

ENHANCING SELF-DIRECTED LANGUAGE LEARNING ENVIRONMENT
THROUGH COMPUTER-ASSISTED LANGUAGE LEARNING (CALL)

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Abstract

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With the rapid progress of science and information technology, Computer Assisted Language Learning (CALL) has gained its popularity among people all over the world. The use of the Internet is widespread in numerous fields. It also carries great potential for educational use, specifically the foreign language learning.

This thesis mainly discusses the effects of Computer-assisted Language Learning (CALL) on the environment for self-directed foreign language learning. In traditional language teaching, most college students are the passive recipients of language knowledge and their individual needs cannot be well satisfied, which gradually leads to the decrease of interest and learning efficiency. Furthermore, because of students' poor autonomous learning abilities and the shortage of well-equipped self-directed learning facilities, self-directed learning is considered most likely to compensate for the deficiency of the foreign language teaching in class. Therefore, the author recommends applying CALL in self-directed learning to solve the problems above.

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Chapter One

Introduction

In the early 1990s, the development of the internet brought a revolution in education. In contemporary China and throughout the world, the internet is gaining enormous popularity in foreign language teaching and learning. Although the potential of the internet for educational use has not been fully explored yet and the average schools and universities still make limited use of computers, it is obvious that the internet has been widely used in language learning and teaching. CALL (computer-assisted language learning) plays an important role in language teaching and learning (Sharma, 2008).

In China, the number of students in college has increased dramatically, which causes the shortage of teachers. It is a crucial and urgent time to find a new language-learning mode. Self-directed learning is a good method. Students vary in their desires for autonomy and guidance; educators vary in their sense of the degree of guidance and autonomy required for learning (Magolda, 2007). Self-directed learning can cater to different individual needs, learning styles, learning strategies, and even personalities of students.

If it is possible, the CALL mode definitely leads to the promotion of self-directed learning. Therefore, in this paper, emphasis will be laid on this hypothesis and the research that will further focus on how CALL can cater to autonomous learners' needs to enhance the language learning process and learning efficiency, and provide an excellent environment for learner autonomy.

Statement of the Problem

The problem expressed as a question is, “How can computer-assisted instruction be used to enhance a self-directed language learning environment?”

Definition of Terms

Self-directed learning. SDL views learners as responsible owners and managers of their own learning process. SDL integrates self-management with self-monitoring. SDL recognizes the significant role of motivation and volition in initiating and maintaining learners' efforts (Abdullah, 2001).

CALL. Computer Assisted Language Learning (CALL) is the term generally used to refer to language learning activity that involves the use of computers.

Delimitations of the Research

The research will be conducted in and through the Karrmann Library at the University of Wisconsin-Platteville. Primary searches will be conducted via the Internet through EBSCO host with ERIC, Academic Search Elite, and Google/Google Scholar as the primary sources. Key search topics included “computer-assisted language learning”, “self-directed learning”, and “learner autonomy”.

Method of Approach

A brief review of literature on the studies of developmental background and underlying theories of self-directed learning, definition, and characteristics of learner autonomy, learning strategies will be conducted. A second review of literature relating CALL, including definition of CALL and the development of CALL will be conducted. The findings will be summarized and recommendations made.

Chapter Two

Review Of Literature

The Evolution of Computer Assisted Language Learning

Computer Assisted Language Learning (CALL) is the term generally used to refer to language learning activity that involves the use of computers, which is also defined by Levy (1997) as “the search for and study of applications of the computer in language teaching and learning.” CALL can be traced back to the middle of the twentieth century, and it has gone through various stages including an emphasis on Behaviorist CALL, Communicative CALL, and Integrative CALL (Rogerson-Revell, 2007).

In Rogerson-Revell’s opinion, the first phase, “Behaviorist CALL”, prevalent between the 1950s and 1970s, favored the use of drill and practice type software and rested on the role of the computer as a “tutor,” delivering instructional material to the learner. During the second phase of “Communicative CALL,” between the 1970s and 1990s, the role of the computer in language learning involved not only acting as a “tutor” but also as the “stimulus” for more communicative language activities, such as student discussion and writing activities. A third model during this second phase was the computer as a “tool,” where the computer does not necessarily provide any language-specific content but is used as a means of performing some language-based tasks; for example, using software such as word processors, spelling and grammar checkers, desktop publishing programs, and concordances. The third phase of “Integrative CALL,” from the 1990s, again paralleled both technological and pedagogical

developments. In this third phase of CALL, the role of the computer can be seen as expanding yet further to incorporate its use as a “manager” and a “messenger.”

Advantages and limitations of Computer Assisted Language Learning

Compared with traditional classroom-based language instruction, CALL shows its obvious advantages. It can integrate various instructional media, prompt multi-interaction, improve learning autonomy, increase the feedback, and move beyond the limitation of time and space (Liang, 2006).

All provide the following advantages:

Firstly, CALL provides a great deal of language input. Traditional teaching methods and obsolete teaching books cannot meet the needs of the EFL learners because knowledge is updated at a faster pace than the books. In that case, the learners should have access to some other sources to get knowledge instead of relying too much on the books. Therefore, the multi-media become the focus of the teaching method. It provides new technology and more information to assist teaching in a multi-dimensional way (Ken, 2005). The power of CALL in language learning and teaching is to introduce new types of input, from both a quantitative and a qualitative perspective. The added quantity of input leads to a richer language-learning environment, while the unique quality of CALL input means different possibilities for accessing and developing information.

Secondly, CALL changes the traditional teaching model, which features

“teacher-centered, textbook centered and classroom-centered” to create a new model that is characterized as “student-centered, study-centered and duty-centered.” In the traditional teaching method, didactic approach or spoon-feeding instruction is used, however, the purpose of the computer-assisted teaching is to make the students more active in the self-learning, to explore and get knowledge, as well as improve skills through the guide of the teachers and other software.

Finally, CALL improves the students’ ability to use language. Teachers can make full use of the software to simulate language contexts in different situations, so the students have more opportunities to get access to the real language-learning environment. The result is that this kind of teaching improves the students’ capacity of using language.

Indeed, a sword has two blades. One cannot deny that there are some limitations in computer-assisted language learning, compared with the traditional teaching method. Although the technology of the computer can offer the chance to communicate between students and computers, it cannot supersede the natural communication among students and teachers. “Communication between teachers and students is itself a language learning process, and it can exert much more influence than the communication between students and computers” (Zhang, 2000).

All create the following limitations:

Firstly, in the traditional teaching method, teachers can control most aspects within the classroom. They try their best to influence their students with their own personal experiences, amiable characteristics, and their charming personality in order to

inspire their desire for knowledge, and help them develop correct motivations. Not all these perspectives can be substituted by the computer-assisted language learning.

Secondly, in computer-assisted language learning, useful resources are pervasive on the Internet. Because students do not know how to choose the most valuable information, searching for the relative sources can be regarded as a waste of time, and can reduce the effectiveness of their research. At the same time, there is valuable and invaluable information on the internet and students may easily get overwhelmed. Not every student can rationally distribute their time in learning, especially without the teacher's supervision and instruction.

Finally, On-line teaching is characterized by a learner's self-dependent learning, but in the meanwhile, the learner will easily feel lonely since he lacks interpersonal communication with teachers. In line with traditional convention, formal and serious teaching should be performed in class. This stereotype may make the learner unconsciously not to pay enough attention to the on-line course. In other words, those who lack the self-dependent ability would probably lose their way in the online learning.

CALL Can Enhance Self-directed Language Learning Environment

Today, computer-assisted language learning is no longer a strange jargon to Chinese educators. It has aroused the increasing interest in China's education and it has been expected to be an effective way to enhance the self-directed learning environment. The most important reason is that the fantastic development of computer and network

technology can create an ideal environment in which learners could construct meanings freely.

Self-directed learning means that the resources are accessible by the learners rather than being directly controlled by a teacher. Self-directed learning (SDL) goes back to the existentialist perspective, which postulates individual freedom, responsibility, and personal views (Savin-Baden and Major, 2004). In the context of learning, this implied that “learning should empower a student to become a free, mature, and authentic self” (Savin-Baden and Major, 2004). The key idea of autonomy in language is that effective learning is “active,” in which the learner is viewed as an active processor of information and constructor of new knowledge (Benson, 2001).

Self-directed learning provides the best facilities and environment for individualized and personalized learning styles. Self-directed learning merely means that the resources are accessible by learners rather than being directly controlled by a teacher. The main purpose of a SDL provision is language learning, but it must give learners the means to learn languages without the teacher’s constant presence and direction. Of course, SDL does not necessarily imply that individuals are working by themselves isolated from teachers since the degree of autonomy may vary from full to partial. Consequently, learning in a self-access facility may be individual, but it also may be in pairs or groups and sometime with a certain degree of presence and direction from the teacher.

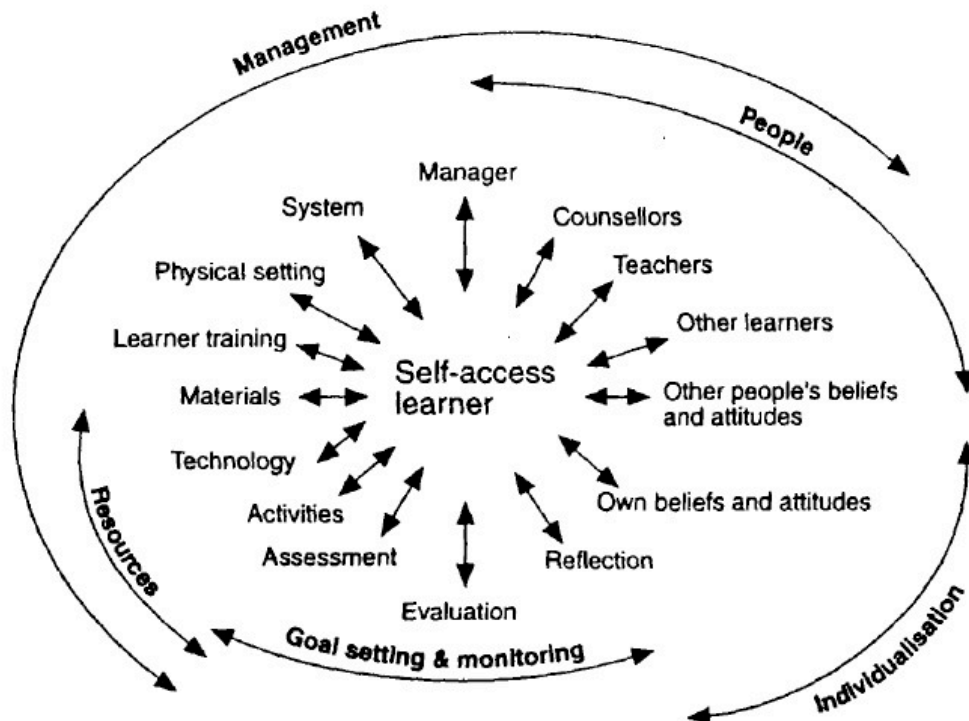


Figure 1. Interaction between the Learner and the Self-Access Environment

The interaction between the learner and the self-access environment, including the authority from the teacher, can be best demonstrated by figure 1, "interaction between the learner and the self-access environment" ("Establishing Self-access: From Theory to Practice", Gardener and Miller, 1999).

CALL can enhance the self-directed language learning environment. New developments in the Web provide individuals with various opportunities of personalizing the tools and services, and performing self-directed learning in an open and social context with their personal learning environments (Klamma, Chatti, Duval, Hummel, Hvannberg, Kravic, Law, Naeve and Scott, 2007). Social software enables people to actively reflect, publish, and share learning experiences. Furthermore, it creates the opportunities for

students to gain awareness and monitor other learners, communities, and networks, as well as publicly store and maintain the evidences of their learning (O'Reilly, 2005).

Another researcher also has an opinion on this topic. Nordgren (2006) has listed important themes that must be solved in educational institutions in order to provide the future learning environment: students owning their learning; standards and curricula that guide rather than dictate; constructivist teaching strategies that empower students; trust and adult supervision; democracy and empowerment; and Global Workforce Competence: making schooling relevant to the work-place.

Overall, the CALL mode is a possible way to satisfy those needs and to enhance self-directed learning environments. CALL has the ability to promote the development of learner autonomy, including helping learners to achieve the better availability of appropriate language input, language practice, and sequential instruction. Furthermore, CALL impels the utilization of language learning strategies to be more efficient, while further promoting autonomous learning abilities and developing favorable psychological characteristics.

Teacher's Role in Self-directed Language Learning under CALL

The use of technology in language classrooms continues to be an important area for research, particularly in understanding the human element – teachers and students – and their attitudes, beliefs, and applications of technology. While there are fundamental skills necessary to be literate users of technology, teachers may not need to develop

advanced skills in order to be successful CALL practitioners, since CALL is likely only one portion of their teaching resources (Hubbard, 2008). In fact, a moderate degree of confidence developed in specific contexts may serve teachers better. Hegelheimer (2006) recognized the importance of confidence using technology for the language teacher. In his study, teachers who were more confident about technology and its use were more likely to employ it in innovative ways.

In the mode of self-directed language learning under CALL, learners still need the teacher's guidance or training to be a good autonomous language learner and teachers should have confidence with technology and have enough background and familiarity with language teaching technology solutions. Peters (2006) identifies the need to prepare teachers to use technology effectively in the classroom rather than to prepare them to be technical or technology experts. Kessler (2007) found that ESL teachers have a general positive attitude toward technology, but when they are asked about using technology for specific teaching, their attitude becomes significantly less positive. Kessler (2006) identified the importance of teacher comfort with CALL methods and materials. In a survey of 240 language teachers, he found that teachers who are less comfortable with CALL materials than with traditional print materials are likely to use CALL ineffectively or not at all. A sense of intimidation may prevail among users of technology who do not consider themselves technologically proficient.

Moreover, Kessler and Plakans (2008) found that often teachers simply lack experience and confidence with technology, particularly instructional technology. If all

teachers are expected to view CALL resources and practices as they would any other familiar teaching resource options, such as materials from books, paper-based handouts and overhead transparencies, they must first be confident with the technology. High confidence alone may not guarantee successful or innovative integration of CALL, but teachers may benefit from an understanding and development of contextual confidence. Hegelheimer (2006) recognized the importance of confidence using technology for the language teacher. In his study, teachers who were more confident about technology and its use were more likely to employ it in innovative ways.

How can teachers' confidence in the CALL mode be improved? Stockwell (2009) found that teachers who are in an environment where they must teach themselves about how to use CALL would improve their confidence. Even though the teachers here were provided with a brief seminar on the nature of CALL, and given a list of strategies to assist them in embarking on the goal of incorporating CALL into their teaching situations, there was a range of difficulties that were encountered along the way. Stockwell also found that the teacher who was unable to find books on CALL quickly gave up, as he felt the task was too overwhelming without some kind of guide to assist him. Teachers settled upon materials that were available rather than those that matched their pedagogical needs, causing them to modify their plans when compared to their initial ideas for how they intended to use CALL.

Chapter Three

Conclusions And Recommendations

Reviewing the previous chapters, it appears obvious that most of the research in the literature review was published after 2005. From the previous research, it indicates that the modern educational technology method – Computer Assisted Language Learning has confirmed its great educational value in supporting the self-directed learning process and optimizing the self-directed language-learning environment.

This literature review explains some terms such as CALL and learner autonomy, reviewing the evolution, advantages, and the limitations of CALL. Generally speaking, students' autonomous learning ability for English study under the CALL environment is practicable. In the CALL classroom, learners are given more freedom in choosing what to learn and how to learn. They can set their own learning objectives, use learning strategies, and actively take on the responsibility of learning. Teachers are no longer the controller of their learning. It is time for students to determine their own focuses on learning. When they take more control over their goals of learning, they will achieve better results from their study. However, students still lack self-monitoring and self-evaluation ability. Students usually lack the ability to check their learning rate effectively in their course of learning. They often cannot actively self-evaluate their study of English and do not know how to make an effective evaluation of their current English ability. This suggests that more instruction should be made to improve students'

ability of self-monitoring and self-evaluation of their study of English.

Here is another problem. Compared with students' general autonomous learning ability, their specific autonomous learning ability in the CALL environment is not as satisfying. Although students are self-motivated to take the responsibility of autonomous learning in the computer assisted learning environment, their ability to search online materials is very poor. They not only lack knowledge of useful websites and course software for English online learning, but also lack necessary knowledge of how to achieve efficient online searching. Teachers are required to recommend to them more useful and helpful online learning materials or course software. Knowledge and skills for more efficient online searches should be given to facilitate students' online performance. Another problem of autonomous learning through the computer is that students' self-discipline level is not satisfying. The effectiveness of CALL is not fully understood by students. The Internet provides not only an abundance of useful English learning materials but also a great deal of attractive entertainment. Students usually mistake CALL for listening classes plus some music, computer games, online chatting and video watching. They are not aware that computers can be a medium of real communication for learning English. Arousing students' interest is very important. Learning materials and courseware should be designed to be more interesting and attractive to facilitate students' online study. Presently, it is still very difficult for most universities to actualize the access to the Internet for its huge investment; efforts should be aimed at constructing a better self-directed language-learning environment, either by

research or by practice.

In this paper, the author also discusses the teacher's role in the self-directed language learning under CALL. The self-directed language learning under CALL demands a new relationship between the teacher and the students. Learners are no longer passive recipients stuffed with language knowledge transmitted by the teacher in class. Learners become more independent when they have access to other sources of language knowledge, such as CALL materials. In this situation, the teachers should reconsider the language methodologies and bravely step down from the platform to the learners' computer station. They need to give learners useful guidance for their self-directed learning, help them to develop their self-directed learning strategies, and train them to be real autonomous learners. Therefore, the teacher should establish a more coordinated relationship with learners under the self-directed learning environment and assume the roles of facilitator, guider, counselor, and trainer. Here are some suggestions. Teachers in the CALL environment should be fully prepared for their role. While conducting CALL programs, teachers tend to relinquish some of their power and authority to the students. However, they play an even more important role as guides and coordinators of the learning process. Moreover, sometimes CALL programs may follow unpredictable paths beyond the teachers' expertise and for which they may be unprepared. Teachers should be well prepared for the role changes to ensure that the programs will have satisfactory results.

Teachers should have much more confidence about technology and the learner

should be trained with some basic computer skills. With the help of a setting such as a multimedia lab, foreign language training will be more efficient. Teachers should have a clear idea of how a traditional classroom is different from a multimedia lab. CALL teachers should prepare themselves for the use of modern computer technology. At the same time, in order to improve autonomous learning abilities, learners need to be trained to take more responsibilities for their own learning and grasp some beneficial strategies for the new learning mode. Certainly, the teacher plays a key role as a trainer. In addition, before participating in the self-directed learning under CALL, learners should be trained to equip themselves with some basic computer skills. Otherwise, learners with little knowledge about computer applications will feel frustrated, both technically and psychologically. Thus, training in computer skills is also necessary to get learners ready for the new learning mode.

Constant technical support is also very important for smooth self-directed learning under CALL. Students usually encounter technical problems, such as system errors and machine breakdowns. These troubles cause learners to spend a great deal of time struggling with the machine, which usually destroys their confidence, patience and a sense of accomplishment. Therefore, constant technical support is needed in order to guarantee learners' efficient self-directed language learning.

Overall, although some Chinese language researchers and educators have realized the potential positive effects of CALL on second language learning, the past few years have not seen any relevant research projects that are influential enough to clarify the

relationship between CALL and SDL. Most of the CALL applications are confined to language teaching in class. Thus, the research on the relationship between self-directed learning and CALL in China stays at its early stage and has a long way to go. More projects and research studies, not only theoretical researches but also empirical researches, should be devoted to this area. To conclude, it is an urgent time for us to initiate in-depth research on exploring the great potentials of CALL on enhancing self-directed learning. The integration of CALL into the EFL self-directed learning in China has provided a broad field for further exploration. We should try to develop the opportunity offered by the rapid development of the computer technologies to its greatest extent, fully exploring the potentials of CALL on enhancing self-directed learning environments and further promoting the development of learner autonomy. Here, it must be mentioned that in reality, confined to poor conditions, most universities cannot implement large-scale CALL-supported self-directed learning. Therefore, it is also very practical and necessary to conduct a research or a practice on how to integrate the traditional language teaching fully with the self-directed language learning under CALL. The integration is supposed to construct an optimal environment for language learning for most universities at the present. In any case, the application of CALL to the current language learning and teaching has been the mainstream of language education reform in China; thereby, we should take advantage of the opportunity to undertake more in-depth research so as to gain more fruitful achievements in China's foreign language education.

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