

Computer Assisted Language Learning and English Language Teaching in Thailand: Overview

Attapol Khamkhien

*Faculty of Liberal Arts and Science, Kasetsart University
E-mail: faasapk@ku.ac.th*

Doi: 10.5901/mjss.2012.03.01.55

Abstract Currently, computer assisted language learning (CALL) is widely accepted to be a tool which can be used to facilitate the language learning process, particularly English language teaching (ELT). The use of CALL has provided a powerful medium for language learning from both teaching and learning perspectives. However, the integration of CALL programs in language instruction requires a certain level of sensitivity and understanding of how to use the programs appropriately. This paper focuses on using CALL in English classrooms in Thailand. It commences with an overview of the development of using computers in the English classroom. Then, advantages and disadvantages of integrating CALL in English instruction are discussed. Next, various types of learning activities that apply computer technology to English learning and instruction in the Thai context are presented. Previous studies on the use and careful integration of CALL, contributing to success of teaching English and facilitating English learning in the Thai context are explored. Pedagogical implications into teaching English with CALL as a tool are suggested.

Keywords: English language teaching; Computer assisted language learning; CALL; Thai learners.

1. Introduction

With the spread of English through information technology, trades, and education, English has become an international language and has played a crucial role in the communications of every country. In Thailand, English is considered one of the major foreign languages taught in schools and academic institutions. All involved parties have put great efforts to improve Thai learners' English competence; however, their English performance after being measured by national tests (e.g., Ordinary National Educational Test or ONET and General Aptitude Test or GAT) or by any of several standardized tests such as TOEFL and TOEIC has been far from satisfactory (Bolton, 2008; Bunnag, 2005; Prapphal & Opanon-amata, 2002; Wiriyachitra, 2001). This unsatisfactory performance of students in English across levels indicates that, despite efforts from all sectors concerned, English language teaching in Thailand has encountered slow progress. Therefore, educators, teachers, administrators and curriculum developers must immediately pay attention in order to improve ELT in Thailand. They must be keen to discern the most appropriate approach to teach English to Thai learners in order for their English performance to meet the international demands, and be able to fully and successfully participate in the international community.

Because of the availability of computer and education technologies in today's world, computers have entered and have strongly influenced our life in every domain of communication.

These technologies have become powerful tools to communicate with people around the globe. They are faster, easier and more convenient to use than other older media. Specifically, the roles of computers in language education are increasing worldwide. This is because learners of language, with the use of the Internet, can simultaneously communicate with other learners or speakers of the target language all over the world. According to Warschauer (1996), technology and the Internet play a vital role in teaching the second and foreign language as an aid to the teacher. As is evident, a large amount of foreign language materials available nowadays e.g., textbooks, program courses and dictionaries are included with and supplemented by other media such as CDs, videos, which require computer and technologies.

In Thailand, thanks to the availability of information technology, lesson planning and connecting the lessons to real world situations is much easily facilitated. Computer assisted language teaching has been

gradually adopted in language classrooms with the hope to improve the English language learning achievement. This development is in response to the demand for English language skills in the workplace. The English language curriculum in Thailand has been, therefore, shifted from English as an elective to English as a compulsory subject, with an emphasis on autonomous learning, independent work, and innovations and new technology in English language teaching (Kanoksilapatham, 2007; Khamkhien, 2010). Thus, it is undeniable that this scenario has affected all spectrums of English language teaching in Thailand from the standard models of English, the goals and approaches in teaching and assessment, to teacher education and development.

As far as English language teaching is concerned, despite the roles of computer and the Internet as an indispensable component of English language learning in Thailand, the inappropriate use and some factors hindering English instruction from improving language competence and proficiency cannot be overlooked.

This article takes a look at its concept, particularly providing a global picture of how CALL emerged in language instruction. It also highlights the advantages and disadvantages of applying CALL to the success of language learning. Its roles in language teaching and learning, and specifically what types of learning activities are more likely to be successful when applying computer technology to English language teaching in Thailand, are proposed. Then, studies conducted on the use of CALL in the English classroom are provided.

2. The Development of Computer Assisted Language Learning (CALL)

The emergence of CALL can trace back to the mid 1950s when technology began to be integrated into language instruction. According to Davies & Higgins (1982: p. 3), the term computer-assisted language learning (CALL) came from computer-assisted language instruction or CALI, reflecting its origins as a subset of the general term computer-assisted instruction or CAI. The term CALI seemed to imply a focus on a teacher-centered approach, whereas language teachers are more inclined to prefer a student-centered approach. CALI, therefore, began to be replaced by CALL which focuses on learning rather than instruction.

Levy (1997) succinctly defined CALL as "the search for and study of applications of the computer in language teaching and learning" (Levy, 1997 p. 1). It embraces a wide range of Information and Communication Technologies (ICTs), applications, and approaches to teaching and learning foreign languages.

Warschauer (2004), Warschauer & Healey (1998), and Warschauer & Kern (2005) suggest that microcomputers that have been integrated into language instruction, and have increasingly contributed to the enhancement of English proficiency in all language skills. These CALL programs include virtual learning environment and Web-based distance learning. They also extend to the use of corpora and concordances, interactive whiteboards, computer-mediated communication (CMC), language learning in virtual worlds and mobile-assisted language learning (MALL).

As for the development of CALL, Warschauer & Healey (1998) suggest that CALL can be generally categorized based on three teaching methodologies dominant in ELT: behavioristic CALL, communicative CALL, and integrative CALL.

Behavioristic CALL is recognized as the first phase of CALL. It was introduced in the 1950s and implemented in the 1960s when the audio-lingual method was widely used in language instruction. Most of CALL programs in this phase entailed repetitive language drills-and-practice activities. Taylor (1980) referred to drill and practice courseware as a tutor presenting drill exercises without feed-back component. In this regard, the computer serves as a vehicle for delivering instructional material.

Based on communicative approach, **Communicative CALL**, the second phase of the development of CALL, emerged in the late 1970s and early 1980s. The focus of CALL in this phase is placed on using the language or functions rather than analysis of language forms. According to Warschauer (1997), the first communicative CALL software (e.g., text reconstruction and language games) continued to provide students

with language skill practice, but not in a drill format like in the first phase. In other words, computers provide context for students to use the language, therefore, grammar is taught implicitly rather than explicitly, allowing students create originality and flexibility in their output of the language. The computer, thus, functions as stimulus, where the computer stimulates students' discussion and writing through role-playing games.

Integrative CALL, the third phase of CALL, started in the 1990s. As described by Warschauer & Healey (1998), integrative CALL was developed in an effort to address some criticisms of the communicative approach by both integrating the teaching of four language skills into tasks to provide direction and coherence and the development of multimedia technology. That is, CALL in this stage allows for a combination of sound, graphics, text, and video presented in one computerized program together with computer-mediated communication or CMC, and further facilitates efforts to teach the four macro skill including listening, speaking, reading and writing (Hubbard, 2009). In this phase, the computer serves as tool, in which the computer does not provide learning material, but empowers users to actually use language. CALL in this period is regarded as a shift from the use of the computer for drill and tutorial purposed into a medium for extending education beyond the language classroom. In other words, in integrative approaches, students learn how to use a variety of technological tools as part of an ongoing process of language learning and use, rather than visiting the computer lab on a once a week basis for isolated exercises.

In summary, the development of CALL corresponds theoretically to a certain pedagogical approach. Its role has shifted from seeing its role as a tutor, a tool, to being as a virtual environment where learners can collaborate and interact in a wide variety of activities and with people from around the world. Students can explore, study, manage their own learning, and construct knowledge, according to their needs and interests to facilitate their learning. The following section discusses some advantages and disadvantages of using CALL programs in English language learning.

3. Advantages and Disadvantages of CALL in Language Learning

As far as English language teaching is concerned, it is believed that CALL is capable of overcoming some of the limitation hindering the success of English language learning and teaching in a number of ways (Barson & Debski, 1996; Chapelle, 1997; 2003; Salaberry, 1999; Warschauer, 1996; 1997; 2002; 2004; Warschauer & Healey, 1998; Warschauer & Kern, 2005; Yang, 2008). These studies seem to yield congruent results regarding the influences and efforts of using CALL in language teaching on learners' performance. In this regard, computer assisted language learning or CALL has provided a powerful tool for language learning for several reasons.

First, the use of CALL to support in language learning provides students with the authenticity of the input. At this point, students can have an opportunity to interact in one or more of the four core skills, namely listening, speaking, reading, and writing because they have to use or produce text meant for an audience in the target language, not the classroom (Garrett, 1982). Teachers can use CALL to provide easy and rapid access to a variety of language learning resources and multimedia components of dynamic and authentic input in all areas of language that teachers could not offer without additional teaching aids. Activities such as problem-solving, information gap, language games, animated graphics are made available from CALL which the teachers can let the students practice with the target language. With these authentic tasks, the students have to actively interact with authentic contexts and negotiate meaning in the target language. As a result, Skinner & Austin (1999) claim that students' interest, motivation and confidence will be promoted, whereas Warschauer (2004) asserted that one quantifiable benefit to increase motivation is that students tend to spend more time on tasks when on the computer.

Second, in alignment with the output hypothesis as articulated by Swain (2005) and Swain & Lapkin (1995), CALL, especially computer mediated communication or CMC, helps encourage foreign language learners to produce comprehensible output. That is, interaction through CMC allows learners to receive input, to use feedback to monitor their language, and to produce output that becomes input for other learners

(Egbert, 2004). Given the fact that the typical nature of Thai learners who are generally shy and easily intimidated hinder the outcome of language learning, Thai learners being pushed to produce language output through CALL, and not in the classroom, can be undertaken with some comfort and ease to a certain extent. As a result, the use of CALL in language classroom basically help improve students' self-concept and mastery of basic language skills, more student-centered learning and engagement in the learning process, more active processing, resulting in higher-order thinking skills and better recall, and gain confidence in directing their own learning.

Third, since language learners have different purposes, and classroom teachers might not be able to have ways of responding to their purposes, CALL is able to provide learners with the kinds of information and support that they require to complete individual tasks and to respond to the diversity of learner needs even within a single classroom structure. As such, Ahmad et al. (1985, p. 116) asserts that computers can provide individual attention to learners who need to remedy and increase their ability, in order to find their own proficiency level and to choose activities or tasks that suit their individual learning styles. Moreover, they can repeat their lesson at anytime and anywhere they want in order to understand the whole lesson more thoroughly (Suwannaprasert & Schmidt, 1998; Wang & Zhang, 2005).

Next, based on the theoretical framework of learner autonomy, CALL can be used to promote autonomous learning. Since CALL allows students to focus on the development of their four macro language skills, they can enjoy their own individuality because they can choose and determine their own level, pace, and time of language practice and development. According to Fitzpatrick & Davies (2003), CALL can provide the facility to design the learning activities in tasks and to accomplish the learning objectives in the first instance. Then, by extension, learners can be able to design their own path in their lifelong learning process by interacting with the learning environment and by making use of learning frameworks. As a result, if the students can overcome the limitations of time and resources, their individualized learning process can be maximized, leading to the development of learner autonomy.

In addition, learner-centered classes can be promoted by CALL. Warschauer & Kern (2005), demonstrate that, while exposed to authentic and dynamic language tasks, learners are pushed to control their learning time and effort to communicate with their partners, peers or class. Therefore, it is believed that learners themselves can progress in their ability to learn by becoming aware of the processes through which they learn, by conceptualizing their learning experiences, by being actively engaged in steering the process and by taking responsibility for organizing their learning (Esch, 1996).

Despite the preponderance of advantages offered by CALL in language classroom, certain shortcomings are not to be overlooked. Chappelle (1997) and Warchauer (2004) suggest that computer technology should not completely replace the language classroom because disadvantages of CALL do exist. Given that the limited exposure to the target language input produced by native speakers might be compensated by the presence of the Thai teachers in an English classroom, English teachers play a central role in a classroom of any discipline (Kanoksilapatham, 2009). The teachers are, therefore, considered to be a resource person in language classroom, as the presentation or authentic input might not be easily comprehended by low proficient learners or even relatively more proficient learners, without additional help from teachers. Moreover, to effectively and successfully apply and implement CALL in language classroom, teachers and learners need to be trained with, at least, basic technology knowledge and familiarity. They might not feel at ease to adjust their teaching and learning styles and relatively rigid curriculum for CALL authentic activities. In terms of language classroom, CALL might not be fully affordable and available to all institutions because of the relatively high cost of appropriate computer technology and efficient network system in class. In this regard, a lack of appropriately-educated persons as a classroom helper is another concern. According to Lian (2002), in Thailand, there are relatively few persons have an in-depth understanding of theoretical issues of language-learning and teaching as well as programming skills and the ability to develop large-scale coherent infrastructures for language-learning and teaching. These reasons might be inherent problems hindering CALL application to a language classroom.

Although CALL has some disadvantages, it is believed that CALL has great potential for use to facilitate the English language teaching and learning in Thailand. To maximize the benefits of existing CALL programs or materials, teachers and involved parties need to be informed about the options of the implementation and application of CALL and how CALL can be integrated into Thai teaching situations or learning context. Finally, with relevance to the theme of this paper, and particularly in the English language teaching context of Thailand, CALL materials, if well selected, seem to satisfy the three major functions of output. That is, CALL materials provide the initial and quality input for noticing to take place, a forum for learners to test how English works, and the means to reflect the quality of the language output.

4. Educational CALL Programs and ELT in Thailand

With the arrival of the Internet, the computer has been transformed from a tool for information procession and display to a tool for information processing and communication both in the society and in the classroom (Sperling, 1998). In response to the rise of the Internet, the Thai government has put a great effort to improve the quality of English language teaching in several aspects. The implementation of the 1999 National Education Act, has prompted a major reconsider in the education sector in terms of both teaching and learning methods, as well as in learning environment. In this regard, since the Ministry of Education's ICT Masterplan seeks to support Thailand's learning society aspirations by enabling all Thai students to experience the benefit of ICT, in response to this plan, the emphasis of current English curriculum is placed on independent work, autonomous learning, innovations and new technology in English language teaching (ELT), such as self-access learning, performance standards of general English as well as English for academic and specific purposes (Wongsothorn et al., 2003).

Moreover, the Ministry of Education has also put strategies by supporting involved parties to create opportunities to enhance access to, and improve the standard of e-learning media through collaborative initiatives to develop information in form of e-contents through different learning media and the promotion of the use of ICT to support personalized learning in line with different learning needs (Bureau of International Cooperation, 2008). At this point, developing ICT tools and infrastructure to establish and enhance effective educational management was implemented by National Electronics and Computer Technology Center (NECTEC) to serve the National Educational Act since 1995 (Intratrat, 2007). Moreover, the Ministry has tried to increase and develop in number of ICT personnel to become ICT professionals and enhance the ICT skills and potential of basic personnel in society to support the development of electronically enabled and empowered knowledge and learning societies.

Although the Thai government has made efforts to improve the quality of English language learning of Thai learners through the use of computers and the Internet, a number of factors are responsible to the failure of integrating CALL in English classrooms. For example, in a survey on the behavior of 20,000 Internet users conducted by Kerdboon (2004) it was found that Thai teenagers tend to use the Internet for entertainment, particularly on-line games. For teachers, a large class size (45-60 students), and inadequately equipped classrooms and educational technology should be taken into account. In rural or remote areas, using CALL materials with the Internet is still limited due to budget allocation (Wiriyachitra, 2001). Therefore, the project to integrate CALL and English language teaching in Thailand cannot be said that the program has met expectation in the educational context at the national and international levels. Common educational CALL programs used in the Thai context include *Tutorial Programs, Drill and Practices, Demonstration, Simulation, Games, and Testing*.

Tutorial programs are responsible for collecting, presenting and guiding information, teaching rules, as well as teaching problem-solving techniques to students. It presents information in small units with sentences, graphics, and sound. Students can learn content through questions. When the students answer, they receive immediate feedback. If their answer is incorrect, they will be helped with corrective teaching tutorials. This kind of program seems to be very popular for students and teachers because it provides

exercises and tests in the same module.

Drill and Practice is to review the content background knowledge, and to assist students to master their language skills such as reading, listening, etc. Providing stimulus, receiving active response from the students, and giving immediate feedback are core steps of this program. The questions will be repeated many times, as well as an explanation on why the answer is correct or incorrect is available. The function of drill and practice is to provide appropriate practice and students can use their background knowledge of the lesson in order to answer questions as well as solve problems effectively.

Demonstration teaching and learning through computer based instruction is very helpful with self-directed learning. With self-directed learning approaches, students will be encouraged to learn by themselves. Particularly, they will gain more experience in meaningful contexts. However, it is recommended that the teacher provide students with opportunities and a rich learning environment for students to develop their abilities to think independently, and to self-manage their own activities in order to construct knowledge.

Simulation or so-called problem solving is used, aiming to raise students' critical thinking, discussion skills and writing abilities. By using real life situations in order to make the learning context more realistic, students are challenged to solve problems, which are mostly entertaining and educational.

Games are used to provide a rich learning and teaching environment. Generally, good educational games should have clear educational objectives. The definition of simulations and games are somewhat similar. Simulations imitate reality, whilst games may not simulate reality. Students are able to gain knowledge about rules, processes as well as other skills from the games. The major characteristic of educational games is entertaining, which students can enjoy themselves while practicing their language skills. At this point, games sometime are called entertaining games or edutainment.

Testing is a tool for assessment and a method to determine what students know and do not know. It can take the form of an informal quiz or a formal evaluation. There are various types of computer-based learning tests. In order to help students learn, the test should be appropriately selected, related to the objective of each lesson for the students. As a result, the students will enjoy learning environment and succeed in their studying. In short, testing is used for helping students feel independent as the test format and structure are less formal than the traditional one. Additionally, the students might feel at ease while taking the tests.

The activities illustrated above, not only course software based CALL but also online programs, including web-based learning, learning management system, multimedia courseware, online communication, online assessment and online feedback, which the Internet and network system are required for running these programs. However, online programs are not probably viewed as ideal for CALL into English language teaching. In this regard, an attempt to try to develop and use CALL programs in the classroom in the Thai context continuously appears in a number of studies. The following section presents some studies that are known to determine the success and failure of developing CALL programs in English classroom.

5. Studies on CALL in the Thai Context

The rapid technological advances of the 1980s have raised both the expectations and the demands placed on the computer as a potential learning tool. With the hope to improve Thai learners' English proficiency, previous research on CALL was mostly designed to show comparisons of learning outcomes from a control group with those obtained from an experimental group (e.g., Intratat, 2007, 2009; Maneekul, 1996; Phongnapharuk, 2007; Thongtua, 2008). These studies conducted in the Thai context have congruently emphasized the importance of CALL and teaching English in four macro skills.

Maneekul (1996), for example, tried to determine the effects of normal instruction supplemented by the computer-assisted instruction program and only giving lecture on achievement and attitude scores of Thai vocational students. The study showed that that normal instruction supplemented by CALL improved achievement and attitude scores. Similar to Intratat's (2007) study, her study focused the importance of using

CALL in classroom practice. Using self-created questionnaires with 167 Thai university students and 70 lecturers asking about English CALL materials, the results reflected that the participants appreciated most the advantages of using CALL materials, particularly freedom in studying. However, some problems in using CALL had arisen. For students, time consumed loading the program was the largest problem, while the development of CALL programs was seen to be the greatest disadvantage of CALL in the lecturers' view. The results seemed to suggest certain advantages of CALL. Educational administrators should support the use and development of CALL for learner autonomy and life-long learning. Then, Wong-a-sa (2010) employed questionnaire and observation techniques to investigate the effectiveness of using supplementary task-incorporated learning activities in CALL courseware. The results of this study showed that with the modified task-incorporated CALL courseware and a set of classroom activities, students' interaction and participation greatly increased. Furthermore, it was found that students' positive learning attitude towards CALL programs was shown. In this regard, Wong-a-sa's suggestion is that, to promote classroom interaction and learning motivation, the designed CALL courseware should be seen a suitable teaching material.

The effects of CALL on improving Thai students' reading skills attracted a wide range of studies. Phongnapharuk's (2007) study, for example, investigated the relationship between students' English reading comprehension and summary writing ability and self-directed learning before and after being taught through the metacognitive strategies via computer-assisted language learning. After being taught through the metacognitive strategies via computer-assisted language learning, 25 high school students were tested and completed a set of questionnaires. The findings revealed that the students' English reading comprehension, the summary writing ability and self-directed learning were increased at good level after being taught through the metacognitive strategies via computer-assisted language learning. Thongtua's study (2008) also considers the development of reading skill abilities. In order to improve students' English reading comprehension, Thongtua (2008) developed CALL reading comprehension program, achievement tests and attitude questionnaires, and tested with 20 high school students. The results revealed that the students studying the CALL program had significantly highly achievement than those who studied the hard copies or supplementary textbooks. It was also found that the students showed positive attitude towards using CALL program in learning English. In accordance with Torut & Torut (2002), they designed and developed a multimedia CALL material for graduate students. The results indicated the students learning through multimedia CALL program and textbook outperformed those learning through a textbook alone in the final reading comprehension test. Moreover, positive opinion on the use of multimedia CALL software was found. Likewise, Banditvilai (2000) discovered that learners increased their motivation when they used the Internet as an integral part of reading courses, enabling them to develop reading skills and enriching vocabulary. In short, as can be seen, although there is no standardized test to measure how Thai students' improve their English proficiency, these studies reflect that applying CALL to the English instruction can enhance Thai students' reading abilities in a certain extent.

CALL also has a useful contribution to the development of oral skills if students make full use of it wisely. Concerning pronunciation and speaking skill development, Yangklang (2006) used a CALL program to investigate the improvement of English pronunciation, particularly final /-l/ pronunciation of 40 Thai students. These students were divided into two groups, good and poor pronunciation abilities. The result indicated that pronunciation abilities of both groups of these students were significantly improved after using the CALL program. Moreover, they had positive reactions towards the use of CALL program for improving their pronunciation. Meanwhile, to improve business English students' listening and speaking skills, Kaewphaitoon (2003) developed an English language learning computer application. It was found that the students had positive attitudes towards using the computer program as it helped them improve their listening and speaking skills. Moreover, Kaewphaitoon' conclusion indicated that, from classroom observation, this group of students gained more confidence in listening and speaking.

As for English grammar, Tongpoon (2001) studied the development of grammar CALL courseware on phrasal verbs for first year English major students. Using an achievement test, a questionnaire and an

observation form, Tongpoon found that these students had positive attitudes towards CALL as their English performance, after studying with the computerized lesson, substantially improved. The result also showed that the developed courseware was efficient in enhancing language learning. Designing CALL materials with include self-access supplementary exercises, Intratat (2003) evaluated the effectiveness of these CALL materials on how students deal with English grammar. Students' scores on a pre-test and post-test were measured and compared. The results revealed that the post-test scores were significantly higher than those of the pre-test, showing students' development in proficiency performance. Although some aspects of the characteristic of these exercises and tests were not explicitly described, yielding the limitation of the generalization of the results, this finding can show how CALL is applicable to educational principles involved instructional design in the Thai context.

Writing skill is another area where CALL has added a great deal of value. CALL can help the students in doing correction of grammatical mistake and give some suggestion for certain expression. Intratat (2009) developed a self-access CALL material to improve English writing skills for Thai undergraduate students. After evaluated by 100 Thai university students, the results from the questionnaire revealed that exercises in levels of difficulty, explanation of grammatical features and examples, vocabulary games, authentic illustration, test scores, to name a few, could help them to improve their English writing ability. Gubtapol (2002) explored what editing strategies Thai students commonly used and how they used their strategies with word processing programs to improve their English writing. Through observation, interviews and document analysis, the finding revealed that the use of word processing programs helped the Thai students improve their writing skills in several aspects: capitalization, singular and plural forms, subject-verb agreement, and punctuations. The study also showed that basic word processing features such as the spelling check and grammar check helped the students when writing English.

Listening skill is another area with empirical research conducted. Shen et al. (2007) employed questionnaires and interviews techniques to investigate Thai university students' attitudes towards using websites for practicing listening skill. It was found that websites provided various topics which the students could choose the topics they prefer and or those related to the topics they were studying in English class. Moreover, with the use of the Internet, they could easily repeat listening material for several times until they finally got information, helping them improve comprehension and enhancing their listening skills. In accordance with Puakpong, (2005) who developed CALL listening comprehension program, and then used with twenty Thai university students from different proficiency levels. The results revealed that the participants performed better than their peers in the same proficiency levels in both midterm and final examinations although the difference was not at a statistically significant level. However, posttest scores were better than those of pretest at a statistically significant level in most aspects except in case of the global ideas. As is clear from the studies above, it can be seen that previous studies conducted in the Thai context include the four major English skills.

Most of the previous studies have investigated how the effectiveness of the use of CALL courseware to develop and enhance students' English skills. In addition, these studies also indicated that the tasks or activities in the program can motive students' positive attitude in English language learning. However, most researchers prefer to use self-created CALL programs which suit a particular group of students, context and area they conduct the experiment. At this juncture, the researchers did not interpret the results in terms of which particular programs to be used in language learning, leading to the inconclusive results as to the potential of technology for replacing some aspects of classroom instruction. Therefore, these criticisms of this line of research can lead to the limitation of the generalization of the results of these studies. As suggested by these studies, future research is substantially needed to investigate different CALL software packages, characteristics of an effective CALL program, the effects of CALL on language achievement and attitude, background knowledge, more levels of independent variables, and a case study with larger population in the Thai context.

6. Conclusion

CALL has emerged as a tempting alternative to traditional modes of supplementing or replacing direct student-teacher interaction, such as the language laboratory or audio-tape-based self-study. This paper primarily highlights and illustrates the potential role that CALL programs can play in language classrooms as an important teaching aid or tool of instruction. This paper discusses at length why CALL is important in the area of language teaching and learning situation, including the development of CALL in language instruction, teacher and learner's expectations, program design, and applied methodologies. Strengths and weaknesses, opportunities and threats of both functions, particularly in the Thai context are also highlighted.

Although the utilization of CALL in language instruction is beneficial, heavy reliance on CALL cannot be healthy (Kanoksilapatham, 2009). Indeed, CALL should not be considered a replacement or substitution for classroom teachers. As suggested by Kanoksilapatham (2009), it should be recognized as an "ad hoc" supplementing or reinforcing what is instructed in language classroom. This article also attempts to forge Thai English teachers to try to maximize the opportunities offered by technological advances. Given substantial exposure to the language input through authentic tasks and activities, and enhanced sensitivity to language practice, learners should be able to appropriately determine and practice their language skills from which to extrapolate different CALL tasks. Then, it is believed that the learners will be able to make valid generalizations from individual cases. Therefore, teachers have to make the decision to use technology as a part of their language learning environments and ensure that they are familiar with the technological options available and their suitability to particular learning goals and thus implement these technologies capitalizing their specific features. For Thai learners, they need to be able to continuously use, experiment and evaluate appropriate and meaningful CALL activities to enhance English proficiency and master English language skills which is the goals of language learning.

References

- Ahmad K., Corbett G., Rogers M., & Sussex R. (1985) *Computers, language learning and language teaching*, Cambridge: Cambridge University Press.
- Banditvilai, C. (2000). Utilizing the Internet as an integral part of teaching reading. *rEFLECTIONS*, 2, 47-55.
- Barson J. & Debski R. (1996). Calling back CALL: Technology in the service of foreign language learning based on creativity, contingency, and goal-oriented activity. In M. Warschauer (Ed.), *Telecollaboration in foreign language learning*, pp. 49-68. University of Hawaii, Honolulu, Second Language Teaching and Curriculum Center.
- Bolton, K. (2008). English in Asia, Asian Englishes, and the issue of proficiency. *English Today*, 24(2), 3-12.
- Bunnag, S. (2005). English skills lowly ranked: Tests put Thais near bottom in S.E. Asia. *Bangkok Post* (10 August 2005): 5.
- Bureau of International Cooperation. (2008) Towards a learning society in Thailand: An introduction to education in Thailand. Retrieved from: www.bic.moe.go.th.
- Chapelle, C. (1997). CALL in the year 2000: Still in search of research paradigms? *Language Learning and Technology*, 1(1), 19-43.
- Chapelle, C.A. (2003). *English language learning and technology*. Amsterdam: John Benjamins.
- Davies G. & Higgins J. (1982). *Computers, language and language learning*, London: CILT.
- Egbert, J. (2004). Mediating the digital divide in CALL classrooms: Promoting effective language. *ReCALL*, 16(2), 280-291.
- Esch, E. (1996). Promoting learner autonomy: criteria for the selection of appropriate methods. In R. Pemberton & S.L. Li Edwards (Eds.), *Taking control autonomy in language learning*, pp. 35-48. Hong Kong: Hong Kong University Press.
- Fitzpatrick T., & Davies, G. (2003). *The impact of information and communications technologies on the teaching of foreign languages and on the role of teachers of foreign languages*. European International Certificate Conference. ICC European Commission DG Education and Culture.
- Garrett, N. (1982). A psycholinguistic perspective on grammar and CALL. In William Flint Smith (Ed.), *Modern media in foreign language education: Theory and implementation*, pp. 169-196. The ACTFL Foreign Language Education Series. ED 234 451.
- Gubtapol, K. (2002). *How Thai students use word processors to approximate edited American English*. Unpublished doctoral dissertation. Clemson University, U.S.A.
- Hubbard, P. (2009). A general introduction to computer-assisted language learning. In P. Hubbard (Ed.), *Computer assisted language learning: Critical concept in linguistics*, pp. 1-20. New York: Routledge.
- Intratrat, C. (2003). CALL materials for EFL students at KMUTT, Thailand. *Proceedings of worldCALL 2003 CALL from the margins*, Banff, Alberta, Canada, 7-10 May. 119.
- Intratrat, C. (2007). Investigation on advantages and disadvantages in using English CALL according to the opinions of Thai university

- students and lectures. *KMUTT Research and Development Journal*, 30(1), 3-19.
- Intratrat, C. (2009). Development of self-access computer assisted language learning to improve English writing skills for undergraduate students at King Mongkut's University of Technology Thonburi. *KMUTT Research and Development Journal*, 32(4), 424-434.
- Levy, M. (1997). *CALL: context and conceptualization*. Oxford: Oxford University Press.
- Lian, A. (2002). Seriously practical: Implementing technology-enhanced language learning (TELL) in an increasingly globalised world. *CALL ASIA 2002*, 1-9.
- Kaewphaitoon, K. (2006). *The development of a CALL program for an ESP course*. Unpublished master's thesis. Khon Kaen University, Thailand.
- Kanoksilapatham, B. (2007). Navigating pathways to success in ELT. *Journal of English studies*, 3, 6-25.
- Kanoksilapatham, B. (2009). Teaching English intonation in Thailand: Overview. *Journal of Arts*, 31(2), 299-319.
- Kerdboon, P. (2004). On line game: problems without solution!. *Than Settakit* (22-24 January 2004): 44
- Khamkhien, A. (2010). Factors affecting language learning strategy reported usage by Thai and Vietnamese EFL learners. *Electronic Journal of Foreign Language Teaching*, 7(1), 66-85.
- Maneekul, J. (1996). *The effects of computer-assisted instruction on the achievements and attitudes of private postsecondary vocational-technical students in a supplementary English course in Thailand*. Unpublished doctoral dissertation, University of North Texas, U.S.A.
- Phongnapharuk, C. (2007). *Applying metacognitive strategies via computer-assisted language learning to enhance English reading, summary writing abilities and self-directed learning of expanding level students*. Unpublished master's thesis, Chiang Mai University, Thailand.
- Prapphal, K., & Opanon-amata, P. (2002). An investigation of English proficiency of Thai graduates. *Chulavijai*, 21, 12-16.
- Puakpong, N. (2005). *An individualized CALL listening comprehension program: Making listening more meaningful for Thai learners of English*. Unpublished master's thesis. University of Canberra, Australia.
- Salaberry, R. (1999). CALL in the year 2000: Still developing the research agenda. *Language Learning and Technology*, 3(1), 104-107.
- Shen, L., Guizhou, G., Wichura, W., & Kiattichai, S. (2007). *The use of websites for practicing listening skills of undergraduate students: A case study at Suranaree University of Technology, Thailand*. ERIC Document No. 500 929
- Skinner, B., & Austin, R. (1999). Computer conferencing: Does it motivate EFL students? *ELT Journal*, 53(4), 270-279.
- Sperling, D. (1998). *Internet guide*. New Jersey: Prentice Hall Regents.
- Suwannaprasert, B., & Schmidt, S. (1998). The production of computer multimedia program for teaching combinatory. *Naresuan University Journal*, 6(2), 59-63.
- Swain, M. (2005). The output hypothesis: Theory and research. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning*, pp. 471-484. Mahwah, NJ: Lawrence Erlbaum Associates.
- Swain, M., & Lapkin, S. (1995). Problem in output and the cognitive processes they generate: A step towards second language learning. *Applied Linguistics*, 16, 371-391.
- Taylor, R. (1980). *The computer in the school: tutor, tool, tutee*. New York: Teachers College Press.
- Thongtua, C. (2008). *The development of CALL courseware to improve English reading comprehension*. Unpublished independent study report. Ubon Ratchathani Rajabhat University, Thailand.
- Tongpoon, A. (2001). *The development of grammar CALL courseware of phrasal verbs for first year English major students in Khon Kaen University*. Unpublished master's thesis, Khon Kaen University, Thailand.
- Torut, S., & Torut, B. (2002). *The development of computer multimedia English lessons for academic purposes*. Nakhon Pathom: Faculty of Education, Silpakorn University.
- Wang, D., & Zhang, C. (2005). CALL in interactive reading of college English. *Sino-US English Teaching*, 2(5), 42-45.
- Warschauer, M. (1996). Computer-assisted language learning: an introduction. In S. Fotos (Ed.), *Multimedia language teaching*, pp. 3-20. Tokyo: Logos International.
- Warschauer, M. (1997). The Internet for English teaching: Guidelines for teachers. *TESL Reporter*, 30(1), 27-33.
- Warschauer, M. (2002). Networking into academic discourse. *Journal of English for Academic Purposes*, 1, 45-58.
- Warschauer, M. (2004). Of digital divides and social multipliers: Combining language and technology for human development. *Information and communication technologies in the teaching and learning of foreign languages: State of the art, needs, and perspectives*, pp. 46-52. Moscow: UNESCO Institute for Information Technologies in Education.
- Warschauer, M., & Healey, D. (1998). Computers and language learning: An overview. *Language Teaching*, 31, 57-71.
- Warschauer, M., & Kern, R. (2005). *Network-based language teaching: Concepts and practices*. Cambridge: Cambridge University Press.
- Wiryachita, A. (2001). A Thai university English scenario in the coming decade. *Thai TESOL Newsletter*, 14(1), 4-7.
- Wong-A-Sa, P. (2010). *The use of supplementary task-incorporated learning activities in computer assisted language learning (CALL) courseware to promote students' interaction in classroom*. Unpublished master's thesis, Mahasarakham University, Thailand.
- Wongsothorn, A., Hiranburana, K., & Chinnawong, S. (2003). English language teaching in Thailand today. In Ho Wah Kam & R.L. Wong (Eds.), *English language teaching in East Asia today: Changing policies and practices*, pp. 441-453. Singapore: Eastern University Press.
- Yang, Y.T.C. (2008). A catalyst for teaching critical thinking in a large university class in Taiwan: A synchronous online discussing with the facilitation of teaching assistant. *Education Tech Research*, 56, 241-264.
- Yangklang, W. (2006). *Improving English final /-l/ pronunciation of Thai students through computer-assisted instruction program*. Unpublished master's thesis, Suranaree University of Technology, Thailand