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Computer Assisted Language Learning – Some Aspects Taher Bahrani, Ph.D. Candidate

Abstract

There is no doubt that there have been impressive technological developments in the last few years affecting our lives one way or another. During this outstanding period in technological developments the computer and the Internet have been developed as the leading ones. The integration of different technologies such as computers has long been established in the field of language teaching and learning. Moreover, the pedagogical values and contributions of computers in language learning have been supported by many scholars.

In the same line, the present paper tried to provide some more insights regarding the integration of computer assisted language learning for language teachers as well as the learners. Accordingly, computer assisted language learning and its history were considered first. Then, the use of computer-assessed language learning based on behaviorist, communicative, and integrative approaches to language learning was considered. Finally, a detailed illustration regarding the advantageous of using CALL was investigated.

Key words: Technology, Pedagogical, CALL, Advantages

Introduction

Today, almost all aspects of our lives are affected in some way by emerging technologies such as computers. Computers have the ability to control countless devices in modern homes, such as those that generate electricity or purify water.

The development of Information Technology (IT) has embedded the application of computers in the language learning process. This very application of computer in language learning is known as Computer Assisted Language Learning (CALL). In this regard, a computer as a medium is used for the sake of facilitating people in language learning. However, a computer is solely a tool and a medium which is totally dependent on the users. In this case, the computer is considered to be a part of the entire language learning process (Hartoyo, 2008).

Recently, the use of CALL in language classrooms has increased all over the world in different language classrooms. In addition, many articles have been written about its role in language learning (Clark & Sugrue, 1991; Hubbard, 1998; Clifford, 1998; Phillips, 1998, just to name some). Although the potential of the Internet for educational use has not been fully explored yet and the average school still makes limited use of computers for some reasons, it is obvious that we have entered a new information age in which the links between Information and Communication Technologies (ICT) and English as a foreign language (EFL) have already been established.

Computer Assisted Language Learning (CALL) has emerged as a kind of technology to aid reinforcement and assessment of authentic language materials to be used and learned.

More importantly and in relation to language learning, CALL highlights the role and the use of Information and Communication Technologies (ICT) in second/foreign language learning and teaching. It includes a wide range of activities, courseware development, pedagogical practice and research.

Nature of CALL Programs

Although CALL has been used since the 1960s, it still lacks research methods and a clear theoretical foundation (Chapelle, 1997).

The development of CALL can be divided into behaviorist, communicative and integrative as the three distinct phases (Warschauer, 1996).

Typical CALL programs present a stimulus to which the learner must respond. This is based on behaviorism which emphasizes habit formation through stimulus and response. In this regard, the stimulus may be presented in any combination of text, still images, sound, and motion video. The language learner responds by typing at the keyboard, pointing and clicking with the mouse, or speaking into a microphone. The computer offers feedback, indicating whether the learner's response is right or wrong. Some developed CALL programs also try to analyze the errors and help the language learner to learn the correct form.

CALL was implemented in the 1960's and 70's based on behaviorism when the Audio-lingual method was mostly used and provided the language learners with repetition and drills. However, some computer based programs are still being used based on behaviorism.

Traditional CALL programs presented a stimulus to which the learner had to provide a response. In early CALL programs the stimulus was in the form of text presented on screen, and the only way in which the learner could respond was by entering an answer at the keyboard.

Using the CALL based on the communicative approach focuses on the real world communication. Putting the communicative approach into consideration, CALL programs provide non-drill format of the materials, through different games, reading and text reconstruction.

Another approach is that of the integrative. Accordingly, multimedia computers and the Internet are used to provide authentic language input. These technological developments have brought text, graphics, sound, animation and video to be accessed on a single inexpensive computer.

CALL and Language Learning and Teaching

Computer Assisted Language Learning (CALL) is usually described as the computer-delivered combination of a large range of communications elements – text, sound, graphics, pictures, photographs, animation and moving video. Language learning is concerned with the development of communication skills and has traditionally and creatively exploited all these communication elements in its classroom context. Each media element has its own particular advantages in conveying particular kinds of messages and evoking particular kinds of language learner responses.

According to CALL, communication and language use are not a one-way process. Multimedia environments provide a further and more powerful dimension to communication when the control and manipulation of meaningful information is passed into the hands of the learner. The ability to interact with these communication elements via interactive CALL allows language learners to explore, discover, ponder, search, question, answer and receive feedback.

Authentic language input provided either through the internet or CD-ROMs is now accessible easily. Language learning via multimedia technology such as TV is already familiar to us. The expansion of the capacity and the speed of the World Wide Web can deliver real world audio/visual language input.

As language teachers, we regularly use in our classes teaching all the media types that go to make up multimedia. These can be written texts, pictures, sound, and video. Each of these delivers messages in a particular manner and can exemplify or elicit communicative language in its own particular way. Accordingly, multimedia delivers the ability to juxtapose these essential language learning media, they can now exist within the same space as each other.

Advantages of CALL

Many educators (Decker, 1976; Breland, 1996; Esteras, 2003; Hartoyo, 2006; just to name some) indicate that the current computer technology has many advantages for second language learning. The following are the advantages as stated by the above-mentioned experts:

• Interest and motivation

Traditional and classical language teaching in classroom can be monotonous, boring, and even frustrating at times. This can cause language learners lose their interest and motivation in learning. CALL programmers can provide student ways to learn English through computer games, animated graphics, and problem-solving techniques which can make drills more interesting.

• Informal language learning

CALL allows learners to learn the language even without having to attend language classes by creating a personal learning environment out of the classroom border.

• A compatible learning style based on the proficiency level

Language learners have different proficiency levels with different learning styles. Turning blind eyes to these factors will cause serious conflicts to them. In this regard, many computer based programs can provide different drills based on the language proficiency level of the learners. For example, from easy drills to very difficult ones or from slow drills to fast ones.

• Optimal use of learning time in formal and informal settings

Thanks to the portability of laptops, computer assisted language learning can be used anytime and anywhere. As a matter of fact, the time and place flexibility of using computer are two essential factors that enable language learners to choose appropriate time and place for learning.

Accordingly, Kiliçkaya (2007) stressed the importance of flexible learning, learning anywhere, anytime, anyhow, and anything you want, which is very true for the web-based instruction and CALL. Learners are given a chance to study and review the authentic language materials supplied by different computer based programs as many times they want without limited time.

• Feedback and error analysis

Students can sometimes benefit from feedback given by the computers. Computer can give instant feedback and help the students to solve the related language problem at the very first stage. Decker (1976) also argues that most significantly CALL provides instant feedback

correcting drill exercises and tests. It seems that Decker has based his arguments regarding the use of CALL in informal settings based on the behaviorist approach that emphasizes stimulus and response for habit formation. In other words, language learners use the computer which is a kind of technology in both formal and informal learning settings to do some repetition and drills which are believed by the behaviorists to boost language learning.

Kiliçkaya (2007) listed the advantages of CALL as giving immediate feedback, allowing students at their own pace, and causing less frustration among students. Moreover, computer database can be used by teacher to classify and differentiate the type of general. A computer can analyze the specific mistakes that students made and can react in different way from the usual teacher, which make students able to make self-correction and understand the principle behind the correct solution.

• *Repetitive practice*

Students have freedom of expression within certain bounds that programmers create, such as grammar, vocabulary, etc. They can repeat the course they want to master as many as they wish. However, I do not want to hold the view that repetition is beneficial to language learners or not. What I try to emphasize here is that computer technology gives the freedom to repeat any authentic language materials as many times as language learners need.

A survey on the advantageous of using CALL into language classrooms

In order to obtain more empirical evidence on teachers' attitudes and motivation toward the application of CALL into language classrooms at different proficiency levels, a survey was conducted.

Participants

The participants in this survey were 15 language teachers including 6 senior lectures and 9 M.A. holders. The participants have been teaching various English language courses at different proficiency levels for 3 to 11 years now.

Instruments

This research utilizes qualitative research methodology. In this relation, a sample questionnaire (see appendix I) which was verified prior to the main study during a pilot study was used as the instrument to collect the necessary data.

Procedure

The qualitative method of data collection was utilized through the use of a survey questionnaire. The questionnaire was designed to investigate language teachers' attitudes and motivation towards the use of CALL in language learning. This set of questionnaire contained 11 items

regarding teachers' attitudes toward the use of CALL. It should be mentioned that 4 of the items are related to the improvement of different language skills via the application of CALL (Appendix I).

Before the actual data collection was conducted, a pilot study was carried out to assure the validity of the questionnaire. To this end, the questionnaire was given to 5 trial language learners majoring in TESL. Then, the questionnaire was modified in order to achieve better results.

After the pilot study and the modification of the questionnaire, it was distributed to 15 language teachers including both males and females at 2 different universities in Iran to collect the necessary data.

Results

The results obtained from the questionnaire can be summarized as follow:

- 12 teachers in the study employed computer and computer based technologies such as the internet, face book, and twitter in their classes. Accordingly, the participants had a positive attitude toward the use of computer. 12 of them acknowledged that they use computer for the improvement of speaking proficiency and listening comprehension more than the other language skills.
- 3 of the participants had a negative toward the use of CALL. Accordingly, they preferred traditional print material rather than new technologies. However, those who said no to the use of technologies in language learning had no specific reason for that to be reported here.

Moreover, the analysis of the answers indicated that 11 participants used the CALL because they believed that CALL motivates their language learners. 12 participants also agreed that CALL can be best used for error correction. The error correction based on CALL can be supported by many educational programs designed to enhance different language skills particularly speaking and listening skills.

Thanks to the rapid developments in computer technology, language learners can also utilize various CALL-based programs in informal language learning setting without always having to wait for the teachers to feed the with language learning ingredients.

To sum up, the study tried to add more light on the current pedagogic rationale of incorporating CALL into language learning. However, the study could be expanded to find out the possible problems associated to the use of CALL in language learning.

Conclusion

Today, technology is growing so fast that no one can deny or avoid its effect on different aspects of our lives. Accordingly, many technologies such as computers have been used in language teaching classrooms. In the same way, the present paper aimed at considering the use of CALL based on some language learning approaches. Moreover, it considered some advantageous and disadvantageous of CALL.

The advantages of CALL can be outlined as providing motivation and autonomy for learner, compatible and time flexible learning, immediate and detailed feedback, error analysis, and a process syllabus. Some considerations must be given to the disadvantages of CALL, such as less handy equipment, high cost of education, lack of trained teachers and of CALL programs of perfect quality, and limited capacity of computers to handle unexpected situations.

However, CALL has certain advantages and disadvantages and teachers should know the strengths and weaknesses in applying CALL in ESL classrooms. It is agreeable that technological advancement and development has enabled the application of CALL programs in language learning and instruction. Even so, computer technology still has its limitation and weaknesses. Therefore, we must first realize the advantages and disadvantages of current CALL programs before applying them to improve our teaching or to help student learning. In the end, we can avoid the mistake in employing CALL program and get the maximum benefit for our ESL teaching and learning.

One important point to mention regarding the use of CALL is that the learning situation that a second-language learner faces is various and ever changing. Computers merely have artificial intelligence, and it cannot deal with learner's unexpected learning problem or response to learner's questions immediately as teachers do. Computer technology with that degree does not exist, and are not expected to exist quite a long time. In other words, today's computer technology and its language learning programs are not yet intelligent enough to be truly interactive.

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