The Impact of Computer-Assisted Language Learning in Teaching Vocabulary

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Abstract

This study aims at determining the effectiveness of using technological aids including computer in foreign language vocabulary acquisition. Firstly, it gives a brief introduction to the current situation of vocabulary learning and teaching in Iran, and then introduces vocabulary acquisition with CALL. There are some strategies that will help learners. There are many models of teaching and learning English using CALL such as: the audio-lingual model, the cognitive-code model, and the humanistic model.

Key words: vocabulary acquisition; CALL (Computer-Assisted Language Learning).

1. Introduction – Vocabulary Learning
When you learn a second language, you have to memorize its words and learn its rules. That is why learning a second language can be difficult and it sometimes makes us feel frustrated. Recognizing this fact, many people try to use many ways in learning English as a second language in order to make learning English easier and more joyful. One of the ways is utilizing a computer as a medium which can help us learn English effectively. We usually call it as Computer Assisted Language Learning (CALL).

Vocabulary is an important segment of any language as well as the basis of linguistic abilities. For most students in learning a foreign language, the first headache or difficulty they meet is usually remembering words. The size of vocabulary is an important standard to evaluate a learner’s English level. Without adequate vocabulary knowledge, a second language learner’s conversational fluency and reading comprehension will meet difficulties. Vocabulary is the foundation of a language.

Evans (1978) indicates that vocabulary has an important role in the development of the four language skills: speaking, listening, reading and writing. He claims that vocabulary can provide clarity and can enable the speaker to diversify language. He further points out that wrong use of vocabulary can lead to misinterpretation, while correct use of vocabulary makes it easier for people to read and write better, understand the main ideas and speak correctly. In this respect, Allen (1983) indicates that the reason for the importance of vocabulary is that: “through research, the scholars are finding that lexical problems frequently interfere with communication; communication breaks down when people do not use the right words”.

Vocabulary Teaching and Learning – A Weak Point

But in language learning and teaching, vocabulary has always been a neglected and weak point. Wilkins (1972) said, “Linguists have had remarkably little to say about the vocabulary and one can find few studies which could be of any practical interests for language teachers”. A decade later Meara (1982) mentioned that vocabulary had received short shift from applied linguistics. Ellis (1995) expressed the view that the situation had not changed significantly. But unfortunately students sometimes do not use context clues
properly because of their poor vocabulary knowledge and low vocabulary capacity. Moreover, Parry’s (1993) study found, a single context hardly gives enough information for an L2 reader to guess the full meaning of a word. In a word, a certain amount of vocabulary capacity is the necessity in second or foreign language acquisition. Learning, memorizing and application of vocabulary runs through the whole process of language learning for students.

**Situation in Iran**

Most Iranian students have been learning English as a foreign language for at least 6 years in secondary and high school, but they are still not able to express themselves adequately and fluently in English or understand what people say easily. The problem may lie in the traditional teaching method. For example, in a typical Iranian classroom, what students did first of all was to follow the teacher reading new words and expressions by repeating again and again. Then the teacher explained the new words one by one, until students felt bored and exhausted. In order to expand their vocabulary, students spent much time repeating and reciting words without knowing clearly how to use them correctly in practice. Many of them could read and understand English, but found it difficult to speak and listen to it. But recent years, with the development of new information technology, especially computer’s application in teaching makes it possible to get rid of the negative aspects that come from social, cognitive and material conditions. At the same time, it can improve the students’ vocabulary learning.

2. **CALL and Vocabulary acquisition**

CALL has recently become a focus of researchers who believe that computers are an effective teaching aid. Researchers have long been interested in examining the effects of pictorial and verbal annotations on L2 vocabulary learning, and have found that processing supportive information such as pictures and translations enhances language learning. In this respect, Chun and Plass (1996) emphasize the idea that associating lexical items with different types of media fosters richness of recall cues and increases the retention. They examined the impact of multimedia annotations on L2 vocabulary acquisition and
comprehension from a reading passage using a written production and a recognition test. The test items paralleled the modality in which the information was presented. They found that students performed better on both types of tests when both pictorial and written annotations were presented than when single or no annotations were accessed during reading. In addition, Jones and Plass (2002) found that the combination of two annotation types allowed for more than one retrieval route to the information in long term memory. They reported that those students who accessed both pictorial and written annotations as they listened to a multimedia-based aural French text performed better on a written vocabulary recognition test than those who accessed single annotations or no annotations at all.

There are several new features frequently used in CALL, including hypertext, hypermedia and multimedia.

**Hypertext** (Christopher & David, 2005, p. 37) refers to links among textual items, often indicated by key words set in underlined blue type. **Hypermedia** (Christopher & David, 2005, p. 38) refers to similar links as those used in hypertext, but instead of simply linking text to text, hypermedia involves linking various media such as sound, images, animation and/or video. **Multimedia** (2005, p. 39) refers to many of the same ideas associated with hypermedia, but hypermedia might only use of two types of media (e.g. text+sound or text+photographs).

Multimedia tends to features several media types including text, images, sound, video and/or animations. Multimedia can promote students’ vocabulary acquisition for its increasing students’ autonomous abilities in learning. It can also lower students’ awareness of teacher-centered feelings in classroom.

Hoogeveen (1995) concluded several good points by using computer in language learning. Firstly, learners respond to computer in a complex way and give the feeling of experiencing information instead of simply acquiring it. Secondly, the man-machine is more friendly interaction. Thirdly, students feel more fun from computer and learning becomes a happy process.
3. Vocabulary Acquisition Strategies with the Help of Computer

It is necessary for teachers to encourage students to develop their own vocabulary strategies and to improve and manage their learning with extensive reading and listening outside the class in order to gain the required exposure to vocabulary and build up word knowledge.

3.1 CALT for vocabulary’s Pronunciation, Morphology and Semantics

Effective language instruction should be of multisensory training in nature. That is, the lectures include students’ visual, auditory and tactile activities. Students whose sensory channels are matched with learning resources and learning environments would achieve statistically higher academically. Computer makes it possible for students to acquire vocabulary from sound, font/spelling and meaning of one particular word.

For the activities that can match students’ visual preferences, traditionally language teachers may write the material on the blackboard, or use teaching aids, such as handouts, pictures, films, charts, or even real objects in class. Students will learn more when information is adopted by a variety of learning channels than when only a single channel of learning is used. Nowadays, with the help of technology, one particular word can be learned through sound, picture and even three-dimensional animation. CD-ROM can promote vocabulary acquisition, pronunciation and independent learning and has a major contribution to make to the development of language teaching and learning.

3.2 Context

Vocabulary learning is more than the study of individual words. By learning words in context, the learner has to learn additional linguistic, semantic, syntactic, and collocational features of a word. Watching video programs or movies in English is the most common self-initiated contextualized vocabulary learning activity, while listening to audio streaming programs and playing computer games in English are also popular activities. Online-chatting
in English can also increase students’ awareness of the language. Aided by pictures, sound and flash animation, teachers could offer abundant interesting learning materials for learners.

3.3 Vocabulary game

For most English learners, it is frustrated and boring when reciting vocabulary. If an instructor uses appropriate vocabulary games to help students to learn, study may get the twice result with half the effort. On line games such as (vocabulary.co.il) is the perfect resource for practicing and growing the word power of students. Another program which is helpful is; (spellingcity) that lets the students create their own spelling lists.

4. Models of Language Teaching Using CALL

Relate to the software that is available in the field, there are many models of language teaching that can be applied in the teaching learning process. Since the supply of programs available changes so rapidly, there are five computer programs in the following models of language teaching which can be used by an English teacher in teaching English to their students: Encarta, Cambridge Advanced Learner’s Dictionary, Hangman, Scrabble, and Longman Student.

4.1. The Audio-Lingual Model

The audio-lingual model claims that language is learnt through the acquisition of association of stimulus and response; the aim of teaching is to get students are able to use structure, etc. automatically and unthinkingly in the appropriate situation. The techniques employed are usually drills in which students practice a particular, structural or lexical point until it becomes automatic, and exploitation activities which encourage transfer to less controlled situation. The prime belief of audio-lingual is that language is primarily speaking and listening, and that reading and writing are secondary skills that should be postponed as long as possible; the computer, however, depends almost totally on written language. For example, by using Encarta, not only can the students find the meaning of a word, but he or
she can also hear how the word is pronounced. And by using Longman Student, the student can do listening exercises.

4.2. The Cognitive Model

The computer use of drills has in fact shaded over into another model, that of cognitive-code learning. For the advantage of the computer over the language is that it can analyze what the student writes, see if it conform to the expected answer and tell the students minimally if he is right or wrong, maximally the nature of his mistakes. Correction by the computer is only an advantage if we believe that the student learns by conscious awareness as in cognitive learning. If the student is encouraged to do exercises in Cambridge Advanced Learner’s Dictionary, or Longman Student’s Dictionary, the computer will tell them if he is right or wrong. Some games in Encarta Kids, such as Word Scrabble and Spelling Bee can be useful for the student. Besides that, trying out Hangman and Scrabble can be a way for the student to exercise their English vocabularies.

4.3. The Humanistic Model

The other popular model of language teaching is the humanistic, a collective name covering the somewhat different of methods united by their emphasis on their value of second language learning to the individual’s own development, whether cognitive, emotional, social or whatever. The aim of humanistic teaching is not to relate the students to the use of language in the external world but to develop the internal world of his or her personality and mind. Computer puzzles and word games popular on computer, such as exercises in Cambridge Advanced Learner’s Dictionary, Word Scrabble, and Spelling Bee (Encarta Kids) can be useful for the students to develop the internal world of his or her personality and mind. Besides that, the students can also experience the exciting games of Hangman and Scrabble.

5. Conclusion

Computer technology has taken its rightful place as an important element of language learning and teaching. Different types of instructional modes, approaches, vocabulary
building activities and skills proved to be effective in developing children's and college students' vocabulary in L2 CALL environments. Practicing vocabulary in context, combining vocabulary with reading and writing activities, and providing the students with different lexical information about the words enhanced children and adult students' vocabulary acquisition. Integration of different forms of technology such as specially designed software, a Tutorial CALL, concordances, online lessons, multimedia contexts, interactive multi-modal materials, online dictionaries and e-books helped the student learn L2 vocabulary better.

References


