STUDY ON THE APPLICATION OF COMPUTER ASSISTED ENGLISH

VOCABULARY TEACHING IN COMPUTER-MAJOR COLLEGE

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Abstract

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Under the Supervision of Professor John Nkemnji, Ph.D.

Being a fundamental language unit, vocabulary is one of the most important parts in

linguistic expression. Vocabulary that students have learned have great impact on the

development of their overall linguistic skills. Therefore, vocabulary teaching has long been a

significant and basic part of school language acquisition in recent years. Aiming at improving the

effectiveness as well as arousing students' interests in vocabulary teaching and learning, this

research focuses on the application of computer assisted vocabulary acquisition.

With the extensive development of information technology, computer assisted vocabulary

teaching attracted the attention of a huge number of educational workers. It can not only provide

authentic texts, images, audio and video materials and other forms of educational resources for

teaching, but also supply some entertainment such as computer games for students' learning.

Being able to get immediate feedbacks of learning, it enables students to study independently. In

fact, under the Chinese teacher-centered education background, it is not so easy to change the

fact that traditional teaching mode have dominated Chinese classroom in years. So it is

imperative to seek for a practical way to improve teaching and independent learning.

The paper explores some articles that report on the application of computer assisted

English vocabulary teaching. At the beginning of the paper, the purpose and the significance of

the study is told. And then some articles about computer assistive learning and teaching are

reviewed. In the end, this paper concludes that to learn English well, it is very necessary to find a

new and effective way in both teaching and learning.

Keywords: vocabulary teaching, computer assisted, English learning

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Chapter I Introduction

Being a fundamental language unit, vocabulary is one of the most important parts in linguistic expression (Liu, 2007, p.134). For most of Chinese students in school, it can be treated as a basic linguistic skill while you learned English.

With difficulty in ahead of our English vocabulary teaching, a new way emerged gradually. This is what we called Computer Assisted Vocabulary Teaching (CALL). It was created for improving the effectiveness of vocabulary teaching and learning in senior high school, this research focuses on the application of computer assisted vocabulary and analyzation of its function for enhancing student's acquisition of vocabulary as well as comprehensive language skills (Levy, 1997).

With the extensive development of information technology, computer assisted vocabulary teaching attracted the attention of a huge number of educational workers. It can not only provide authentic texts, images, audio and video materials and other forms of educational resources for teaching, but also supply some entertainment such as computer games for students' learning(Tsou, Wang, & Tzeng, 2006). Being able to get immediate feedbacks of learning, it enables students to study independently.

In fact, under the Chinese Teacher-centered education background, it was not so easy to change the fact that traditional teaching mode have dominated Chinese classroom in years.

Statement of the Problem

The problem to be addressed is, how to get computer-major students involved in English learning especially in vocabulary. The problems in such an education background are pervasively existed in Chinese education system. Firstly, it was taken as granted to lie in teacher-oriented education system, vocabulary was not supposed to teach by teachers but rather

memorized by students themselves. The learning processes are tedious enough and weaken the confidence of student, they are forced to be crammed to memorize these irrelevant words and forget them in a short time. In a word, the traditional teaching way confused our students with heavy burden. Second, traditional Chinese teaching method used to attach much importance to grammar and tense instead of basic knowledge. They focused on the scores on the paper rather than practices in reality, consequently make our students less practical but more theoretical. Third, it was not easy accepted by students to change their own learning way, it might distract their concentration if they meet something brand new in terms of learning tools, like slide show, video or audio. Thus, based on the condition we analysis above, we may cast the following problems: Can computer assisted teaching application improved students' ability in terms of learning vocabulary? How will they achieve the expectation?

Definition of Terms

Computer assisted teaching (CAT): It was originated in U.S. in 1960s, and because of popularity of personal computers and the application of information technology. Computer assisted teaching refers to the teaching method of using computer as medium and an auxiliary tool during the teaching process to fulfill language teaching and learning tasks in a better way (Levy, 1997). Also known as CAT. Multimedia-CAT is CAT combined with using of multimedia in teaching. And Web-CAT is CAT with web.

Computer-assisted language learning (CALL): It is succinctly defined in a seminal work by Levy (1997) as "the search for and study of applications of the computer in language teaching and learning". CALL embraces a wide range of information and communications technology applications and approaches to teaching and learning foreign languages, from the "traditional" drill-and-practice programs that characterized CALL in the 1960s and 1970s to more recent

manifestations of CALL, e.g. as used in a virtual learning environment and Web-based distance learning.

Computer-assisted vocabulary teaching (CAVT): It is defined in the paper by Chang and Chu (2011) which can "contributes to a more positive attitude and better response from subjects, leading to a more significant vocabulary growth". Unlike the traditional way of vocabulary teaching, teachers could help students to improve the students' English ability by some prepared computer or online activities for vocabulary-building (Chang, 2011, p.125).

Purpose of the Study

The purpose of the study is to try to find a new way to change the old and traditional way of learning vocabulary, which can also help students arouse their interest in English learning, especially vocabulary learning.

Significance of the Study

In order to create an optimized environment for students, to mobilize their multiple senses and inspire them to raise passion towards learning vocabulary, we create Computer assisted vocabulary teaching application to help them change the way we used to adopt. Accomplished with Computer assisted vocabulary teaching application, we hope we can make the "boring" English learning more attractive and interesting as well as arose students' enthusiasm and efficiency. Under the help of computer, it may create a new way for students to use Computer assisted vocabulary in a reasonable and effective way, and choose a suitable teaching subject. We hope it is a positive trend, which shows the Chinese students a new method to learn vocabulary.

Methodology

The research will be conducted in and through the Karrmann Library at the University of Wisconsin-Platteville using the University of Wisconsin system UW-Search tool beginning Feb. 2016 through May.2016. Searches of the literature will be conducted via the Internet through EBSCO host with ERIC, JSTOR, and WorldCat as the primary sources. The key search topics included "Computer Assisted Teaching", "English Vocabulary", "English learning".

And because my research is related to Chinese university students, it will also be conducted in and through the "CNKI", which refers to "China National Knowledge Infrastructure" and is the biggest scholarly database in China, using its search engine.

Chapter II Review of Literature

In China, English is an essential ability of test as well as communication. The exam directed English learning is so common. So students (especially computer majored) are negative in English learning just because they are quite weak in their foundation of English such as vocabulary. What's most important is to arouse their interest in English learning as well as strengthen their basic ability, and it's better to be combined with computer. Therefore, computer assisted language learning is considered.

Using Computers to Arouse Students' Interest

As introduced before, the biggest problem for computer-major students in learning English is how to motivate their interests of English. DeWitt (2004) believes that computer games assisted learning "perform well in opening up the concept of literacy practices and values in ways that conventional literacy studies has failed to do". Many young people play computer games, as the old saying "all work and no play make Jack a dull boy", it is a better way to learn with fun and playing. For Example, an EFL student may be curious about how the "game terms" are translated from English into Chinese, or the reverse. It would be helpful in vocabulary learning if students can understand the meaning and the use of the words and phrase. And in this way, the game can active their motivation of learning English. In Gee's (2003) words, "learning is most effective when it is active and critical."

In addition, the difference between computer games "society" and reality learning life is not quite obvious. Students can get fun from learning in the same way that from games. According to Bowman (1982), what makes a video game learning experience meaningful for a student is also what makes any generic learning experience meaningful.

The computer-game-based books can also help students in English learning. Jolley (2008) found that students like reading books about computer games because of their game experience. What's more, they think the books are full of action, and like the way the books tell stories which makes them familiar with the game. They also point out that their game experience is useful to understand the books (p.82). And she also thought that the whole experiment (try to give game-based books to students for motivating them to read) is valuable because it makes people who don't like reading start reading. Once students start reading books, even not about games, things look easy. And the habit of reading will be built by making connections between reading and what people are interested in (p.86).

Computer games are used not only in English learning, but also some other areas. Here are some examples. Helena Maria Sabo (2012) mentioned in her paper that computer games are used in teaching of geography that new technologies for processing and transmitting information in all shapes of influence of the manner of communication and interaction (p.272). This motivates us to think about how to use computer games in English teaching. And depending on Sabo's analysis, it should work.

The above is just one aspect of using computer to help computer-major students in English learning, try to find a way that combine their hobbies with learning to arouse their interest in English learning. Next the CALL theory will be brought in.

The Introduction to Computer Assisted Teaching

With the fast development of the modern technology, the computers have made progress in life and the area of teaching. Levy (1997) provides a descriptive discussion of Computer-Assisted Language Learning (CALL), examining its origins, scope, and directions and looking at its connections to other disciplines. This book also incorporates results of a survey of

104 CALL practitioners in 18 countries. The first two chapters set CALL in historical and interdisciplinary perspectives. Chapters 3-6 focus on how CALL practitioners have conceptualized the use of the computer in language teaching and learning. They look at the issues addressed in the literature on CALL, examine findings of the survey, and identify and explore specific themes that emerged from the survey. Chapter 7 is devoted to the tutor-tool conceptual framework. The final chapter examines the nature of CALL and makes some recommendations for directing future efforts. Levy (1997) has shown the idea that the computer is a crucial part in people's daily life. Levy (1997) insists that computers are the reflection of the world and he has the idea that the computer can be used in teaching (p. 246).

The Levy's book analyzes the status of computer aided teaching through the domestic and foreign computer aided teaching history review and summary, it sums up the experiences and problems in the process of development and puts forward the solving strategy, what's more, it discusses the development trend of the computer assisted teaching and points out the direction for its development in the aspects of networked, intelligent and multimedia (p. 65). In addition, it provides a beneficial reference for the better implementation of the computer assisted teaching service. Additionally, Computer assisted teaching's instruction started late in China or most of the schools in China and computer assisted instruction is still in its infancy state. The book based on the study of computer assisted teaching of theory and technology and put forward the existing problems of computer assisted teaching and future work problems.

According to the problems, one of them is to strengthen the study of the basic theory based on the national conditions, selective absorption and actively practice and so on. In the mean time, the second is to continue to increase the funding of the central and western education in China and improve uneven regional development. The third measure is to strengthen the

relevant theory of training and practice of teachers, and gradually improve the teacher's information literacy. Besides, the fourth shows that it is necessary to reform the traditional teaching quality view and establish a scientific and external teaching evaluation system. In the end, the fifth is to serve the students as the principle, in order to enhance the level of software development, establish and improve the development and application of the system.

Although there are still many problems about the computer assisted teaching in our country, the prospects for the development of computer assisted teaching is very promising. What's more, the Levy's book also shows that with the economic globalization's coming, the talent is a precious wealth for the country and the nation. Of course, the competition of talents depends on education. China's education is bound to keep up with the trend of world's development and break the traditional indoctrination of teaching is the basic means of the education model.

The Introduction to Computer Assisted English Vocabulary Teaching

When it comes to the computers' important roles in the aspect of English vocabulary teaching, there are still a marvelous number of writers are devoted themselves to doing it. For example, Ma and Kelly (2006) wrote the book which was named by Computer assisted vocabulary learning. This book focuses on the design and evaluation of the computer-assisted vocabulary learning (CAVL) software WUFUN. It draws on the current research findings of vocabulary acquisition and CALL, "aiming to help Chinese university students to improve their learning of English vocabulary, particularly that with which they experience most difficulty." (Ma, Q. & Kelly, P., 2006, p.15)

It is argued that vocabulary should be learned explicitly as well as implicitly; learners need to be trained to become good learners, e.g., by being instructed in useful learning strategies,

to enable them to learn vocabulary more efficiently and effectively (Ma & Kelly, 2006, p.16). A design model of CALL efficacy is constructed to ensure the quality of vocabulary learning in CALL programs; it is employed in the design of the software WUFUN. Finally, the preliminary results of the software evaluation are reported and discussed. Ma (2006) is still in favor of the idea that the computers are playing significant roles in people's English vocabulary teaching (p.40). He shows that the English teaching ought to be combined with the modern technology. People can have a good teaching by adopting some useful software to teach English vocabulary.

In addition, Basoz and Cubukcu wrote the paper whose name was "The effectiveness of computer assisted instruction on vocabulary achievement" in the year of 2014. In recent years, computer assisted language learning has come to the forefront of language learning and teaching. Computer assisted vocabulary instruction has been considered to be one of the most common applications of CALL.

And Basoz and Cubukcu (2014) have shown us the main aim of the computers to play the critical roles in the process of teaching. The purpose of this article is to investigate the effectiveness of computer assisted instruction on students' vocabulary achievement. And in the paper, the experiment was described as below:

> The subjects of this quasi-experimental study consisted of 52 freshmen studying in the
> ELT Department of Balikesir University in the spring semester of 2012-2013 academic
> year. Before the intervention, the students were randomly assigned to one of the groups;
> Computer Assisted Instruction or Communicative Language Teaching and they were
> given a pre-test. Following the pre-test, the CAVI group studied 20 target words by using
> a Moodle in a computer laboratory whereas the CLT group was instructed the same
> words by their teacher in a communicative classroom atmosphere. Both groups were

given the post-test immediately after the intervention. The delayed post-test was administered to the freshmen five weeks after the intervention in order to test the retention. The results revealed that both CAVI and CLT groups had some kind of vocabulary gain as a result of the treatments. However, there was no significant difference between the groups in vocabulary gains. (p.44)

As a consequence, the author insists that with the fast development of economy, people ought to combine teaching with computers. The study of the computer assisted English vocabulary teaching has made great progress too.

In the meantime, in Liu and Xie's paper, they analyze the value of corpus-based vocabulary teaching for English majors and raises four steps of applying it to vocabulary classroom teaching which are illustrated with examples (2014, p.135). To prove the effect of the teaching mode, the author conducts a teaching experiment by using a control group and an experimental group. This teaching experiment indicates that corpus based vocabulary teaching for English majors has not obvious influence on students' overall English vocabulary level, but the influence on the middle score group students is quite obvious; what' more, the study also shows that this teaching mode has not obviously positive influence on enhancing the English comprehensive level of all students who have different English foundation (Liu & Xie, 2014, p.140). This research indicates that this teaching mode should be revised according to the actual situation of different students and this teaching mode should be utilized and strengthened continually in the classroom teaching which may exert positive influence on enhancing the students' English comprehensive level in the future.

The paper shows that the mode of the computer assisted English vocabulary teaching is helpful to students and during the process, they can have much meaningful knowledge. Effective

vocabulary learning has long been a main task of College English teaching and a big challenge for College students. However, the present vocabulary teaching approaches have proven to be time-consuming and ineffective. The integration of corpus-based approach in College English teaching will redefine the roles of teachers and learners, make the classroom more student-centered, and thus increasing learning autonomy and learning effectiveness.

The Introduction to Multimedia Teaching Approach

Multimedia Teaching is one of the most common way in CAT. In modern Multimedia Teaching mode, teachers can use multiple tools in their teaching process. Multimedia teaching approach contains different ways, such as web, sound, and image all together, makes the classroom vivid in order to get students involved in teaching. Stebila (2011) designs an interactive game with elements of Road Safety Education, and this game includes "program, animated crossroad, memory game, test, and end", which is supported by multimedia teaching (p.105). This stimulation provides a great way of combination of multimedia teaching in classroom. In addition, Liu (2011) mentions that there are three characteristics of network, breakthrough time, spatial, the region limit, can be used to "stimulate students' study enthusiasm, and enhance the teaching validity, even strengthen students' learning capability (p.1)."

Previous Studies on Computer Assisted Vocabulary Teaching

CALL is a cross-disciplinary science conceived in the 1950s and implemented in the 1960s and 1970s (Liu W. Y, Liu T. G, Liu F. W. et al, 2011, p.1). This paper analyzes the objective reasons for innovation and reform on Chinese traditional teaching model and focus on the unique advantages and prospects of CALL in the current and future foreign language teaching.

When it comes to the content of the famous book, it just shows us the differences

between the traditional teaching mode and the computer assisted teaching. The writer shows the readers the disadvantages of the computer. Every coin has two sides, with the development of the computer, there are a lot of mistakes and disadvantages to people's life.

The classroom is not conducive to the teachers and student's emotion using the network information technology exchange. Multimedia application of writing on the blackboard is relatively reduced, teachers and students are so busy with coping with dazzling things and students did not think the gap so teachers should combine modern technology with traditional combination and reasonable arrangement of content and time greatly and teachers play the role of modern technology. What's more, class capacity is too large, the problem is arising for students when they are taking notes. The use of computer assisted vocabulary teaching, there are full of a variety of information capacity and for students, accepting so much information is so difficult for them in such a short time. Which is likely to cause the attention of students to decline, the impact of classroom teaching. Besides, the production of multimedia needs to spend a lot of time for teachers. And the method may relax the teaching materials and teaching methods for the teachers. Everything has two sides, as long as we exert its advantages and avoid its adverse place, modern information technology can better serve for English teaching. As English teachers in a school, people should get rid of the heavy and boring English teaching methods, to find a new and more effective method. That is to say, the use of computer assisted vocabulary teaching.

The author also expresses that with the development of the economy, people's views about the world and the things have changed a lot. People are beginning to have a more positive attitude to the computer assisted vocabulary teaching. The computer is not only a kind of culture, but also is an ideal cognitive tool in the teaching process. Computer can stimulate interest in

learning, help to form the learning motivation, which can provide graphic audio-visual articles two-way learning environment and bring the desire to cooperative learning for students to take the initiative to find and take the initiative to explore. Of course, a computer network can provide collaborative learning mode, which can effectively promote students to learn the meaning of knowledge construction. Not only does it can make people have a good command of knowledge, but also it can enrich people's life and broaden their horizons and it is the fortune of people's life.

But everything in the world ought to be so tough, what people should do is that keeping a positive heart to it and try their best to realize their dreams. During the tough time, there are still a large number of authors are devoting themselves into the studying the computer assisted teaching, of course, they have made great progress and people can make further study on the base of the professional profession. The writer is also telling that people should combine the modern technology with the teaching method, and make full use of the computer so that the education will make a good progress.

Chapter III Conclusions and Recommendations

Based on the review of existing literature related to "Study on the Application of Computer Assisted English Vocabulary Teaching in Computer-major College", the following conclusions can be drawn.

The effect of computer assisted vocabulary teaching is indeed a fantastic way of teaching vocabulary in computer-major college. On the one hand, it can arouse students' interest in English learning by combining what they like with English, and also strengthen their weak foundation in English learning. On the other hand, it enhances the effectiveness of vocabulary teaching and changes the traditional way of vocabulary teaching by modern technology.

However, computer just acts as an assisting way. And computer assisted vocabulary teaching can never replace the significance of experienced teachers. The shortcomings of computer assisted vocabulary teaching still exist. As the main instructor of teaching activity, even though we always highlight the students-centered way, teachers must spare no effort to help students stay focus on the whole teaching process, make full use of their initiatives and combine traditional vocabulary teaching with various modern teaching mode together.

References

Basoz, T., & Cubukcu, F. (2014). The effectiveness of computer assisted instruction on vocabulary achievement. *Mevlana International Journal of Education*, *4(1)*, 44-54.

Bowman, R. (1982). A Pac-Man theory of motivation: tactical implications for classroom instruction: *Educt Technol 22*, pp. 14–17.

Chang, L. H. & Chu, Y. T. (2011). Computer-Assisted Vocabulary Teaching for Vocational High School Students. *National Pingtung University of Education*, pp. 124-143.

DeWitt, S. L. (2004). What video games have to teach us about learning and literacy by James Paul Gee review by: Scott Lloyd DeWitt: *College Composition and Communication, 56(2)*, pp. 335-342.

Gee, J. P. (2003). *What video games have to teach us about learning and literacy.* New York, US: Palgrave Macmillan.

Jolley, K. (2008). Video games to reading reaching out to reluctant readers: *The English Journal, 97(4)*, pp. 81-86.

Levy, M. (1997). *Computer Assisted Language Learning: Context and Conceptualization.* Oxford: Cvlarendon Press.

Liu, A. Q. (2007). On teaching English vocabulary. *Journal of Xuzhou Education College*, *22(4),* pp. 134-135.

Liu, A., & Xie, K. (2014). Corpus-based college English vocabulary teaching mode and the teaching effect. *Journal of Chongqing University of Arts & Sciences*, pp.135-140.

Liu, B. (2012). Computer-assisted corpus-based College English vocabulary teaching. *7th International Conference on Computer Science & Education*, 2012, pp.1864-1867.

Liu, H. M. (2011). Research of multimedia teaching strategy based on Internet virtual teaching

platform. In *the 2011 International Conference on E-Business and E-Government*, May

2011, pp. 1-3.

Liu, W. Y, Liu, T. G, Liu, F. W. et al. (2011) Computer Assisted Language Learning.

International *Conference on E -Business and E -Government*, 2011, pp.1-4.

Qing Ma, & Peter Kelly. (2006). Computer assisted vocabulary learning: design and evaluation.

Computer Assisted Language Learning, *19(1)*, pp.15-45.

Sabo, H. M. (2012). Computer games used in teaching of geography. In *the 8th International

Scientific Conference eLearning and software for Education Bucharest*, April 26-27,

2012, pp. 271-276.

Stebila, J. (2011). Research and Prediction of the Application of Multimedia Teaching Aid in

Teaching Technical Education on the 2nd Level of Primary Schools. *Informatics in

Education*, *10(1)*, pp. 105-122.

Tsou, W., Wang, W., & Tzeng, Y. (2006). Applying a multimedia storytelling website in foreign

language learning. *Computers & Education*, *47(1)*, pp. 17-28.