self-training, self-tutorials, searching Internet resources and online help.

Likewise, talking about computer training for teacher-CALL practitioners, Hanson-Smith (2000) offered practical ideas, namely encouraging hands-on learning, allowing time for sharing ideas, using groups, choosing flexible software and equipment, offering opportunities for practice, and providing auxiliary supplies like realia. In line with Hanson-Smith (2000), Peeraer et al. (n. d.) said that teacher training on the uses of ICT for ESL teaching should be organized but so should training on skills like the use of

equipment or searching information on the Internet. More importantly, teacher-CALL practitioners should have time to practice on the spot because even though teachers may be trained in how to use technology, they could become confused with software and techniques for working with English learners who are enrolled in a regular classroom.

It is worth reiterating the findings in many studies (e.g., Chapelle, 2001; Levy & Stockwell, 2006; Hubbard, 2008) that teacher training for CALL cannot be separated from institutional support. As Hubbard (2008) said, “Institutions offer the technical infrastructure and support to allow teachers to optimize technology use, and where the unique elements of learning through computer mediation and learning a language are elegantly combined” (p. 176). McGee and Diaz (2007) asserted, “It is vital that the institution provide services and resources while also supporting the range of faculty members’ skill, expertise, capability, interest, and motivation” (pp. 33-34).

Moreover, the policy and mechanism regarding ongoing financial support for new hardware and software, funding for future training, awards, and the like contribute to CALL training and applications in the class. Additionally, Peeraer and Van Petegem (n.d.) suggest that some “steps need to be taken, from improving access to improving basic and advanced ICT skills of teachers and trainers and including reflection on the possibilities of ICT for teaching and learning” (p. 7). While some efforts are made by the institutions, teacher-CALL practitioners are encouraged to self-study or have a self-training habit to achieve their comfort level of computer use as well as to stay current with technological tools. In brief, teacher training in CALL could be described as an interrelation of knowledge, practice, and reflection.

While teacher training is the key factor to make technological integration in the

classroom possible, student training to help them function effectively is equally important. Because students come from different technical backgrounds, offering preliminary technology training to students will help “limit the novelty effects as well as build student confidence and reduce anxiety” (Hubbard, 2005, p. 362). Therefore, language teachers need to have knowledge about students’ technical background, experience, and predisposition because “such knowledge has the potential to lead to design decisions that create learning environments for students with a familiar ‘feel’, and interfaces that are intuitive and easy to learn”. “... such an approach can save an immense amount of time in learner training” (Levy & Stockwell, 2006, p. 31). One of the ways to figure out students’ computer experience and decide on various technology applications is asking students to complete pre-training questionnaires (Barrette, 2001; Green & Young, 2001). Barrette asked students about some specific information regarding their comfort level with the applications of e-mail, word processors, and browsers, the purpose of using computers, previous computer courses, and attitudes toward computer use.

As mentioned above, knowing students’ computer background and then offering some initial training sessions to help them perform as expected is very important and necessary. However, according to Hubbard (2005) and Levy and Stockwell (2006), student training should be ongoing rather than occurring just at the beginning.

In Vietnam, some computer application programs such as word processors, PowerPoint presentations, and e-mail applications are reportedly common and familiar to Vietnamese students. Therefore, teachers can save time in this training and devote time to training in other programs with complicated features. However, it is worthwhile spending one class meeting at the beginning in a computer lab, using the show-and-tell method

with a projector so that students have a chance to learn, reinforce, and practice basic commands of the tools.

Like the teachers, the students should be encouraged to gain more computer knowledge by experiential learning or knowledge-discovery learning because they might happen to know some other programs that work best for them, and they could operate these programs more effectively. Some studies report that students with moderate computer experience could work with computers quite well and learn how to use some programs much better when they see their friends or peers using them. Therefore, Vietnamese students are encouraged to share their computer experiences with one another.

In short, computer training and self-training need to be emphasized so that its intended users, teachers and students are able to operate computers without difficulty. According to Peeraer and Van Petegem (n. d.), “[Vietnamese] teachers and students have to know how to work with the medium, the technology and therefore have to acquire the necessary skills to become ICT literate” (n. p.). However, it is appropriate to mention that neither teachers nor students need to be computer geniuses to take advantage of computer technology. Therefore, the following suggested CALL options are believed to meet the context, the needs, and the computer proficiency levels of the intended users.

Suggested CALL Options for Teaching EFL in Vietnam

It is safe to say that numerous software programs, both free and shared, and websites dedicated to language teaching and learning in general and ESL/EFL teaching and learning in particular are being created over time. The following CALL tools are recommended because they are believed to meet the criteria of technological selection

based on sound pedagogical principles, effectiveness, user-friendliness, cost-effectiveness, and appropriateness for Vietnamese situations. For ease and convenience, an attempt is made to divide the suggested tools into two main categories, namely language areas and language skills, but no single technology is better suited for a specific area or skill. Therefore, an overlapping or integration of tools will be occasionally seen.

Options for Teaching Language Areas

When learning English, many Vietnamese learners have a misconception that English is just composed of vocabulary and grammar. Therefore, they think that in order to master English, they only need to spend time learning as much vocabulary and doing as many grammatical exercises as they can. Ironically, despite the obvious fallacy, learners still hold to this misconception because in reality, mastering vocabulary and grammar has helped them achieve high scores on the current high-stakes tests. However, many Vietnamese EFL teachers complain that students make many grammatical mistakes in their papers, and students acknowledge that they also lack the vocabulary to express their ideas. Computers and the Internet are likely to provide a good option for lexical acquisition and grammatical accuracy because of the availability of materials that allow multiple access and contextualized language focus. The following addresses some recommended CALL options for teaching and learning English grammar and vocabulary.

CALL options for instructing grammar.

Research studies show that computers and technological affordances significantly help students learn and practice grammatical constructions because of the multimedia annotations, the availability of materials for multiple access, and contextually embedded grammar points. According to Luu and Nguyen (2010), computer applications with

multimedia such as graphic images, sounds, and videos can be used for teaching grammar, and so grammar lessons will become more effective, motivating, and interesting.

It is a good idea to note that some CALL tools for grammar instruction reviewed in the literature such as *Hot Potatoes* (Allum, 2002), *iWRITE* (Hegelheimer, 2006), and *Adverbial Analyzer* (Torlakovic & Deugo, 2004) have been frequently used and proven to be effective in developed as well as in some developing countries. However, some of these tools may not fit the current Vietnamese context due in part to the intended users' computer expertise level and the number of available equipment. Therefore, the suggested CALL options for teaching grammar that consider and address the current Vietnamese context include some tools in the literature and other appropriate tools. The options are flexibly divided into authoring tools including *Hot Potatoes*, *QuizStar*, *Google Docs*, *corpora and concordance* and available online resources or websites dedicated to English grammar instruction.

Authoring tools.

For authoring tools, *Hot Potatoes****, a free software program available at <http://hotpot.uvic.ca/> is first recommended because it has numerous features that suit the Vietnamese teaching context. For example, it provides templates for six types of interactive exercises including multiple-choice, short-answer, jumbled-sentence, crossword, matching/ordering, and gap-fill for the World Wide Web. The program also has an *Answer* feature that enables teachers to personalize feedback for students' answers (see Figure 1 below). That said, Hot Potatoes could help teachers devise original lessons with interactive activities that focus on the accuracy of a certain grammar point. The

effectiveness of using *Hot Potatoes* was proven in many studies such as Allum (2002), Kamhi-Stein et al. (2002), and Wang and Wu (2010). Furthermore, *Hot Potatoes* also allows the inserting of other text types such as texts, graphics, and audios simply and easily. Although *Hot Potatoes* is becoming popular among teachers, it is said to be easier to use once intended users get used to it. In other words, the software requires some technical training sessions and is appropriate for Vietnamese EFL teachers of moderate technological skills. *Hot Potatoes* is available for use once the software is downloaded and installed on a computer.

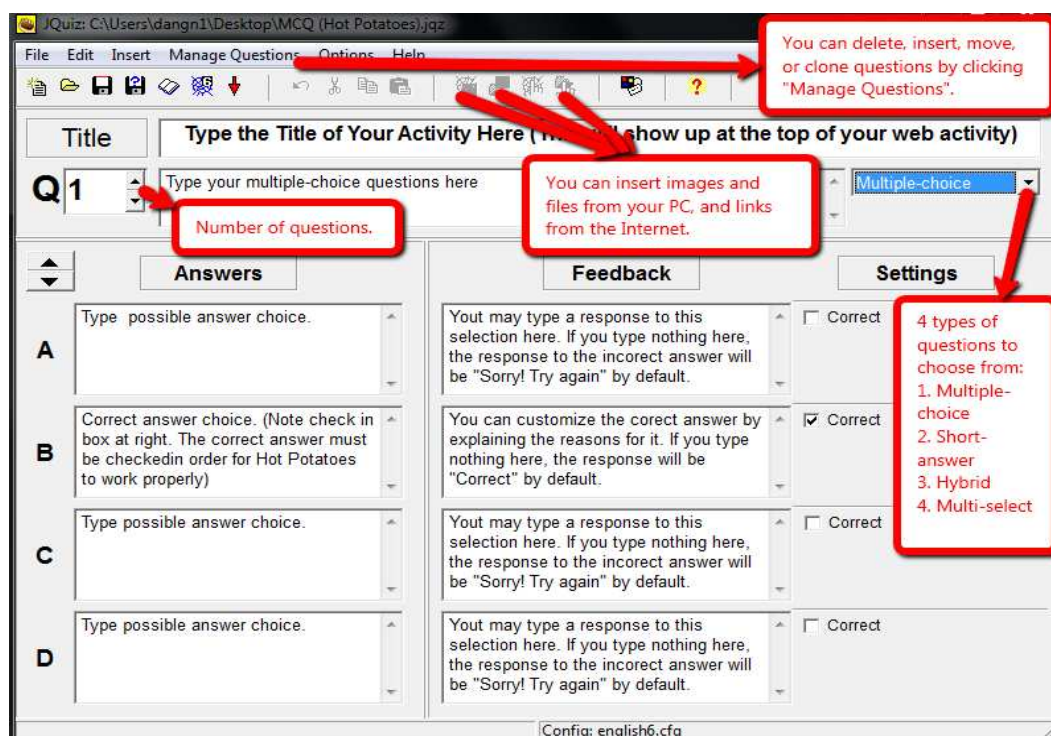


Figure 1. The multiple-choice template of JQuiz (Hot Potatoes) can score correct answers and provide feedback

The second recommended tool for teaching English in general and English grammar in particular is *QuizStar***, a free web-based quiz maker that enables teachers to create, administer, and automatically grade quizzes online, available at <http://quizstar.4teachers.org/>. Although *QuizStar* shares many aspects with *Hot Potatoes* in terms of question forms and answer formats, it has some unique features that make it outstanding. With *QuizStar*, teachers can manage classes and quizzes, create questions that allow multimedia files to be attached, duplicate the created quizzes to make changes for different classes, and share quizzes between instructor accounts. The quiz setting allows teachers to make quizzes public or private, give comments or feedback to students' papers, as well as allot time for assignments. Additionally, *QuizStar* is a free online service (since 2009) that allows teachers to create quizzes instantly. That said, teachers do not need to pay to download the software and avoid possible problems of installation. Therefore, *QuizStar* generally meets the needs of teachers of low and moderate level of computer literacy.

Another recommended tool is *Google Docs***, “a free, web-based word processor, spreadsheet, presentation, form, and data service offered by Google” (Wikipedia, 2010). The Form and Spreadsheets from Google Docs share many features with *Hot Potatoes*. For example, it has multiple choice, checkboxes, choose from a list, scale, grid, and paragraph text. These diverse and cost-free features will help teachers create exercises that motivate students to learn English grammar. With Google Docs, teachers with low or moderate computer experience can use Form quite comfortably. Teachers can also save class time by preparing and creating grammar exercises before class, and they can reuse and recycle the created exercises for future classes.

*Corpus***, a large collection of naturally occurring authentic texts, stored in an electronic database to be accessed on a computer is recommended for teaching grammar in Vietnam. According to Cutting (2008), *corpora* consist of written texts such as newspaper articles, advertisements, letters, emails, and blogs, and spoken texts such as casual conversations, telephone conversations, interviews, service encounters, speeches, lessons, and podcasts. To access or make use of a corpus, one uses a *concordancer*, a tool to look at individual words or groups of words and list them with immediate contexts, to see occurrences of a word and its order of frequency in language patterns. The first recommended site is

<http://www.xmarks.com/site/www.collins.co.uk/corpus/CorpusSearch.aspx> , which contains many other sites for corpus research from English-speaking countries such as the Collins COBUILD Corpus, Cobuild Concordance and Collocations Sampler, British National Corpus (BCN), and Corpus of Contemporary American English (COCA). Other sites such as Information Communications Technology for Language Teachers (ICT4LT) at http://www.ict4lt.org/en/en_mod2-4.htm, Key Word in Context Concordances (KWIC) at <http://www.kwicfinder.com/KWiCFinder.html> , as well as sites dedicated to corpora from other countries including East Africa, Hong Kong, India, Philippines, and Singapore are also useful in teaching and learning grammar.

Corpora and concordances are believed to work in the Vietnamese context where English is not the native language because corpora and concordances “not only helps English language learners to better understand how to use grammar but can also help them to practice formulating rules from examples (deduction)” (Egbert, 2005, p. 24). The idea of generating rules suits Vietnamese EFL learners because they like to study rules

when learning English. Also, it helps the teachers and learners employ empirically determined uses of a word rather than its uses by intuition and retrospection (Sinclair, 2004). In fact, when words are presented in their most frequent forms and their relational patterns and structures, they can be learned effectively, interpreted properly, and used appropriately. This concurs with many studies (e.g. Horst, Cobb & Nicolae, 2005; Kaur & Hegelheimer, 2005; Yoon, 2008) in the literature that corpora can be used as a linguistic resource that helps students solve their immediate language problems and develop their writing confidence over time. Although *corpora* and concordances, especially complex corpora could confuse Vietnamese users of moderate experience during their first few tries, the resources turn out to be extremely helpful once learners are used to them.

Dedicated websites.

In terms of available resources or websites dedicated to English grammar instruction, numerous websites help English learners acquire its grammar and structures. The following websites are recommended because they are unbiased in content, and they are published by academic institutions, universities, or trustworthy organizations. The sites offer many choices that could meet the diverse backgrounds and levels of the intended users. They are free and non-commercial. The suggested websites range from sites with comprehensive grammar reviews, navigational options, and references that help users with when and how to use a certain grammar point to sites with interactive quizzes and explanations. The websites include:

- The Athabasca University Write Site available at <http://www.athabascau.ca/courses/engl/egh/> by Canada's Open University

- The E. L. Easton's site at <http://eleaston.com/grammar.html> by Bergen Community College
- ESL Blues for pre-intermediate and high-intermediate level English students at <http://ww2.college-em.qc.ca/prof/epritchard/>
- English Grammar Lessons at <http://www.english-grammar-lessons.com/> by Capella University Caroline and Pearson's site at <http://www.englishgrammarsecrets.com/>
- The Internet TESL Journal's site at <http://a4esl.org/>
- The Grammar Aquarium with explanations, online and print exercises at <http://perso.wanadoo.es/autoenglish/freeexercises.htm>
- 330 Grammar Topics by University of Victoria, Canada at <http://web2.uvcs.uvic.ca/elc/studyzone/330/grammar/index.htm>
- The Guide to Grammar and Writing's site by the Capital Community College Hartford, Connecticut at <http://grammar.ccc.commnet.edu/grammar/index2.htm> or at <http://grammar.ccc.commnet.edu/grammar/index.htm>
- English grammar by Essberger (2003) at <http://www.englishclub.com/grammar/>

It is worth noting that the list is never complete, and the above are just a few sites for teaching English grammar. Other sites with a variety of English activities also contribute to a wide range of resources for learning English, especially English grammar (e.g. UsingEnglish.com at <http://www.usingenglish.com/>).

In brief, some authoring tools such as Hot Potatoes, Google Docs, corpora and concordances, and some of the above-mentioned websites could contribute to Vietnamese EFL grammar teaching and learning more effectively and efficiently.

CALL options for vocabulary instruction.

In terms of vocabulary, Liu (2009) said, “learners tend to forget newly-remembered words quite soon or they find it rather difficult to use them in speaking or writing because of the lack of knowledge of collocations or pragmatics” (p. 60). Likewise, Becker (2001) opined, “Finding ways to reinforce new vocabulary and concepts for language learners is always a challenge” (p. 28). Students often forget vocabulary quickly and even right after learning. Many research studies (e.g., Al-Seghayer, 2001; Ercetin, 2003) found that multimodal annotations and repetitive reviews should be made to anchor and transfer the newly learned words into long-term memory. Therefore, computers and the Internet are likely to work best for lexical acquisition because of the availability of materials that allow multiple access.

It is worth reiterating that suggested CALL options for teaching English vocabulary in Vietnam involve both CALL tools reviewed in the literature that fit the current Vietnamese situation and other added programs and resources. The following CALL options are believed to meet the context and so are recommended.

Authoring tools.

First, *Clipart** and *Google Image** are believed to offer many ways for teachers to help students with lexical acquisition. Graphical representations are one of the modes of annotating and glossing that could help learners acquire vocabulary. Free, available, and abundant images on the Internet allow teachers greater choice, range, flexibility, and even

originality in creating their own materials. Becker's (2001) ideas of using clipart (at <http://www.clipart.com>) by creating miniature pictures for a rebus, a story, or a riddle that uses pictures in place of words as well as making flashcards for numerous activities could be applicable to teaching English to Vietnamese high school students for several reasons. First, learners often respond positively when texts are interspersed with familiar pictures. They could try to acquire the word when they see the picture representing the word. Second, Vietnamese students learn better with visuals or graphics. So, when they see a picture associated with a word, chances are that they will remember that word longer and recall it more easily because the picture creates a mental image in their minds. While some people argue that this method is just appropriate for low proficiency level students, using *Clipart* and *Google Image* could be applied to higher or advanced proficiency level students if some follow-up activities to reinforce and use the words in oral or written mediums are implemented. However, using images for lexical acquisition often works well with concrete vocabulary. For abstract lexical items, using other CALL tools could be more productive.

Second, *Picasa**, a free web-album program, available at <http://picasa.google.com/> might be used to create and teach lexical items. Teachers can use Picasa in the classroom by presenting information through pictures that can be cropped, rotated, and retouched. That said, Picasa with collage features enable teachers to teach new words through graphical and textual annotations. Picasa also allows importing, organizing, and editing as well as locating and pulling the photos from hard drives, cameras, and the Internet. Using Picasa, students could create slideshows with timelines and picture collages to learn new vocabulary, retell a story, or do an oral presentation.

Picasa is thought to fit nicely into the Vietnamese ESL vocabulary teaching context for several reasons. First, it is free to download and easy to use. The program can even be used offline without hassle. Second, it fits nicely with Vietnamese students' visual learning style. They can learn and retain new vocabulary thanks to graphical and textual annotations. Picasa could motivate students because it allows them to edit, organize, and share photos collages.

Dedicated websites.

Along with some web authoring tools, Google search of ESL vocabulary will probably provide many websites for learning English vocabulary. The following sites could be used to acquire vocabulary, both online and printed:

- Compleat Lexical Tutor at <http://www.lextutor.ca/> ,
- E-Glossary available at <http://www.harcourtschool.com/glossary/esl/> ,
- Vocabulary Page 2 at
<http://legacy.lclark.edu/~krauss/toppicks/vocabulary2.html>,
- ManyThings at <http://www.manythings.org/e/vocabulary.html>,
- Englishclub at <http://www.englishclub.com/vocabulary/index.htm> , and
- E. L. Easton at <http://eleaston.com/vocabulary.html> .

The above websites are recommended because they contain word definitions, pictures, examples in sentences, and pronunciation. Some of them also have links to information for a variety of specialized subject areas and vocabulary-focused topics such as abbreviations, antonyms, collective nouns, dictionaries, etymology, homonyms, homophones, and more. These features are believed to enable Vietnamese EFL learners to learn independently, which helps them increase their vocabulary stock over time.

Very frequently, Vietnamese EFL learners look up meanings of new words while they read, and so chances are that they would pick up more and more new words during their reading practice. Therefore, some free online dictionaries such as *dictionary.com* or *thefreedictionary.com* would be useful. These websites have audio and phonetic symbols that can help learners to listen and repeat as well as learn how a word is transcribed. Other websites such as Spelling Bee at <http://www.thefreedictionary.com/> (see Figure 2) and *FREE Rice* at <http://freerice.com/> have many levels that allow learners to choose the one that fit their proficiency. However, students are advised to develop guessing skills rather than referring to a dictionary every time they see a new word (Nations, 1990; Schmitt & Meara, 1997). One way that students can deal with a new, long word is

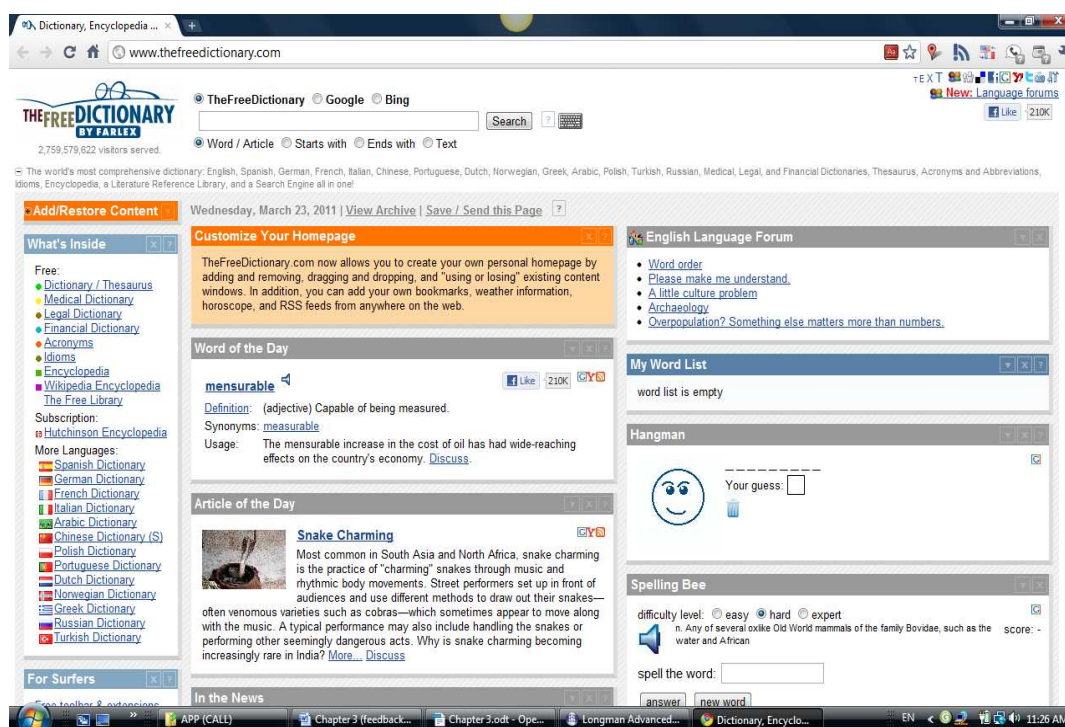


Figure 2. The Free Dictionary has audio and phonetic symbols as well as games (Hangman and Spelling Bee) that can motivate the way learners learn vocabulary.

breaking it into parts to see if it has a suffix and/or a prefix. According to Schmitt and Meara (1997), greater knowledge of suffixes would “coincide with a larger vocabulary because it would facilitate access to more members of a word’s family” (p. 20). The website at <http://www.affixes.org/a/index.html> contains many common prefixes and suffixes, which is found to be helpful and appropriate for Vietnamese EFL learners, whose learning style is often analytical in nature.

In short, although the tools for teaching and learning English vocabulary are abundant and varied, students are more likely to use online resources such as dictionaries and lexical acquisition strategies. This notion could be different from that of instructing other language areas and skills. The following addresses some CALL tools recommended for teaching pronunciation.

CALL options for teaching pronunciation.

According to Avery and Ehrlich (1992), because of the differences between the sound systems of English and Vietnamese (intonational and tonal respectively), Vietnamese EFL learners can have quite severe pronunciation problems such as rounded vowels, the length of vowel sounds, consonant clusters, word-final sounds, pitch, and intonation patterns. Obviously, it takes teachers time to train students in English pronunciation. Available computer software and for pronunciation can provide teachers with many alternatives the way teachers teach and the way students learn pronunciation. As Hubbard and Siskin (2004) said software “can provide multimedia models with audio, technical description and graphic visualization of sounds” (p. 459), allowing users to “record and compare” the accuracy of their pronunciation vis-à-vis that of the native standard.

The following CALL options thought to meet the criteria and standards of technology selection are suggested for teaching English pronunciation to Vietnamese EFL speakers. The options include downloadable software and sites dedicated to English pronunciation instruction.

Software programs.

In terms of software, *PRAAT*, *WASP*, and *text-to-speech (TTS) software* are recommended for teaching English pronunciation in Vietnam. First, *PRAAT****, as reviewed in the literature, a program co-developed by Paul Boersma and David Weenink (2004) at the University of Amsterdam, the Netherlands available at <http://www.praat.org> is a very flexible tool for the analysis and reconstruction of acoustic speech signals. *PRAAT* offers many features including general analysis such as waveform, intensity, spectrogram, pitch, and duration, and others. That said, the intended users could analyze, synthesize, and manipulate speech. *PRAAT* also provides feedback on articulatory changes reflected on the graph. Brett (2004) found this graphical feedback helpful for Italian ESL students in improving some sounds that are not in Italian. *PRAAT* is found to be very meaningful for Vietnamese EFL learners in assisting, facilitating, and familiarizing themselves with the English sound system, which is different from that of Vietnamese. Additionally, *PRAAT* is a freeware program, and is compatible with any operating system. So, the intended users, regardless computer proficiency, feel less frustrated when working with *PRAAT*.

*WASP***, developed by Mark Huckvale (2003) at University College London and available at <http://www.phon.ucl.ac.uk/resource/sfs/> is a free program for the recording, display, and analysis of speech on personal computers. With *WASP*, users can record,

replay, save, and reload speech signals from disk, edit annotations, and display spectrograms and a fundamental frequency track. *WASP*** has a simple application that is believed to suit Vietnamese EFL teachers of moderate computer experience.

Besides the two software mentioned above, other software for speech, hearing, and phonetic sciences at <http://www.phon.ucl.ac.uk/resource/software.php> could be used to train students in English pronunciation.

Text-to-speech * (TTS) software is also believed to work well in an EFL context like Vietnam where the lack of native language users is obvious, and teachers have to teach large classes. Some free text-to-speech software programs such as *Cantare* at <http://www.ccdmd.qc.ca/en/cantare/> and *ReadPlease 2003* at <http://www.readplease.com/#listen> and paid service like *Site Pal* at <http://www.sitepal.com> or *Cepstral* at <http://www.cepstral.com> will help teachers save time when teaching students pronunciation.

Dedicated websites.

Regarding sites dedicated to English pronunciation instruction, the following are recommended. First, the program, *Phonetics - the Sounds of Spoken Language*, developed by the University of Iowa, available at <http://www.uiowa.edu/~acadtech/phonetics/english/frameset.html> is a perfect tool in teaching pronunciation (see Figure 3 below) because it demonstrates how each English vowel and consonant sound is articulated with examples through animated diagrams and videos. Learners can see where they should put their tongues, lips, jaw, teeth, and other organs to produce a certain sound. They could also see a complete articulatory anatomy with flash animations interactively before practicing the sounds of American English.

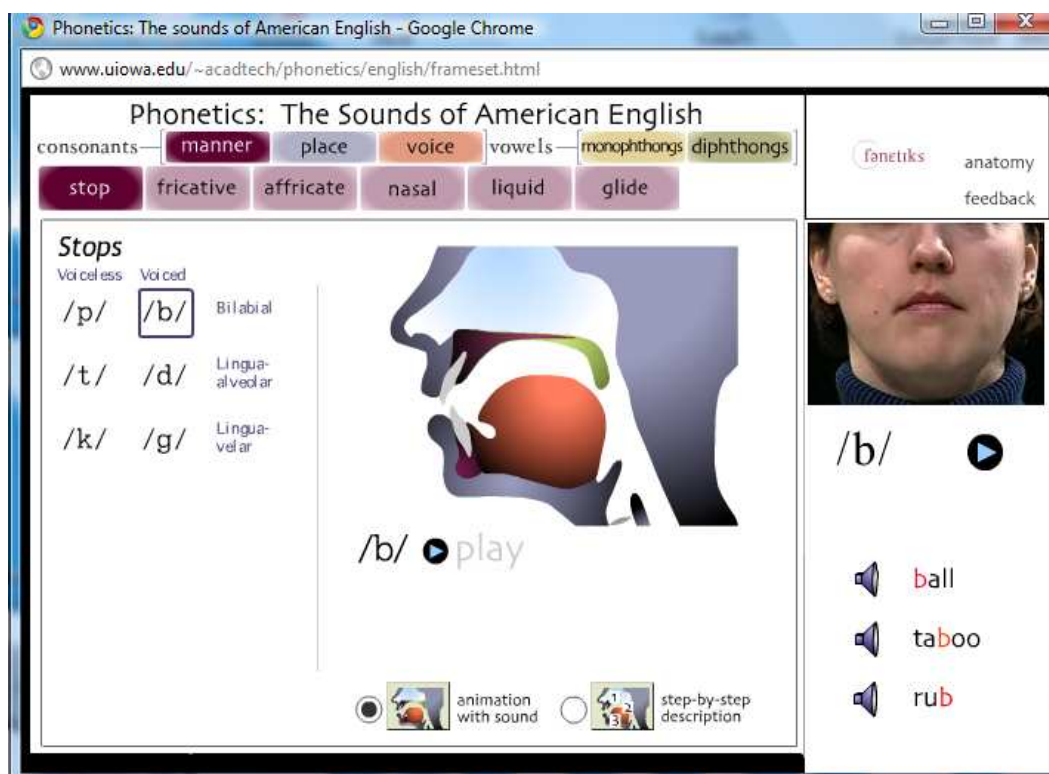


Figure 3. Phonetics: the Sounds of Spoken American English developed by the University of Iowa

Second, the site Guide to English Phonetic symbols at <http://www.oupchina.com.hk/dict/phonetic/home.html>, has the phonetic symbols of 22 vowel and 24 consonant sounds as well as an introduction to the International Phonetic Alphabet (IPA) with such common pronunciation issues as long-short vowels, diphthongs, consonants, and primary and secondary stresses. The site is believed to cover many key aspects of English pronunciation that would help Vietnamese EFL learners practice pronunciation on their own.

Third, ManyThings.org, developed by Charles Kelly and Lawrence Kelly, at <http://www.manythings.org/e/pronunciation.html> is a very interesting site that helps

ESL/ EFL learners with American English pronunciation practice. The site includes minimal pair practice and quizzes using flash and audio files, listen & repeat podcast to help improve intonation, rhythm, and pronunciation, as well as listen & repeat videos that focus on common pronunciation issues such as accents, long-short vowels, diphthongs, consonants, consonant clusters, and tongue-twisters. These features are believed to facilitate Vietnamese learners in improving their English pronunciation. Fourth, Developing Teachers.com available at http://www.developingteachers.com/phonology/sound_activities1.htm, contains activities for practicing aspects of the sound system. The phonology index of this site helps teachers with awareness and practical ideas to develop students' listening and pronunciation in the classroom. Finally, it is worth noting that learning English pronunciation is about learning to pronounce words in sentences and discourses rather than in isolation. Train Your Accent at <http://www.trainyouraccent.com/index.htm> and EZSlang at <http://www.ezslang.com/> by Randall Davis will help improve accent and rhythm, speak more naturally, and understand conversational speech by eliding or reducing vowels of function words in a sentence and learning daily expressions at the same time. The topics of the lessons from Train Your Accent take learners through common activities of a typical day as they practice pronunciation skills. The sites are recommended for Vietnamese EFL learners because they provide them with samples of relaxed American English that reflect everyday activities. Furthermore, understanding reduced speech will help Vietnamese learners understand spoken English better.

In short, the software *PRAAT* and *WASP*, and the aforementioned websites are believed to facilitate Vietnamese EFL learners' improvement of English pronunciation.

These CALL tools enable students to listen as many times as they wish to the pre-recorded control sounds, record their own voices pronouncing the sounds and, finally, assess their own pronunciation by comparing the graphic of the recorded sound to that of the control sound. With time and practice, students will improve in their pronunciation skills, which in turn contribute to their English listening and speaking skills.

CALL Options for Teaching Language Skills

In terms of language skills instruction, Vietnamese EFL teachers have focused on writing and reading much more than listening and speaking because the teaching of EFL has traditionally emphasized knowledge to read and write in English rather than the using of the language for genuinely communicative purposes (Shih, 1999). Also, speaking and listening skills are not included or tested in the current testing system. However, as we know, language is understood as a means of communication expressed orally and textually. Therefore, the current focus of EFL teaching in Vietnam could be considered incomplete in terms of language acquisition. While much time and effort have been devoted to teaching writing and reading, the quality and outcome of EFL teaching and learning have not been achieved as expected due in part to teachers' qualification, students' motivation, and the learning environment. Therefore, the following suggested CALL options are believed to offset the current challenges and meet the needs for EFL teaching in Vietnam. The recommended tools are appropriate because they meet the criteria of technology selection and address Vietnamese contexts.

Options for teaching writing skills.

As mentioned above, writing skills are prominent in EFL teaching in Vietnam. However, students' writing skills have not improved significantly. Many students are not

interested in writing much because they do not see a real purpose and a real audience for writing (Bicknell, 1999). Additionally, many students fail to understand differences in rhetorical styles, writing conventions, and organizational structures in English (Xing, Wang, & Spencer, 2008). Many studies report that using technological tools could probably motivate students and improve their writing. Also, using some CALL tools benefit the teachers in terms of convenience because teachers do not need to collect students' papers and carry them around, but the teachers can still comment and give feedback. According to Levy and Stockwell (2006), writing through CALL has taken a variety of forms. The suggested options that are believed to meet the selection criteria and appear appropriately applicable to situations in Vietnam include word processing, e-mail, blog, wikis, Google Docs, and bulletin and discussion boards on WebCT and Edmodo.

Authoring tools.

First, *word processing** is believed to work well in Vietnamese contexts. Using word processors is a very familiar activity with almost all Vietnamese teachers and students. For most Vietnamese teachers, the reason they first turn on a computer is that they want to write something using Microsoft Word. Word is considered one of the most common tools for writing because of "its capacity to ease the mechanical processes of generating texts" (Levy & Stockwell, 2006, p. 184). In other words, Word allows users to revise through addition, deletion, substitution, and moving large blocks of text with simple a copy or cut-and-paste. Word processors have features that allow users to do many things such as inserting tables and pictures to illustrate the points made, highlighting some sections of a document in different fonts and sizes, finding and replacing misspelled words with Go To, or even editing by using Track Change to give

comments. Many features in Word 2007 support writing, one of which is allowing users to compare the two versions of written texts, original and revised. This is very useful for teachers to detect whether students' papers are plagiarized. In short, word processing is supportive of composition writing.

Second to Word processing is *e-mail**. Melby-Mauer (2003) concluded that “using e-mail for writing and editing practice can be a worthwhile endeavor” (p. 38). E-mail allows students to plan, compose, revise, and edit their draft papers after feedback more effectively and efficiently. Using e-mail in the writing classroom enables learners to not only promote language accuracy by reducing grammatical errors over time but also develop appropriate language use and e-mail etiquette. E-mail is thought to fit the Vietnamese context because first, it is becoming part of “daily mail-checking” for Vietnamese teachers and students. In other words, e-mail is very familiar to them, so time spent for e-mail training could be saved. Second, e-mail allows Vietnamese EFL learners to have access to native speakers easily, without any special equipment needed except a networked computer. Third, as mentioned elsewhere, e-mail is thought of as a useful learning tool because it provides students with an increased opportunity to communicate in the target language, and they learn more about the target culture through written exchanges (Kelm, 1998; Levy & Stockwell, 2006). Fourth, like other ESL students, Vietnamese students seem to enjoy writing e-mail. In fact, e-mail, according to Biesenbach-Lucas (2007), is becoming “a dominant form of contact among people, not only in academia but also in all other walks of life” (p. 75). This reflects a real-world situation and real communication. Finally, e-mail allows various types of multimedia to be appended for feedback simply and easily. For example, teachers can attach further

reading materials for students to prepare before class time, e-mail a writing topic for homework, or follow and monitor a debatable topic among students.

However, correction, revision, and feedback via e-mail could be time-consuming if they are not set up properly. Therefore, in order for teachers and students to use e-mail as an effective learning tool, teachers could start with a simple assignment such as journal writing because it requires less correction and feedback. Also, teachers could limit the number and length of the assignments with a given focus. Additionally, to save time in future and make the process easier, teachers need to demonstrate the uses of common functions of e-mail in front of the class such as creating an account, naming a title of a paper, attaching a document, and others. Alternatively, teachers can use *Jing* (available at <http://www.techsmith.com/jing/>) to capture screens or create a video tutorial, and then upload it to the Internet for students' reference. It is worth noting that numerous Internet service providers offer free accounts (e.g., www.yahoo.com, www.hotmail.com, www.googlegroup.com, www.gmail.com, www.excite.com, www.go.com). Of these, *Yahoo.com* and *Go.com* offer an "Auto-save" feature that stores messages. This feature is found to be particularly helpful for students who may forget to save a corrected e-mail before sending. Another concern about e-mail is that it might not provide "standard" language input because of the proficiency level of the sender and recipient. However, this "imperfect" linguistic model could be overcome by email grammar corrections over time, in-class grammar analysis of students' e-mail messages, as well as explicit instruction on linguistic conventions for common e-mail situations. Additionally, it is good to consider Levy and Stockwell's (2006) suggestion that e-mail is applicable only in the e-mail environment and not with other forms of interactions, and that learners have a chance to

develop their English in other forms such as the above-mentioned word processing, or other means such as blogging, wikis, or Google Docs.

The literature addressed many studies (e.g., Arena & Jefferson, 2008; Halic et al., 2010; Montero-Fleta & Perez-Sabater, 2010) about the positive effect of using *blogs** (available at www.blogger.com) to improve students' writing skills. A blog, a web tool that allows authors to quickly and easily self-publish text, artwork, and links to other blogs or websites (see Figure 4 below), is said to fit the Vietnamese teaching context because, first, a blog is relatively easy to use. It does not require extensive technical knowledge to create and update efficiently. A user only needs a Google account and will then be able to use it. Second, a blog is pedagogically collaborative because it allows feedback and comment from not only the teacher but also classmates and even "unknown" readers once the writing is posted via *Bloglines* (available at <http://www.bloglines.com/>) or *Activorous* (at <http://activoro.us/>). This creates a sense of community and builds a class bond over time. Simultaneously, the readers help the writer/poster with the content and linguistic aspects of the writing. Third, a blog works well for students because it can be operated at any time and in any place with a networked computer. Furthermore, a blog provides a space where the teacher and students can work to develop writing so that students could build up their writing confidence over time. Finally, a blog is free and this permits many Vietnamese students, especially those who like writing journal and diary entries to similarly enjoy blogging, posting, and commenting on others' postings. However, a blog appears personal, but when it is posted, it will be viewed publicly. Therefore, issues regarding privacy, access, security, and free expression need to be considered.



Figure 4. Blogger facilitates writing as journal or diary entries

Google Docs^{**} (mentioned on page 58) again is recommended for teaching EFL writing skills in Vietnam because of its multiple benefits and contextual appropriateness. With Google Docs, all the emailing back and forth is not necessary because it allows written papers to be shared, viewed, edited, and collaborated on synchronously and asynchronously. It not only allows individual documents but also whole files or folders to be shared. This is particularly useful if a course has a lot of documents, articles, or handouts that need to be distributed to all students. Google Docs is seen as a tool combining features of e-mail (e.g., sending back and forth) and features of blogging (e.g., collaborating and editing). Google Docs is a user-friendly tool because any one with moderate computer skills with a Google Docs or Gmail account will be able to operate it. The interface looks like Microsoft Word, which is said to be familiar to students.

*Wikis*** and bulletin and discussion boards on *WebCT* and *Edmodo* are also recommended for teaching writing skills in Vietnam. Wikis are free and easy to use (available at <http://www.wikispaces.com/>). Wikis not only allow the sharing and disseminating of knowledge and information but also allow everyone with a registered account to edit any part of the document to make the content in Wikis justifiable or accurate. Wikis' unlimited pages, allow the editing and uploading of multimedia documents simply and easily. Wikis' features are said to have much in common with those of bulletin and discussion boards on WebCT and Edmodo in terms of posting, sharing, editing, and linking with other resources. In brief, *Wikis* and discussion boards on *WebCT* and *Edmodo* help to improve writing skills because their inherent features allow composing, editing, revising, and publishing.

Dedicated websites.

Along with online authoring software, some websites dedicated to writing also contribute to students' writing skills. First, *Purdue Online Writing Lab*, available at <http://owl.english.purdue.edu/owl/> helps students gain an overview of the writing process, learn how to write general and academic papers, as well as cite sources. Second, *EnglishClub.com* at <http://www.englishclub.com/writing/> assists students with the mechanics and issues of plagiarism. These two websites are found to be helpful for Vietnamese EFL teachers and learners because they provide key topics about writing such as mechanics, writing processes, plagiarism, and citations that challenge Vietnamese students due to their cultural differences and differences in writing conventions.

In short, the above-mentioned tools, namely Microsoft Word, e-mail, blog, Google Docs, Wiki, bulletin boards on WebCT and Edmodo, and others, can be used to

provide ways for learners to express ideas and to easily compose, revise, and edit writings that meet readers' expectation. Capitalizing on these tools could develop students' confidence and interest in writing over time when they see their papers published on the Internet and read by an authentic and global audience. In other words, the number of digital texts is increasing, so how students can read the e-texts effectively and efficiently? The following address options for teaching reading skills.

Options for teaching reading skills.

Online reading is a very common if not a favorite of many readers in the era of information technology. However, the amount of information produced every day overwhelms readers. Therefore, it is important to develop screen-reading strategies so that readers know what to read and how to read it (Kol & Scholnik, 2000). Although Vietnam is at the initial stages of ICT, a large number of Vietnamese people like to read online because of its convenience and currency of information. However, readers might or might not process and understand the online reading materials written in English in the same way that they do in Vietnamese. Likewise, academic reading does not necessarily share the same features with other reading genres; the former might require additional skills. Therefore, there is a need to develop Vietnamese EFL students reading comprehension skills by capitalizing on available technological tools. The suggested options for teaching reading include using software and reading exercises from dedicated websites. It is worth noting that knowledge of vocabulary has a close relationship with the increase of reading comprehension. Hence, CALL tools for teaching reading skills could overlap with those of other language areas or skills.

Authoring tools.

With regards to authoring software for reading instruction, software might not be as popular as reading materials available online because of the currency and amount of information as well as software installation issues. However, some authoring software programs, namely *MacReader*, *Storyboard*, and *Reading Galaxy*, reviewed in the literature produced positive effects. For the Vietnamese teaching context, *Storyboard*** is found to be appropriate for teaching reading skills. First, *Storyboard* uses “cloze” passages to develop both language skill and a linguistic understanding of the language. To guess the right words in the “cloze” passages, students have to use a wide range of skills and knowledge such as grammar, vocabulary, prior knowledge, and cultural knowledge. This is found to be helpful in training Vietnamese students in guessing so that they do not have to look up every new word while reading a text. *Storyboard* is authorable; that is, the teacher can adapt or create any passage for the program, thereby making it easier to fit into an existing curriculum. In addition, writing new *Storyboard* texts is not a really challenging task because a built-in text editing program resembling a word processor allows teachers to enter texts. This user-friendliness is believed to meet the needs of many Vietnamese EFL teachers with moderate computer skills who are still able to create their own interactive lessons for students to work on individually or in groups.

*Hot Potatoes**** can be used to teach grammar effectively. The software can also be used to teach reading skills. With the templates for six types of interactive exercises including multiple-choice, short-answer, jumbled-sentence, crossword, matching/ordering, and gap-fill for the World Wide Web, the program enables the teachers to create

their own materials by inserting texts and comprehension questions. Students can work individually or in a team in the class as well as outside of class as further reading. Furthermore, the simple and easy insertion of other text types such as texts, graphics, and audio can help learners increase their understanding of the reading passage by referring to it when needed. The link feature serves as an organizer to help navigate the readers to information needed to satisfy a task. This is found to be useful in developing students' scanning skill. For most of the CALL practitioners, Hot Potatoes is said to be relatively user-friendly. This notion suits many Vietnamese EFL teachers of high as well as moderate computer skills. Finally, Hot Potatoes is handy and convenient for use once the software is downloaded and installed in a computer. In short, Hot Potatoes allows learners not only to read and respond to comprehension questions, but also to control reading pace and capitalize on various meaning aids, such as the graphics, audio, as well as the links inserted.

Dedicated websites.

In terms of online reading materials, numerous websites dedicated to reading exercises are available. However, the following are recommended because they meet the criteria of selection regarding pedagogy and technology. First, the site *ESLhome.org*, available at <http://home.earthlink.net/~eslstudent/read/read.html> is recommended for teaching reading because it contains many levels of proficiency and various reading exercises such as comprehension questions, jumbled sentences, gap-fill, matching, story-recreating, and summarizing. The reading passages are an anthology of stories from CNN, Literacyworks, and Western/Pacific LINCS and other hypermedia texts. Second, the *Study Zone* of the English Language Centre at the University of Victoria, at

<http://web2.uvcs.uvic.ca/elc/studyzone/> is recommended for teaching reading to Vietnamese students because the site allows them to choose to work at their proficiency level from upper beginner to advanced levels. The lessons are exciting and up-to-date, and the exercises cover many common types of readings that develop students' skimming and scanning skills. Many Things.org by Charles Kelly and Lawrence Kelly, available at <http://www.manythings.org/e/reading.html> is another site found to be appropriate for Vietnamese EFL students who will probably enjoy "real-world" knowledge and information from the site. It involves reading comprehension quizzes, stories from VOA Special English in written texts and audio files, and more than 700 photos of signs in English. Two other sites, *Christine's Links to useful TESL/CALL Web Sites*, at http://academics.smcvt.edu/cbauer-ramazani/Links/esl_reading.htm and *EnglishClub.com*, at <http://www.englishclub.com/reading/>, are also suggested because they provide users with multiple links that facilitate the searching for more reading materials.

In short, electronic enhancements regarding authoring software and available reading materials from dedicated websites present excellent opportunities for students to practice reading and improve their main reading skills such as skimming, scanning, guessing, and summarizing. Vietnamese EFL students' reading could be facilitated with such computer applications while other computer applications could help students enhance their listening in English. The following addresses technological tools used in teaching listening skills.

Options for teaching listening skills.

Listening is said to challenge Vietnamese EFL students very much. Le (2001) reported that her students could not do listening tasks presented to them because of the fast speed, various accents, and the difficulty of listening tasks. Likewise, Vu (2003) said that her students had difficulty recognizing words and understanding long conversations. According to *English Now 9* (2004), in an EFL country like Vietnam, people get very few opportunities to communicate in English, and so “listening has always been one of the most challenging skills for students to develop and for teachers to teach. It is especially demanding in the context of resource-poor condition” (p. 10). Therefore, establishing an English environment will probably help students increase their listening comprehension. Computer technology with language-learning software and dedicated websites could be used to create a simulated language environment or at least to provide additional avenues for teachers and students to work with listening. It is believed that Vietnamese EFL students’ listening could improve in CALL-based environments where the teachers use authoring software and online materials from dedicated sites.

Authoring tools.

*Podcast*** and *CamStudio*** are recommended for teaching listening skills because they have numerous benefits. In the literature review, O’Byran and Hegelheimer (2007) and Standley (2006) found using Podcast effective in terms of increasing students’ learning motivation through authentic materials and extending their learning time within and outside of the class. Creating a podcast is quite easy by using the free automatic podcast creation site at <http://www.podomatic.com> after registering an account (see Figure 5 below). Therefore, teachers do not need to worry about the technical aspects but

can focus on the content, which supports Vietnamese teachers of moderate computer skills. Although making an online podcast allows for multiple re-recordings, it prevents editing or deleting of unwanted listening parts. So, teachers can use the free audio editing software, *Audacity* at <http://audacity.sourceforge.net> to first record and then remove any unwanted sections before uploading it online. Podcasting can also include the use of video known as video podcasting. However, it is difficult to edit the content for listening. So, audio podcasting or just podcasting is good enough as an aid for listening. In short, podcasting meets the criteria of technology selection based on pedagogy-driven, effective, cost-effective or free, and user-friendly conditions and fits nicely into the Vietnamese context.

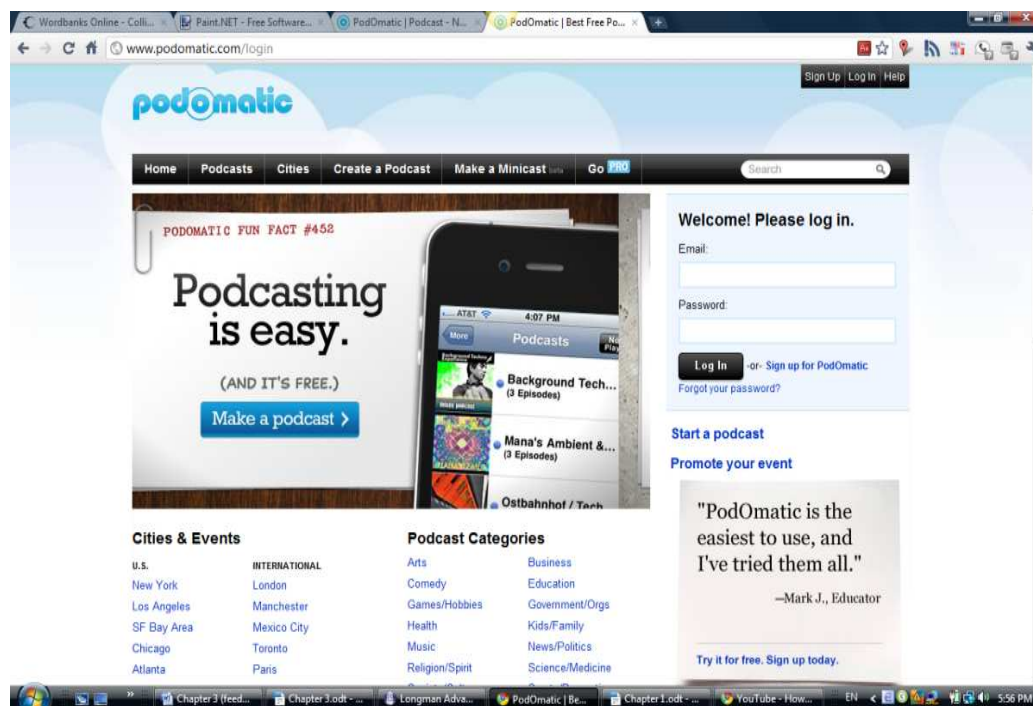


Figure 5. PodOmatic allows creating original podcasts.

CamStudio 2.0^{**}, a free software program that allows the recording of all screen and audio activity on a computer and creates video files known as screencasts, is another authoring program recommended for teaching listening in Vietnam. With *CamStudio*, teachers can create their demonstration videos and video tutorials for class, or simply make recordings. Screen annotations enable teachers to add text captions as slides, while video annotations allow teachers to record the content along with other screen content. Therefore, *CamStudio* helps students listen and watch demonstrations at the same time. This feature is found to be useful and meets students' individual learning differences. *CamStudio* is free of charge, and it is not very difficult to use after being downloaded at <http://camstudio.org/>. Its user-friendliness enables many Vietnamese EFL teachers of moderate computer skills to operate it with ease and comfort.

Dedicated websites.

Along with original materials created by using authoring software, teachers can also use available online materials. The abundant and available materials allow ESL teachers to teach inside and outside the class, simulate the language environment, and choose materials that fit their students' proficiency levels and needs. The recommended materials range from sites dedicated to ESL to sites of online radio, television or Youtube.

The ESL websites include:

- The Internet TESL Journal at <http://iteslj.org/links/ESL/Listening/Podcasts/>,
- Randall's Cyber Listening Lab at <http://www.esl-lab.com/>,
- English Language Listening Lab at <http://www.elllo.org/english/home.htm>,
- EnglishClub.org at <http://www.englishclub.com/esl-videos/index.htm>, and
- ManyThings.org at <http://www.manythings.org/listen/>.

These websites are useful and appropriate for teaching and learning listening because they have many different levels, diversity of topics, subtitles or transcripts, and interactive quizzes. They are free, and can run online or be downloaded easily.

Another source for teaching and learning listening is online radio and television broadcasting. First, *the CNN Stories Archive* at <http://literacynet.org/cnnsf/archives.html> has full text stories and various interactive activities to test comprehension. Users can choose to listen to and/or read the texts and view short video clips of the stories. Second, the *VOA Learning English* of VoANews.com at <http://www.voanews.com/learningenglish/theclassroom/home/> or at <http://www.manythings.org/voa/scripts/> provides not only authentic materials in textual or audio modalities but also many good activities on vocabulary skills, main ideas, listening skills, and expands one's English. Like VOA Learning English, BBC Learning English at <http://www.bbc.co.uk/worldservice/learningenglish/language/> has a variety of topics and stories in audio and text forms that can be used online or downloaded and then presented to the class. A digital archive of C-SPAN video, available at <http://www.c-spanvideo.org/videoLibrary/>, and some other websites from <http://www.npr.org/>, <http://thisibelieve.org/>, or http://www.nhk.or.jp/daily/english/05_11.html can also be used as more resources or references to teach listening skills.

Finally, *YouTube* at <http://www.youtube.com/> is recommended for teaching listening. *YouTube videos* are considered a powerful educational and motivational tool, and they are proven to produce positive results because students are shown the speeches of native English speakers (Mohideen, 2010). *YouTube* is believed to work well in the Vietnamese context because it is free, abundantly available, and easy to access.

In conclusion, computer technology offers great potential for listening instruction, ranging from authoring programs such as *Podcasting*, *Audacity*, and *CamStudio* to the websites dedicated to ESL, radio and television programs online, and *YouTube*. These resources are believed to facilitate Vietnamese teachers and students in English listening.

Options for instructing speaking skills.

Vietnamese students are often characterized as “shy” learners in terms of oral communication. This “shyness” could result from their fear and anxiety about communicating directly with “unfamiliar” people, and they are often afraid of making mistakes in spontaneous oral production. Computer-Mediated Communication has been found to have lasting positive effects on communication anxiety or fear associated with oral communication in English because it provides “an entirely different modality of interaction that seems to lower inhibition”(Arnold, 2007, p. 471). The tools for speaking reviewed in the literature have produced positive effects. However, some options such as *Skype*, video chat via *Lyceum* or *NetMeeting*, and text chat like *MOOs* are believed to suit the Vietnamese context because they are user-friendly, effective, and practical while others such as 3-D virtual world through avatar and Movie-making might not suit the context because the tools are complex and focus less on English acquisition. Although some websites such as the Internet TESL Journal (at <http://iteslj.org/links/ESL/Speaking/> and EnglishClub.com (at <http://www.englishclub.com/speaking/index.htm>) are dedicated to improving ESL learners' speaking through already-designed activities, improvement in speaking requires interactions, discussions, presentations, and other practices. Therefore, the tools recommended for teaching speaking in Vietnam include *Skype*, text chat, and other tools such as *Power Point/ Prezi*, and *Voicethread*.

Authoring tools.

First, *Skype**, a communication tool that allows users to make audio and video calls over the Internet, available at www.skype.com, is recommended for teaching speaking skills. Video calls via Skype will work when a computer with a webcam is connected via broadband Internet. Skype is free to download, and calling other Skype users either via audio or video is free. Skype can be used to make phone calls or call landlines for a low cost. Skype is an excellent tool for teachers who enjoy collaboration with other teachers across the world and for students who want to communicate and make friends with native speakers and international students. With this tool, it is possible for Vietnamese teachers and students to have more interactions beyond the classroom. Furthermore, some features of Skype such as instant messaging, file transferring, and screen sharing allow teachers to send messages, share documents, files, and screen in a real-time audio or video call. Additionally, Skype is easy to use, and its simplicity makes it an accessible tool for some Vietnamese EFL teachers who are less comfortable using technology in the classroom.

In terms of chatting, Vietnamese students prefer text chat to video chat, and they usually code-switch between English and Vietnamese to chat with others. They often use common, simple, and free tools such as *Yahoo Messenger*, *Gmail*, and the current social network tools, *Facebook*, to do the chatting. It is worth reiterating Weininger and Shield's (2003) notion that although text chatting is realized through a written medium and shows specific characteristics, it has more in common with oral than written discourse. Thus, *Multi-User Domain Object Oriented* (MOO) is recommended because MOO** offers several benefits to user-learners. First, MOO, at <http://schmooze.hunter.cuny.edu/>, is free

of charge, and the steps required to join are simple. After filling out the information including name and e-mail address at “Request a Character”, users will be able to explore MOO at “Visit schMOOze” with ease. Second, because of the simplicity of the commands and the simple layout, English learners of any proficiency level can work with it. It seems to fit the *leaning by discovery* principle, which makes learning exciting and enjoyable as learners explore a “virtual university” on MOO. The virtually simulated university is believed to help Vietnamese students “understand” what a typical American university looks like and how it operates. Third, MOO allows users to find their classmates and other MOO users to talk or interview. When interacting with others in MOO, Vietnamese students are likely to learn more English and to practice what they are learning.

Although the literature did not review Microsoft PowerPoint*, it is strongly recommended for teaching speaking in Vietnam. PowerPoint is available on every computer, and it is not only handy but also easy to use. Widely accepted, PowerPoint is used to develop presentation-speaking skills because of its benefits. First, it serves as a reminder to a presenter and a signpost to the audience. The presenter often feels more comfortable and confident when he delivers a speech with a reminder, and the audience can follow the presenter easily with notes on the PowerPoint. Second, PowerPoint has visual features that allow adding graphics and tables to illustrate the points being made. In the same way, *Prezi*** at <http://prezi.com/> is said to have many things in common with PowerPoint, except that *Prezi* allows creating oral presentations online and Power Point offline. However, it is suggested that the visuals, colors, sound effects, and transitions added need to be purposeful rather than be added for purely aesthetic reasons that might

distract the audience or lose the focus of oral presentations.

An additional tool recommended for teaching speaking in Vietnam is *Voicethread***, a web service that allows users to upload photos, videos, Power Point slides, or artifacts, add voice narration to create a multimedia presentation, and then receive feedback from a group or community. Voicethread at <http://voicethread.com> allows people to make comments in many different forms such as using voice (with a

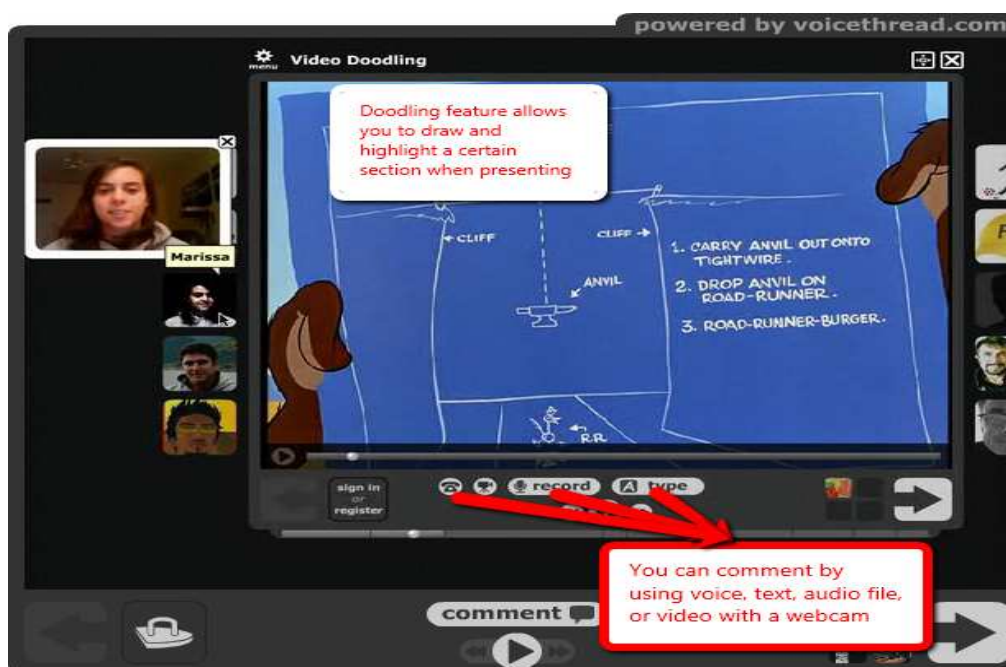


Figure 6. Voicethread facilitates multi-modal discussion and collaboration.

microphone or telephone), text, audio file, or video with a webcam (see Figure 6 above).

The multi-modal commenting is found to suit individual learner differences and encourage every student's participation. Another interesting feature of Voicethread, *the doodling tool*, enables teachers and students to highlight or point out specific sections of the visual artifact as they are talking. Teachers can use Voicethread for making

presentations, giving instructions, generating/facilitating student discussions, and peer reviewing. Voicethread is quite easy to use regardless of the skill level of the teacher. This user-friendliness makes it possible for Vietnamese teachers and students alike to add artifacts as well as comments to the page. However, to view and comment on Voicethreads, users need to create Voicethread accounts that have some limitations in the free version. The paid version, *Voicethread Pro* can meet teachers' expectations in terms of privacy control, comment moderation, and uploading capacity. In brief, Voicethread is believed to develop speaking skills for Vietnamese EFL students because they can comment multi-modally. Chances are that students will use in-class learned vocabulary and grammatical structures as they do so. Also, they can choose to join in commenting and speaking on various topics and on different levels whether in class or at home and whether synchronously or asynchronously.

In conclusion, the above are just a few CALL options that teachers can use to teach speaking skills in the English-language classroom. The options are believed to meet the standards, needs, and computer-proficiency levels of the intended users. However, as mentioned elsewhere, the options are not strictly applicable to teaching speaking skills, but move beyond to activities that might involve other language skills. This is compatible with the belief that in order to help learners become good communicators, the teacher needs to create opportunities that both focus on each skill individually and integrate other skills as well.

Summary

As mentioned elsewhere, the teaching and learning of EFL in Vietnam still reflect the traditional method. However, in recent years, EFL education has been emphasized in terms of enabling learners to use English to communicate. Thus, the instructional approach has changed in that direction. Strikingly, thanks to the Directive of MOET (2008) about Information and Communication Technology that makes computers and the Internet accessible and available, teachers of EFL have had more opportunities to perform their jobs more easily and effectively. The above-recommended CALL tools are just a few options that could be used in the teaching and learning of EFL. The options are believed to work in the current Vietnamese context, and it is hoped that they contribute in part to facilitating the teaching and learning of EFL in Vietnam. As can be seen throughout this chapter, the options are flexibly divided into tools for teaching language areas and language skills. Although reasons for using the activities and the levels of technical difficulty of the options are mentioned along the way, further uses, activities, as well as technical difficulties of selected authoring tools need to be considered accordingly.

Chapter IV. CONCLUSION

Information and Communications Technology is being increasingly applied in education and training in Vietnam. As described in Chapter 1, there are two major purposes in utilizing technology in the teaching and learning of EFL. It contributes to not only improving the quality of training, teaching, and learning of EFL but also to developing learners' computer knowledge. Additionally, applications of computers in the classroom respond to the government's call for educational innovation and its investment in computers in schools.

Chapter 2 addresses the benefits and challenges of applying computers and the Internet into the teaching and learning of EFL. Previous research indicates that CALL can facilitate communication that could go beyond the classroom. Also, CALL can enhance learners' interest and motivation, promote an egalitarian learning environment, develop learner independence and individualization, provide immediate feedback, and improve writing skills. However, CALL practitioners need to overcome some barriers and challenges in terms of institutional contexts, financial barriers, the availability of computer hardware and software, technical and theoretical knowledge, the accessibility of the Internet, and users' proficiency and attitudes.

In light of CALL's strength, this paper first reviews many empirical studies on CALL options that have been frequently used and proven to be effective in the teaching and learning of ESL in developed as well as in selected developing countries including

China, Malaysia, Taiwan, and Thailand, and then specifically in Vietnam. When choosing CALL studies to review, the paper carefully considers Egbert's (2005), Levy and Stockwell's (2006), and Stockwell's (2007) criteria of technological selection consisting of pedagogically sound principles, institutional factors, personal users' curiosity, future trends, TESOL technology standards, as well as other standards such as user-friendliness, cost-effectiveness, and appropriateness for the Vietnamese context.

Second, the paper then follows Stockwell's (2007) idea that "people in the field [of CALL] may find it very daunting when confronted with the ever-growing list of technologies available to them, and decisions regarding appropriate technology choice are complex" (p. 107). Therefore, the paper intends to provide Vietnamese EFL teachers with ideas about options they should use to teach language skills or areas although overlapping or interchangeable options could arise.

As described at the beginning of this paper, the applications of computers and the Internet in EFL instruction in Vietnam are limited and embryonic. Thus, this Alternate Plan Paper has proposed an appropriate response to the current situation by suggesting some CALL options that allow Vietnamese EFL teachers with high, moderate, or low computer proficiency to exploit the present technological resources to promote their students' English-language learning.

Additionally, the paper addresses the importance of intended users- teachers and students in computer applications in EFL teaching. It is recommended that training not just be offered in the beginning, but rather on an ongoing basis. Alternatively, the training could include self-training and experiential learning. In other words, CALL practitioners need to keep searching, staying current with technology change, and learning to use the

programs available through trial and error so that they can accrue CALL options at their disposal.

Although the teaching and learning of English in Vietnam has changed in recent years, its instructional approach is still influenced by the traditional method. Calls from MOET for training students to be able to communicate in English as well as its policy, assistance, and investment in computers in schools would provide teachers and learners with more beneficial opportunities. As we all know, applying CALL tools in the classroom brings with it numerous advantages and values. However, this does not mean that technology should be used in every single class, but that it depends on the learning goal, scope, and activities involved. Alternatively, that learners enjoy using computers is not sufficient to justify its use, meaningful activities integrated within the class curriculum need to be thoroughly considered. Also, teaching with technology is not just about staying current with the latest tools; it is about knowing how to successfully incorporate the best options into the teaching when and where it makes sense.

As we know, language is a means of communication. “Communication is the end goal, computers are the medium and the means is whatever language is appropriate, necessary or convenient” (Figura & Jarvis, 2007, p. 460). It is worth understanding that while technology is not a panacea for education reforms in general and Vietnamese EFL teaching in particular, it might help improve the quality of English language teaching and learning by motivating Vietnamese students to learn English in a flexible, authentic, and stimulating atmosphere and allowing them to connect locally and globally. More importantly, students can achieve a dual purpose in terms of linguistic development and computer literacy, which Bicknell (1999) considers are life-preparation skills.

While the important roles of computers and the Internet in the classroom are palpable, Vietnam, however, is just at the initial stages of implementing CALL tools in education in general and in EFL teaching in particular. Understandably, there is not much research about this field. It is hoped that this paper meets the current needs and fits the current context of Vietnam. However, the nature of technology and its rapid change go beyond the scope of this paper, so Vietnamese EFL teachers need to research and set up appropriate software and programs that fit the “tripod” factors of institution, teachers, and students. It is also worth noting here that at the time the CALL options are suggested, the options work well and meet the expected criteria and standards of selection. However, a consideration is that websites come and go on the Internet, and some sites could disappear without notice. Therefore, it would be a good idea to stay current with the sites and see whether they continue to function or where they are moved.

It is not difficult to imagine that non-native English speakers seem to learn English more successfully and effectively when they are immersed in the cultures of the communities in which the target language is spoken on a daily basis in comparison with those who learn it through structured input or formal classes. However, while the immersion setting is impossible in Vietnam, a need to utilize some technological aids like the above-mentioned in order to create a simulated EFL learning environment is highly desired. Therefore, it is hoped that the CALL options suggested in this paper can alleviate Vietnamese teachers’ burdens, motivate student learning, and eventually improve the quality of the teaching and learning of EFL in Vietnam.

Despite some limitations, it is believed that this paper contributes to EFL instruction in Vietnam. First, the CALL options selected and recommended are made

mainly based on my perspective after reviewing empirical studies. Second, the tools are suggested based on my knowledge and experience from a *CALL* course I took and from the *Technical Communication* course that I observed at Minnesota State University, Mankato. Third, the options are expected to be applied to a specified context in Vietnam where a group of three or four students works together with one networked computer. Therefore, the options suggested might not be generalizable or produce a desirable result when applied to other contexts. In addition, the recommended tools work properly at the time the paper is written. Technology, however, is always changing. New software with sophisticated features is being developed and could probably meet users' expectations better than the existing ones. Also, some websites come and go with or without notice. Thus, it is a good idea to stay current with technology to see whether the recommended software programs still function as expected and where the desired websites are moved. Finally, technology is a great tool, but as we all know, its users are far from discovering the many ways it can be used to enhance EFL teaching and learning. Therefore, continuous searching and experiential learning is likely to help CALL practitioners know how to use many other new and effective tools that could be implemented in the classroom.

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