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The Effect of Interactive and Non-Interactive Call activities: State of Art Article

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ABSTRACT

English has become the common international language in the 21st Century. It is the language most frequently used to communicate by people who are not native speakers of the same language. Consequently, learning and using English is of a great importance nowadays (Wu and Marek, 2010). Language is still taught as a traditional classroom subject, similar to math or geography in countries where there is not population of native or English speakers. Technology, however, offers opportunities for people from other cultures to interact with each other. It can be beneficial to language learners if technology is incorporated into the classroom (Chang & Lehman, 2002).

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Introduction

Computer assisted language learning (CALL) is defined by Davies (2010, p. 261) as " an approach to language teaching and learning in which computer technology is used as an aid to the presentation, reinforcement, and assessment of material to be learned, usually including a sustainable interactive element".

Learning and teaching of English as a foreign language is affected by lack of a surrounding community of English speakers outside the classroom. It makes EFL/ESL learning and quality teaching more challenging when there are no English speakers available outside the classroom (Parker et al., 1995). Thus, the most successful EFL/ESL pedagogies enhance the quality of learning and teaching by applying technology-assisted teaching (Lapkin et al., 1990).

Traditional higher education language learning has involved the use of lectures, during which language concepts are explained to students by the instructor. Additionally, seminars or study sessions are provided to handle issues and questions from the lecture as well as provide an additional outlet for students to discuss language topics under the guidance of a seminar tutor. A major disadvantage of this style of classes is that it can be considered a passive approach to learning (O'Donnell, C. & MacCoinnigh, M., 2006). This approach is regarded as learning which does not actively engage the learner.

Lectures and seminars often encourage a passive approach to learning because students can potentially opt out of the course even though they may still be attending. In contrast to this, technology based learning theories often suggest that learning is an active process by which the learner builds new knowledge based on personal judgments and self-organized input (Baumgartner, Lee, Birden, & Flowers, 2003; Walker, 2003).

Nelson, et al. (1976) mention that:

"The unique property of the computer as a medium for education is its ability to interact with the student. Books and tape recordings can tell a student what the rules are and what

the right solutions are, but they cannot analyze the specific mistake the student has made and react in a manner which leads him not only to correct his mistake, but also to understand the principles behind the correct solution" (pp. 28-37).

As the use of computers in language teaching increases, they gain much of the attention and interest of researchers and language practitioners. Second Language Acquisition (SLA) researchers have asserted that the computer should be used to replicate what they believe ought to occur in the classroom (e.g. Quinn, 1990; Underwood, 1993; Figueredo & Varnhagen, 2006).

Baturay, Daloglu&Yildirim (2010) suggests the use of technology is "another major function"...that "provide(s) opportunities for learners to practice the language through mechanical activities that are not normally used in the classroom" (p. 314).

In the mid 1960s, new technological aids came into general use in the classroom-language laboratory such as portable tape-recorder and film strip projector which were all greeted with satisfaction in all modern language departments. Use of tapes and equipment was revolutionary for language teachers. Although tape-recorder was helpful because it offered native speaking voice in the classroom, it could not provide learners by editing and self- recording facilities (Mirhassani, 2003).

Media motivate students by presenting language in a more complete communicative context and by bringing real life experience into the classroom. Media can also help students process information and free the teacher from excessive explanation, and they give them opportunities to increase their knowledge in an interesting way in the classroom (Brinton and Holtan, 1997).

The terminology Computer-Assisted Instruction (CAI) was formed in the early 1960s when people first utilized computers in education. "When computers first entered education on a relatively broad basis in the early sixties, the term Computer-Assisted Instruction (CAI) was

coined" (Russel, 1982, p.27). Blomeyer (1984) indicated that computers had been gaining greater significance in foreign language instruction. According to Garrett (1988), although the most commonly used acronym for the endeavor had been the generic CAI, there had also been increasingly frequent references to Computer-Assisted Language Learning (CALL). CALL was defined by Merrill, Tolman, Christensen, Hammons, Vincent, and Reynolds (1986) as CAI applied to second or foreign language learning and acquisition. CAI is the umbrella term for the use of computers to assist in instructional activities in general. Therefore, CAI could be applied to many different fields of studies such as physics, chemistry, mathematics, social sciences, etc. Under the umbrella term of CAI, Computer-Assisted Language Learning (CALL) concerns the use of computers in assisting second or foreign language instructional activities. In other words, as Merrill et al. (1986) defined the term, CALL is CAI applied to second or foreign language learning and acquisition.

Egbert (2005, p. 4) defines CALL as "learners learning language in any context with, through, and around computer technologies". Moreover, Jarvis (2004, p. 116) develops these broad definitions to characterise the software applications as which are "Language specific as well as more generic Information Technology (IT) programmes".

Learning has three dimensions namely motivation, confidence, and ability (Butler & Lumpe, 2008; Clément & Kruidenier, 1985; Hirschfeld et al., 2004; Phillips & Lindsay, 2006; Tavani & Losh, 2003). These three dimensions are directly related and impact upon each other. If one of them increases or decreases, the other two will follow in a direct relationship. All three learning dimensions can be met only when students have cumulative experiences both in and out of the classroom.

CALL as a research field has received considerable attention over the past few years, and a number of studies have attempted to identify the characteristics and limitations of research taking place in the field (Stockwell, 2007). CALL is traditionally described as a means of presenting, reinforcing and testing particular language items. The learner is first presented with a rule and some examples, and then answers a series of questions which test her or his knowledge of the rule and the computer gives appropriate feedback and awards a mark, which may be stored for later inspection for the teacher (Gunduz, 2005).

The use of computers in language learning can be distinguished into two different categories: tutor and tool. Creating a division in the world of computer applications for language learning became popularized in Levy (1997) (Hubbard, 2005). This division is based upon the specific functioning role of the computer. Using computers as a tutor allows the students to complete language learning exercises. These teaching exercises are typically found in multimedia programs that include grammar, reading, listening, and speaking activities. On the other hand, using computers as a tool means that students are using them for communication in the L2, such as discussion boards or emails.

These tool based activities are more closely related to socio-cultural aspects of language learning (Fischer, R., 2007). Many proponents of Computer-Assisted Language Learning (CALL) have advocated the development of communicative computer programs that provide opportunities for meaningful communication (Garrett, 1991; Lavine, 1992; Lambek, 2004; Fukushima, 2006). Although some educators have decried the use of computers as electronic workbooks for drill and -

practice exercises (Chun & Brandl, 1992; Underwood, 1993), others have advocated their use for tutorials and drills to free up more classroom time for real communication (Gilby, 1996; Hoffman, 1996).

Three second language acquisition (SLA) perspectives **Input Perspective**

Input perspective states that we acquire language by using what we know couples with new information, or $i+1$. Krashen (1997) believes that language, which contains only structures that we already know, does not aid in acquisition. This is just i . Acquisition is a result of $i+1$, or current knowledge plus input just a bit beyond that, with the comprehensible input being the most important thing. Several CALL research studies conducted within an input perspective have attempted to explain the meaningful input with computer become helpful for the learner. However, all research of input perspective focused on the positive effects of computer applications comparing with conventional learning tools or methods.

In Schaefer's study (1981), he compared the computer-based semantic practice with structural practice. He claimed that practice is important for the internalization of input and meaningful practice being effective in second language acquisition. In his study, learners were subjected to two sets of computer-based drills: semantic practice and structural practice. Results indicated that semantic practice is more effective than structural practice in terms of success on semantic measures and that both kinds of practice are equally useful for structural measures (grammar tests). Thus Schaefer (1981) concluded that meaningful practice leads to the acquisition of grammar structures and further that meaningful content processing results in better understanding. This study emphasized the importance of meaningful and comprehensible input when we design the activities with the aid of a computer. However, his research is poorly designed, with the participants and tests in the study not clearly stated.

Some researchers (Johns, 1991; Dodd, 1997; Fernandez-Villanueva, 1996) have provided evidence of input perspective with the concordancing program. These studies proved Krashen's input perspective that context provides the key information necessary to allow $i+1$ input to be comprehended and incorporated into the developing languages. However, all these studies were too restricted to the effectiveness of the concordance program itself for grammar instruction.

Johns (1991) and Dodd (1997) examined the practice with the aid of computer software to understand meaning and grammar. They commonly found that the teacher facilitates students to research into language without knowing in advance what rules or patterns are used. Consequently, students are encouraged to make one up in their own terms. Fernandez-Villanueva (1996) emphasized the fact that the concordancing program provides more input and motivation than regular classroom exercises in her German language classrooms. Similarly, Johns (1991) supports the view that learner's own discovery of grammar based on more input and motivation becomes central to the learning process and acquisition takes place during comprehension rather than production.

Doughty (1991) compared three kinds of computerized instruction; a rule-oriented instructional group, a meaning-oriented instructional group, and a control group. All subjects were presented the same reading texts on the computer, but the rule-oriented instructional group received explanations of the grammatical rules in relative-clause constructions, the meaning-oriented instructional group was encouraged to focus on both the content and structure, and the control group was

merely exposed to the reading texts. While both the rule-oriented instructional group and the meaning-oriented instructional group improved equally well in relative-clause and significantly better than the control group, the meaning-oriented instructional group performed best in comprehending the reading texts.

Similarly, Robinson's study (1996) employed computerized instruction to teach both simple and complex structures of English under several conditions. All subjects were presented the same target sentences on the computer, but, for example, the rule-instructed subjects were asked linguistic questions regarding the sentences, the rule-search subjects were asked if they identified any rule in the given sentences, and the implicit subjects were instructed to memorize the target sentences. The rule-instructed subjects performed significantly better than the rule-search subjects and the implicit subjects for the simple structure on the grammaticality judgment test. The rule-instructed subjects also outperformed the other groups for the complex structure although the difference was statistically significant only between the rule-instructed subjects and the rule-search subjects.

As demonstrated by all research studies above, most CALL empirical studies are focused on the use of computer application itself and instructional methods with the aid of a computer to provide comprehensible input to support learning in narrow areas. Also, findings for all meaningful use of computer application are positive. In this case, some questions are raised: how do technology-enhanced language learning (TELL) classroom environments, not a single computer application, support the input perspective for optimal language learning? What are negative results as well as positive results in TELL classrooms?

Output Perspective

The input perspective does not exclude a role for the learners' output in assisting language learning. But, from the input perspective, the role of the learners' output is usually seen as secondary and indirect. However, Swain (1985, 1995) argues "there are roles for output in second language acquisition that are independent of comprehensible input," (Swain, 1985: 248).

He believes that output may be used as a way of trying out new language forms and structures as learners stretch their interlanguage to meet communication needs; they may produce output just to see what works and what does not. CALL empirical research studies on output perspective are mostly comparative studies, and there is a tendency among these comparative studies to limit the types of CALL programs to tutorial or drill-and practice in attempting to replicate closely traditional instruction.

Swain's study (1985) emphasized the comprehensible output very well. His software use was for drill and practice because it is easy to make conclusions. He indicated that sixth-grade French immersion students perform similarly to native speakers on those aspects of discourse and sociolinguistic competence which do not rely heavily on grammar for their realization but their grammatical performance is not equivalent to that of native speakers (p. 251). The immersion students in his study received enough comprehensible input with software, but their "comprehensible output" was very limited. Swain inferred that producing language, as opposed to simply comprehending the language with software, may force the learner to move from semantic processing to syntactic processing, thereby facilitating more grammatical competence.

Swain also refers to the phenomenon of individuals who can understand a language and yet can only produce limited utterances in it. A ninth-grade immersion student said, "I understand everything anyone says to me, and I can hear in my head how I should sound when I talk, but it never comes out that way," (Swain, 1985: 248). This indicates that comprehension does not necessarily transfer to production.

Van Patten and Cadierno (1993a, 1993b) examined the effects of two types of instruction, traditional instruction and processing instruction, in both interpreting and producing Spanish object pronouns in object, verb, and subject (OVS) and object and verb (OV) order. The traditional instruction involved grammatical explanations and output practice, while the processing instruction involved grammatical explanations and comprehension practice. These two kinds of instruction were also different in the grammatical information provided and the instructional approach adopted. The result of their study indicates that the processing group performed significantly better than the traditional group on comprehension post-tests and equally well on production post-tests. Van Patten and Cadierno concluded "instruction is apparently more beneficial when it is directed at how learners perceive and process input rather than when instruction is focused on practice via output," (1993a, p. 54; 1993b, p. 240). A few years later, DeKeyser and Sokalski (1996) replicated Van Patten and Cadierno's study using two different target structures: the Spanish direct object (the same structure used in Van Patten & Cadierno's study) and the Spanish conditional, which is more complex and difficult to produce. DeKeyser and Sokalski's study eliminated extra variables by providing the same grammatical instruction and exercise content, so the comparison was entirely between comprehension practice and production practice. The results of the immediate post-test show that for object, the input practice group performed better in the comprehension tasks and the output practice group performed better in the production tasks. For the conditional, the output practice group outperformed the input practice group in both the production and the comprehension tasks. These differences faded in the long term, however. The results indicate that "the relative effectiveness of production versus comprehension practice depends on the morphosyntactic complexity of the structure in question as well as on the delay between practice and testing" (DeKeyser & Sokalski 1996, p.231).

Nagata (1998) used two different computer applications for grammar instruction. She performed an experiment concerning the relative effectiveness of computer-assisted comprehension practice and production practice in the acquisition of a second language. Two computer programs were developed: (a) an input-focused program providing students with explicit grammatical instruction and comprehension exercises and (b) an output-focused program providing the same grammatical instruction together with production exercises. The study employed computer software to provide various types of comprehension and production tasks and examined the relative effectiveness of comprehension and production practice in the acquisition of Japanese honorifics. The results of the study suggest that given the same grammatical instruction, output-focused practice is more effective than input-focused practice for the development of skill in producing Japanese honorifics and is equally effective for the comprehension of these structures. Increased effectiveness of production practice over comprehension practice was observed in both written and oral

production. The analysis of different types of exercises suggests that the relative advantage of production practice may be greater in tasks involving complex syntactic processing than in tasks requiring less syntactic processing. The results support Swain's argument that there are roles for output in second language acquisition that are independent of comprehensible input.

Kern (1995) compared web discussion with oral discussion. He found that students had from two to three times more turns (opportunities) and produced two to four times more sentences and more words in the web discussion than in the oral discussion. Similarly, Sullivan and Pratt's study (1996) provide indirect support for an increase in learner language production in the electronic mode by attesting to the drastic reduction of teacher talk in favor of student production. However, in both studies, their research methods were not appropriate. They used several rough measures of language productivity (length of learner output in terms of number of words, sentences, and turns) that are difficult to interpret because of the lack of controlled comparisons with face-to-face language production under equivalent conditions (such as number of participants, plus or minus teacher participation, etc.).

There are also research studies that show that the first language is minimized in electronic discussion (Beauvois, 1992; Kelm, 1992; Chun, 1994; Kern, 1995). However, it is difficult to establish links between the amount of language produced and the relative time that was actually invested in it (i.e., composing messages) because of the individual freedom in electronic discussions to allocate time and effort to several tasks, such as reading others' messages, editing and revising one's own contribution before sending it, and so forth. In addition, the quantity in analyses of computer assisted discourse does not provide any indication of the extent to which the output in question is competence expanding: amount in practicing may not be relevant from a language development (Chun, 1994).

In summary, CALL studies with output perspective emphasize the importance of comprehensible output. However, like CALL research with input perspective, CALL empirical research studies with output perspective are also mostly comparative studies and there are limited to the types of CALL programs to tutorial or drill-and practice. Such experiments on learning rules of a language required learning specific aspects of a language not of the learners' choosing for short duration determined by the researcher. Although such experiments carefully model the desired cognitive characteristics for formal learning, critical elements of learner motivation and communicative language use are likely to be missing. In fact, given the artificiality of the learning situation created by the laboratory experiment, Hulstijn (1997) warns that "without additional research in real L2 learning environments, one should be extremely cautious in drawing immediate conclusions from laboratory studies to language pedagogy" (p. 132). Even, we can find similar limitations in CALL studies with interaction perspective.

Interaction Perspective

Interaction perspective has been articulated primarily through research programs on the role of linguistic input and interaction in Second Language Acquisition (SLA) in instructional settings (Gass, 1997; Long, 1996; Pica, 1994). The interaction perspective claims that linguistic input needs to become intake in order to be acquired by the learner. Intake refers to input that the learner has comprehended both

semantically and syntactically. Importantly, linguistic input that has been comprehended semantically may be of limited help to the learner because semantic comprehension is often accomplished by recognition of isolated lexical items or interpretation of non-linguistic cues with the help of existing schema (Hegelheimer & Chapelle, 2000).

Also, learners are most likely to notice linguistic form during interaction. The most useful interactions are those which help learners comprehend the semantics and syntax of input and which help learners to improve the comprehensibility of their own linguistic output. Such beneficial interactions can occur in a number of different ways depending on the situation. In face-to-face conversation, comprehension can be achieved through negotiation of meaning that occurs during communication breakdowns when learners are confused about meaning or syntax and are therefore unable to comprehend the message at first. One reason that negotiation of meaning is valuable is that it can result in modified input - input which is better tuned to the learner's level of ability. Doughty (1987) pointed out that interaction modifies through "confirmation checks, comprehension checks, and clarification requests and repetitions or paraphrases of a previous speaker's utterances" (p.155). Like other perspectives we discussed, CALL empirical studies with interaction perspective are product-oriented to evaluate the effectiveness of CALL.

The possibility of computer-mediated interaction was well illustrated by St. John and Cash (1995). Their study used analysis of texts and learner self-reports to investigate the effects of a six-month e-mail exchange between a high-intermediate learner of German and a German native speaker. The learner systematically studied the new vocabulary and phrases that he read in his incoming e-mail and stored the e-mail messages for later study. When he wrote letters, he reviewed the past messages and made special effort to put to use the new vocabulary and phrases, a process which the authors claim dramatically assisted his language learning. Even though the native speaker offered no explicit linguistic feedback, the learner was able to make many corrections, especially at the lexical level, by noticing the difference between his usage and the usage of his partner. By the end of the six months, striking progress had also occurred at the syntactic level, with the learner using more complex structures, longer sentences, more correct word order, and more natural German (St. John, Cash, 1995: 193).

Schultz (1996) tested the potential of interaction in second language writing classes, by comparing various combinations of face-to-face and computer-mediated peer review in eight intermediate French courses. She found that for most groups a combination of the two media worked best. She claimed that face-to-face interaction, with its fast pace and fluidity, allowed students to stop frequent digressions that seem to feed positively into idea generation. Written comments focused more in depth on one or two points, and these points were more likely to be incorporated into revisions.

Taken together, the two modes allowed superior co-construction of knowledge than either mode alone. The benefits of adding computer-mediated interaction as an additional component of peer review were more pronounced for students in French 4 classes than for those in French 3 classes; Schultz concluded that their higher level of language allowed them to make better use of the electronic medium for sharing of ideas. Whether the same results would result from e-mail communication remains to be seen; first language

studies have indicated a superiority of e-mail to oral communication for peer review (Hartman, et al., 1991; Mabrito, 1991; 1992).

Toyoda and Harrison's study (2002) examined negotiation of meaning that took place between students and native speakers of Japanese over a series of chat conversations and attempted to categorize the difficulties encountered. The data showed that the difficulties in understanding each other did indeed trigger negotiation of meaning between students even when no specific communication tasks were given. Using discourse analysis methods, the negotiations were sorted into nine categories according to the causes of the difficulties: recognition of a new word, misuse of a word, pronunciation error, grammatical error, inappropriate segmentation, abbreviated sentence, sudden topic change, slow response, and inter-cultural communication gap. Through the examination of these categories of negotiation, it was found that there were some language aspects that are crucial for communication but that had been neglected in teaching, and that students would not have noticed if they had not had the opportunity to chat with native speakers.

2.3. 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).

Categories of CALL

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

This category 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.

Communicative CALL

Based on communicative approach, 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.

Current SLA Theories pertaining CALL

While there are multiple theories in the literature that attempt to explain Second Language Acquisition (SLA) theory as it relates to Computer-Assisted Language Learning (CALL), the following mentioned theories seem more related to CALL as one of the most fruitful means of EFL teaching/learning.

Interactionist Theory

Mackey and Gass (2006) indicated that interactionists claim, in addition to manipulation of input through interaction, learners need *opportunities to receive corrective feedback* to be able to better regulate language production or output. There are a number of studies in the Second Language Acquisition literature that are based on the interactionist perspectives. Hsu (1994) interpreted learners' requests for help as a way for

learners to overcome the breakdowns in understanding what they experienced when interacting with an aural passage. Liou (1997) used the interactionist account because from her viewpoint, the design of the courseware reflected the interaction negotiation model proposed by Long (1991). As Long (1991) indicated, one of the key components of the interactionist theory is that only the input that is noticed or apperceived can become beneficial. It provides guidance for the design of instructional materials, which should contain features that enhance input through modifications.

Revisiting Ellis' (1999) work on interaction, Chapelle (2003) identified three types of basic interaction: interpersonal (between people), intrapersonal (within a person's mind), and that which occurs between a person and a computer (learner-computer). Chapelle noted that most users are accustomed to initiate learner-computer interaction when they click on a hypertext link to receive help with comprehension or seek dictionary help. One benefit of learner-computer interaction identified by Chapelle was that of obtaining enhanced input. Chapelle (2003) noted that SLA researchers agree that enrichment of input is more beneficial for learning than simplification because learners are exposed to forms closer to the ones used by native speakers of the language.

Drawing on interactionist SLA theory and Computer-Assisted Language Learning (CALL) research, Chapelle (1999) suggested that interactions in CALL may be beneficial for language development if they focus learners' attention on input form, allow for modification so learners can focus on input form and meaning, and draw learners' attention to the form of their linguistic output in a way that leads to self-correction (Mills, 2000).

Chapelle (1989) asserted that applying the theory and methods of interactionist research to CALL requires an expansion of the conception of negotiation of meaning in two ways. First, negotiation of meaning needs to be seen not only in face-to-face spoken conversations but also in written communication that occurs over networked computers. A second and more extensive expansion of the definition of negotiation of meaning is seen when the modified interaction take place between the learner and the computer. The computer program created the opportunities for modified interaction by offering modified input to the learner on demand. The data documented that the learner actually engaged in modified interactions by requesting and receiving the modified input, i.e., aural repetition and written text (Chapelle, 1989). Theory and research have suggested that the saliency of the target language input (Doughty, 1991; Sharwood Smith, 1991) and opportunities for production of comprehensible output (Swain, 1985; Swain & Lapkin, 1995) are important for acquisition. These claims point to other observable interactions that can be documented in CALL activities, such as whether learners are shown input that highlights relevant linguistic features and whether they correct their linguistic output to make it comprehensible.

Chapelle (1998) stated that a frequently cited research advantage of Computer-Assisted Language Learning (CALL) is the built-in data-collecting methods that can document learners' interaction as they work on learning activities (Bland, Noblitt, Armington, & Gay, 1990; Doughty, 1992; Jamieson & Chapelle, 1987). Chapelle (1998) suggested that such data can provide researchers with detailed information about learners' interactions and performance.

Sociocultural Theory (SCT)

The sociocultural theory (SCT) is a theory under the umbrella term of constructivism. Constructivism is a theory that asserts that humans generate knowledge and meaning from an interaction between their experiences and their ideas. It is an interaction between their experiences and their reflexes or behavioral patterns. Constructivism is not a specific pedagogy, nor a novel concept. It is a basic learning process theory known by educators for years. For constructivists, learning is constructing your own knowledge through *social interaction* with others. It is a process of thinking, and learners figure out knowledge by themselves. When we think of constructivism, we are looking at it in terms of a way that is typically set up in a classroom with groups of students working together, building and sharing. Within the constructivist paradigm, the focus is on the learner rather than the teacher. It is the learner who *interacts* with her or his environment that gains knowledge through this self-learning process.

The Zone of Proximal Development (ZPD) is a theory developed by a prominent psychologist and social constructivist, Lev Vygotsky, stating the difference between what a learner can do without help and what she or he can do with help. Vygotsky stated that a child follows an adult's example and gradually develops the ability to do certain tasks without help or any assistance. Vygotsky (1978) provided the definition of ZPD as the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving with the assistance of an adult (an expert), or through collaboration with more capable peers (novices).

Several CALL researchers see sociocultural theory (SCT) as a potential way to frame and interpret findings in CALL (Levy & Stockwell, 2006; Ganem-Gutierrez, 2003; Warschauer, 2005). Although the current study is based on interactionist theory, the researcher believes that CALL can also be examined through the lens of the sociocultural theory. Cardenas-Claros and Gruba (2009) claimed that framed by sociocultural theory, CALL can also be seen from the perspective of the novice-expert account. In this way, CALL could be seen as the *experts* who possess additional information a *novice* may need to understand learning materials. As learners (novices) experience difficulties, they may request additional forms of enhanced input through CALL. Once learners are exposed to different forms of enhanced input, it is likely that they will be able to better perform second language tasks.

Chapelle's (2009) contribution to the relationship between SLA theory and CALL not only updated and expanded the theoretical concerns Garrett raised in 1991 but also provided an expert, in-depth exploration of the issues. Garrett (2009) urged scholars in the field of CALL to remind themselves and those outside the field that "CALL is not shorthand for „the use of technology“ but designates a dynamic complex in which technology, theory, and pedagogy are inseparably interwoven" (Chapelle, 2009, p.719). She argued that the pragmatic goal of Computer-Assisted Language Learning (CALL) developers and researchers to create and evaluate learning opportunities pushes them to consider a variety of theoretical approaches to second language acquisition (SLA), which have developed partly in response to the need to theorize the role of instruction in SLA.

To illustrate connections between SLA and CALL, Chapelle (2009) touched on multiple theoretical perspectives grouped into four general approaches:

- 1) cognitive linguistic (Universal Grammar, autonomous induction theory, and the concept-oriented approach);
- 2) psycholinguistic (processability theory, input processing theory, interactionist theory);
- 3) human learning (associative-cognitive creed, skill acquisition theory); and
- 4) language in social context (sociocultural, language socialization, conversation analysis, systemic-functional, complexity theory).

Chapelle (2009) suggested that the above theoretical approaches can be useful in the development and evaluation of CALL materials and tasks. She proposed that the expanding use of technology changes the nature of communicative competence theory, challenges SLA theory, and increases the number of consumers for SLA research. Garrett (1991) referred to the implication for instruction as "Since so complex an ability can hardly be „taught“, our job is to create an environment in class or in our materials in which students can work on acquiring that ability. The power of technology as a medium for supporting new kinds of language learning activities is multiplied by its potential for an unprecedented integration of research and teaching.

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.

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.

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. Intratrat (2009) developed a self-access CALL material to improve English writing skills for Thai undergraduate students.

Advantages 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).

CALL has great potential for use to facilitate the English language teaching and learning. 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 teaching situations or learning context. CALL programs also create the opportunity for autonomous learning. Students are able to learn when and how they want, as well as control the speed at which they are learning (Lasagabaster, D. & Sierra, J.M., 2003).

Another perceived benefit of CALL programs is that the learners can work at their own pace, and if required in privacy. In other words, CALL programs have the ability to create an environment which may lessen the anxiety that can sometimes be present in the language learning context. Speech is an inherently social action which requires a co-participant in the dialogue.

In a CALL program, co-participants can be created for the learner as speech-enabled animated agents, which can introduce a social aspect to a language learning activity and which crucially can be a virtual interlocutor with which a learner can practice their target language (L2) speaking skills. Speech recognition technology is used to allow the learner to interact with the character who can then respond to the learner in a number of conversational turns. Through a speech enabled CALL system, oral language practice need not be restricted to limited class time. In addition, speech enabled CALL systems

can also help students who feel anxious practicing their oral language skills in public (Wachowicz & Scott, 1999).

Ewing (2000) also believes that students find chances for improvement in CALL environment which are unavailable in traditional L2 classrooms. Learners can receive immediate feedback about their answers and correct their errors from the system.

Finally, 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.

Disadvantages of CALL in Language Learning

A considerable disadvantage of CALL is the initial cost. Computers, various programs, accessories such as microphones, and copy rights can place a financial burden on educational facilities. But, once these initial costs have been incurred, computer technology is considerably lower than traditional classroom instruction. Additionally, when CALL is used a scaffolding technique, students are able to work independently. This creates an opportunity for the students to play interactive learning games, repeat lessons as often as necessary, and potentially relieve the stress and anxiety of learning a second language. The classroom instructor is therefore allowed more time to concentrate on the areas of second languages which are still difficult to learn by the use of a computer. These areas generally include oral aspects such as spoken dialogue or formal presentation practice (Lai, C., & Kritsonis, W. A., 2006).

Occasionally, even the most obvious disadvantages are overlooked in adult education. Things that are as fundamental as basic literacy are often a priority in adult education. A great concern for many adult educators is that in order to use CALL in the classrooms, students must have a literacy level that will allow them to take advantage of the technology. Many public access and other important websites are written at a literacy level that some adult students will be unable to understand. The "Digital Divide" report released by the Children's Partnership in 2000 estimated that some 44 million American adults lack functional literacy skills (Children's Partnership, 2000). Additionally, many websites do not offer translations into other languages or any other potential form of assistance to non-English speakers. Both of these can create an unexpected negative downside to using technology to teach a second language. Instructors therefore need to be aware of the students they are teaching and address issues, such as illiteracy, as needed (Terrill, L., 2000).

A further look into the disadvantages of CALL reveals the distinct need for not only students, but also instructors to have a basic ability with computers. In order for instructors to be able to fully assist their students, they must have a thorough knowledge not only of the programs the students will use, but also how the computer itself will interact with these programs.

Instructors need to be able to clarify, assist, and aid intertechnical problems that can occur. This disadvantage will require schools to provide educational training to their instructors (Terrill, L., 2000). Therefore, according to Roblyer (2003), the benefits of CALL are nonexistent for those students who are not familiar with computers.

An additional disadvantage of CALL is the lack of sufficient language learning software programs. Many of these computer programs are still imperfect; the majority dealing primarily only with reading, listening, and writing. These are

welcomed supplementary tools for language learning, but most language learners usually learn a language in hopes of being able to speak the language. Oral aspects of CALL have been increasing in the recent past, but many programs lack the ability to evaluate the appropriateness of a user's spoken input. According to Warschauer (1996) a program should ideally be able to, "diagnose a student's problems with pronunciation, syntax, or usage and then intelligently decide among a range of options."

Not all students enjoy using CALL to learn a language. In a survey by Scholfield and Ypsiladis (1994) students were independently interviewed about their CALL opinions. The survey participants found the CALL programs easy to use, which lead Scholfield and Ypsiladis to conclude that the negative views of CALL that some students have is not a result of technological inexperience. In fact, the participants cited their main reason as being the feedback that the computer provided. For example, some language learning software programs are unable to recognize correct answers that are simply misspelled and some do not provide a thorough explanation as to why certain answers are more appropriate than others. Often the software program is only able to recognize one particular answer. If a student misspells or places the accent on the wrong part of the word, the whole answer is then incorrect. In Murday, K *et al* (2008) participants in their study specifically noted how aggravating this aspect of CALL was, especially for those students who had difficulty simply typing in the correct accent marks. Some participants even went as far as to complain about their disappointment over having to spend time resolving these technical issues rather than concentrating on learning the language. This created a sense of frustration and anger among the students. Ultimately, this means that since many students find CALL programs easy to initially use, if they are unhappy with certain CALL programs, the blame cannot be placed on technological difficulties. The blame must be placed rather on design aspects of the program itself that are insufficient and unhelpful.

Language teachers sometimes have barriers, which are related to the system, such as viruses, connection problems or problems caused by the students unconsciously. Second language learners' learning situations are various and ever changing. Due to the limitations of computer's artificial intelligence, computer technology is unable to deal with learners' unexpected learning problems and response to learners' question immediately as teachers do. The reasons for the computer' inability to interact effectively can be traced back to a fundamental difference in the way humans and computers utilize information (Dent, 2001). Blin (1999) also expressed that computer technology with that degree of intelligence do not exist, and are not expected to exist for quite a long time. In a word, today's computer technology and its attached language learning programs are not yet intelligent enough to be truly interactive.

People still need to put effort in developing and improving computer technology in order to assist second language learners.

Imperfect language programs lead to the final major disadvantage of CALL: the lack of ability technology has to deal with unexpected and surprising situations. Anyone who has studied a second language would be able to share the endless variety of situations that can transpire when learning a language. The ability to have a living instructor in the classroom to assist with this is a clear and distinct advantage

of traditional instruction. In part because of the limitations of computer's artificial intelligence, computer technology is unable to cope with various unplanned learning problems and questions that can arise from language learners. Since humans and computers still process information differently, this may continue to be a disadvantage for some time (Lai, C., & Kritsonis, W. A., 2006; Felix, U., 2005). Stepp-Greany (2002) found that most students considered the presence of their instructors to be an important aspect of the learning process. Additionally, these students agreed that the instructors help to facilitate instruction in CALL environments where the cultural knowledge, communication skills, and confidence in learning could be enhanced by having the instructors present.

Chapelle (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 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), there are relatively few persons who 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.

Issues for CALL Normalization in EFL Context

Normalization, as an end state in itself is significant in the field of language teaching on the following grounds: First of all, normalization is the gateway that leads us to the vast world of educational evolution through connecting us with the past literature. Normalization makes this connection feasible as it treats CALL like any other innovation among myriads of innovations. Not that it downgrades CALL but it tries to induce the feeling that CALL is not something unique that should be avoided (Fullan, 2005).

The second merit of normalization builds on the idea that it makes practitioners keep pace with the most recent and state-of-the-art studies on educational change and advancements. It advances humans capacity on how to cope with this educational change and builds their know-how on the way that these innovations function and integrate into our everyday life (Rogers, 1995). This knowledge is undoubtedly of certain value to ELT profession in a computer assisted environment. Moreover, it is of undeniable value to CALL practitioners to base their research partly on the findings of the pertinent literature concerning the more meticulous analysis

and discussion of new technologies and also in part to direct their focus to the new aspects of the emerging innovation all with one aim which is helping CALL move towards normalization. Accordingly, the usefulness of normalization finds significance in ELT in that it draws on insights from that wider literature on how human beings deal with change in general.

The third merit of normalization which is actually an amalgamation of the first two provides CALL practitioners with an objective aim and agenda. In fact, normalization sheds light on the path stretched between computer application in one end and language teaching in another with the aim of making CALL as unremarkable in ELT setting as BALL and PALL (Chambers & Bax, 2006). Using technology has a very bright condition in many countries. However, CALL is not fully implemented in many educational institutions. There are many issues should be considered to make CALL normalized in these settings. The following section will discuss the issues CALL practitioners should bear in mind when CALL is to be implemented.

Personal Issues

Technology without human beings cannot create a good environment for language teaching and learning. Also, the users of technology have very important roles in the processes of language teaching and learning. Many issues related to individuals (i.e. teachers, students, and administrators) should be considered when CALL is integrated. There are some external factors that influence the teachers' use of CALL in their instruction. These factors are: ICT knowledge, lack of support from administrators, training, and accessibility, scheduling problems, lack of time to prepare lessons, connectivity, and home access. There are some other internal factors that influence the teachers' use of CALL in their instruction (e.g., teachers' attitudes, and teacher beliefs). There are also some instructional factors that influence the teachers' use of CALL. Problems with assessment and teaching experience are some of these factors.

ICT Knowledge

There are some basic ICT skills teachers need to know in order to implement CALL well. According to the report done by Directorate General Education and Culture (n.d.) language teachers need to:

- recognize the individual learning problems of learners;
- make a careful and considered choice concerning the use of the media;
- check the truth of information content offered;
- develop efficient search techniques and be capable of conducting effective research with the help of the computer;
- be able to use standard software confidently and competently;
- make wise and critical choices of information found. (p.10)

Teachers' ICT illiteracy is a very crucial factor. Schemidt (1995), as cited in AlKahtani (2007), surveyed faculty who were still not using or integrating technology into their work and found that they did not use technology due to a lack of knowledge in operating them despite their awareness of the technology impact on education. Chambers and Bax (2006, p.473) point out that "for normalisation to take place, teachers and managers need to have enough knowledge of and ability with computers to feel confident in using them."

Nowadays, most of the learners are accustomed to using many types of technologies in their daily activities. This generation is described by many authors as the "net generation" and the people of this generation are called "the

digital natives". However, this does not mean that they automatically know how to study using CALL programmes in their learning. For CALL to be normalised, language learners need basic skills that are required for implementing CALL technology.

Training

The successful integration of CALL is also based on teacher training. Technology without teachers cannot create a good environment for language learning. However, teacher training in using technology is not enough. Teacher training should be done in two related directions: (a) using technology such as operating computer programs, and other applications; and (b) applying technology effectively for language learning. Teachers should be exposed to the latest trends in ELT methodologies and approaches. Teacher training does not mean its formal ways which mean attending seminars, workshops, and so on, but it can be occurred in different ways. As Chambers and Bax (2006, p.475) point out "One way of doing this is to see development not in terms of training workshops but as an ongoing process, possibly through the formation of teams of 'experts' working with 'non-experts'". A teacher in Park and Son (2009) recommended school-based small-group teacher training in which a CALL specialist visits the school and teach them how to use computers for language teaching to the current situation of the school. Chambers and Bax (2006, p.475) state that "If CALL is to be normalised, teacher training and development may best be offered in collaborative mode rather than in 'top-down' expert-to-novice mode." Unfortunately, many educational institutions are aware that their teaching staff needs ICT training, but very few realize that their learners also need ICT training. There are some important issues that language learners should be qualified with when they use CALL. For example, learners need to be trained properly for their written assignments, how to cite sources, and avoid plagiarism. Learners need to be trained to move from traditional face-to-face learning to be able to study in CALL settings. For CALL normalisation, language learners need to be qualified with the basic rules and conditions of using CALL materials.

Technical Support

Lack of technical support hinders the smooth release of language classes and affects the flow of classroom activities. The respondents of the Becta Survey (2004) stated that "technical faults might discourage them from using ICT in their teaching because of the fear of equipment breaking down during a lesson". Chambers and Bax (2006, p.476) pointed out that "Successful normalisation requires that teachers' concerns about technical failures, and their lack of skills to deal with such failures, be addressed and overcome by means of reliable support and encouragement"

It is also necessary to determine the teachers' existing technical skills and the gaps in teachers' ICT knowledge. There are some examples of checklists that can be used as a starting point to determine the technical skills language teachers need to know (e.g., ict4lt).

Time

Successful integration of CALL requires enough time to plan lessons, find suitable internet sites, and check software to choose the areas that are related to the objectives of the lessons, and so on. Jones (2001, p.365) points out that "what really prevents teachers from following an interest in CALL is lack of time, since they tend to be sufficiently burdened already by their conventional administrative and classroom duties." Chambers and Bax (2006, p.471) point out that "For

teachers to 'normalise' computer use within their daily practice, they may need additional time for preparation and planning."

Beliefs

Teachers' beliefs about CALL are shaped by their previous experiences as learners, by social, economic and political contexts. The environment where they grew up and the institutions where they worked are also important to shape the teachers beliefs about CALL and its benefits in language teaching and learning. Cuban (2001) as cited in Kumar and Tammelin (2008) pointed out that teachers will use technology only if they perceive it to enhance instruction. For CALL normalisation, teachers need to have positive attitudes towards CALL and its benefits in language teaching and learning. It is supposed that because the learners grow up in a technology environment, they have positive attitudes and beliefs about technology and its benefits for all aspects of life. A number of studies have examined the students' attitudes and beliefs about CALL. They concluded that many students had a positive attitude towards CALL. Today's learners are equipped with technology. Their use of technology enables them to be more confident in using CALL in language learning. Colley et al. (1994) as cited in McMahan, Gardner, Gray and Mulhern (1999) found that participation in a computer course significantly reduced anxiety and increased confidence among students (both males and females). However, this is not the case for all situations. There are still some situations in which learners are not ICT literate and they are afraid of using technology in their learning. For CALL normalisation, language learners need to have positive attitudes towards CALL.

Administrators Issues

To some extent, the administrators play a crucial role to make CALL successful. Their beliefs and attitudes towards CALL is an important factor. The way that they plan to use CALL is a significant factor that should be considered. The administrators need some basic ICT knowledge to accept the integration of CALL at their institute

Technical Issues

Many colleges install high-tech labs designed for language teaching and learning. However, the use of these labs does not match the objectives and the cost of their establishment. In many situations, language labs are not well exploited by language teachers and learners. This happens because of many factors, such as ICT location, and classroom organization. To make full use of computer technology in language teaching and learning, the following issues should be considered.

Location

Computer equipments should not be separated from classes. Instead, computers should be a part of the classroom. When computers are separated and put in language labs or "language learning centers", their benefits are reduced. Scheduling problems, unexpected breakdowns because of others use and class clashes are some examples of problems that may occur in such situations. Instead, the classroom can be equipped with enough computers and the learners can use them when required. Chambers and Bax (2006, p.470) point out that "for normalisation to take place, CALL facilities will ideally not be separated from 'normal' teaching space."

Organization

Classrooms with computer technology can be organized in different ways. Some ways will be easier and beneficial for effective use of CALL. There are many ways of organizing computer technologies in classrooms. Chambers and Bax

(2006, p.470) point out that "for normalisation to occur, the classroom will ideally be organised so as to allow for an easy move from CALL activities to non-CALL activities". It is important to locate the proper amount of and right types of technology where teachers and students can effectively use them.

Adequacy

In many cases, the teachers have basic ICT skills and they perceive the benefits of CALL and they are willing to integrate CALL into their instruction, but the resources are inadequate. The inadequacy of CALL resources can occur in different forms. Few computers devoted for language teachers and learners is one of the problems that face CALL integration. Pelgrum (2001) as cited in Becta (2004, p. 12) found that the most frequently mentioned problem when teachers were asked about obstacles to their use of ICT was the insufficient number of computer available to them. Also, inadequacy of CALL software is considered another issue that hinder CALL implementation. The teacher may not have enough options to choose the suitable software to match the content of a lesson. A third issue is that computers are not connected to the internet .

Quality

The quality of hardware, software is a factor that affect the integration of CALL. Preston et al. (2000) as cited in Becta (2004) suggest that teachers are less enthusiastic about using ICT where the equipment available is old and unreliable.

Pedagogical Issues

Technology should be used under the command of pedagogy. Textbooks can be designed in a way that requires CALL materials to be implemented. According to a teacher participated in the study of Park and Son (2009), "having a flexible curriculum is a first step to facilitate technology use in the class.

Methodology

Outdated methodologies do not require technology to be used. Old methods don not encourage the use of CALL materials. These approaches neglect the skills that language learners need for their future life. It can be assumed that new methods require new technologies. Therefore, for CALL normalisation, recent ELT methodologies are required so that it will urge for CALL implementation.

Textbooks

Almost all of the textbooks used for EFL learners are imported from European countries. Some of them were written for "any users". They may contain some aspects that these learners cannot cope with (for example, to talk or write about famous European film stars). Another issue is that most of these textbooks do not match the time allotted for them. Many units should be taught in a short period.

In this case, the teachers tend to finish the book in the prescribed time and then neglect some extra activities especially CALL activities. CALL activities are neglected because they will not appear in the final exams which will be held with pen-and-paper methods. Therefore, to make CALL normalised, the textbooks should be designed to suit the level of the existing learners and match the time allotted for them, and encourage CALL to be implemented.

The Objectives

It seems that many textbooks used for EFL learners do not match the EFL learners' needs and objectives. The selection of textbooks in many cases depends on surface factors such as the publisher, authors, the cost, the availability, and so on.

Most of these textbooks are attached with CALL materials (e.g., CD-ROMs and DVDs). However, their use is limited because of many factors. One of these factors is the objectives of these textbooks do not match the needs and objectives of the learners use them. Chambers and Bax (2006, p.474) pointed out that " progress towards normalisation may be enhanced by the use of 'authorable' CALL materials which allow teachers to tailor the CALL activities better to fit the existing syllabus aims, as opposed to the use of imported 'closed' materials."

Socio-Cultural Issues

The implementation of CALL is also influenced by the cultural perceptions of teachers and students. These perceptions are crucial factors for the implementation of CALL at any stage of CALL integration. There are some issues that can be discussed under the socio-cultural issues. The content and fear of influence are among them.

The content

Some CALL materials are considered irrelevant to some contexts. The content may contain some aspects which can be considered as "immoral" or "offensive". For example, a kissing scene between male and female can be considered immoral for many Arab EFL learners. The solution to this issue is encouraging teachers to use "authorable" software; this may help to achieve successful integration of CALL.

The participants to Albirini (2006) emphasized the need for Arab-made software that integrates the values, ethics and the way of thinking of Arab people. Fodje (1999) as cited in Albirini (1999) point out that What the world needs today is not talent in producing new technologies but talent in understanding the impact of technology on the society and individuals...Educational programs in the third world heretofore have been designed around the Western ideals.

These need to be reworked to reflect the indigenous cultures and promote human values while at the same time producing the talent for 'controlled' technological advancement. (p. 60)

Fear of Influence

The "digital age" facilitates culture transfer. This leads some people to think about anything coming from other cultures. They are afraid of the influence of "foreign" cultures on their young people. To some extent, this may affect the flow of CALL integration. Some CALL materials are not welcomed by these people because they do not match the culture of their learners. At first stages, local software or modified CALL can be used to overcome this kind of fear.

Institutional Issues

The success of CALL integration also depends on the objectives that the institution had chosen to implement CALL. The institution may implement CALL for quality assurance. It may be because of competition with other institutions. The fashion of ICT labs is an important aspect of modern universities that make many institutions tried to achieve. The level of administrative support to language teachers plays a major role in the success of CALL implementation. Administrative encouragement and rewards to the teachers are important factor to keep the dynamic of teachers in implementing CALL.