

How to Foster Learner Autonomy in Computer-Assisted Instruction Environment

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Abstract

Computer-assisted instruction has been employed in English teaching for decades, and it offers rich materials and ample opportunities for students to share ideas with each other. It has been long considered as one of the effective teaching modes to promote autonomous learning. This paper aims to address the major issues teachers and students encounter under computer assisted instruction background. After a brief introduction about the present English teaching status and the relative theories about Computer-Assisted Instruction(CAI), teaching practice is put forward and discussions about it are followed in an attempt to give some enlightenment to the current foreign language teaching.

Keywords: *CAI; Autonomy; Constructivism; ELT*

1. Introduction

At the end of 1860s, some western countries began to study the Computer Assisted Instruction. Later, Computer Assisted Instruction was rising in China. Computer Assisted Instruction has the characteristics of strong interaction, intelligence, efficiency and scientificity. It can enrich the teaching method and it should be able to evaluate the learning effect according to the learning process so as to decide the content and speed of the next step of study. The employment of Computer Assisted Instruction inspires students' thinking ability, improves students' autonomous learning ability, and promotes their learning. Computer aided education is a new educational idea and educational means. It is an interdisciplinary subject with the integration of comprehensive computer science, education, psychology, engineering technology and related courses. Compared with the traditional teaching method, the computer assisted language teaching is becoming a more effective media for language learning and teaching. In the learning process by using computer, the computer is controlled by one or several students, and the learning task becomes more personalized, which makes each student get guidance and feedback in time. Many education experts believe that the cooperative learning with computer will make students more creative and more active.

2. College English Curriculum Requirements

With a view to keeping up with the new developments of higher education in China, deepening teaching reform, improving teaching quality, and meeting the needs of the country and society for qualified personnel in the new era, College English Curriculum Requirements (Requirements hereafter) has been drawn up to provide colleges and universities with the guidelines for English instruction to non-English major students. Because institutions of higher learning differ from each other in terms of teaching resources, students' level of English upon entering college, and the social demands they face, colleges and universities should formulate, in accordance with the Requirements and in the light of their specific circumstances, a scientific, systematic and individualized College English syllabus to guide

their own College English teaching.(Http:// wenku.baidu.com)

3. The Problems in English Teaching

College students in Inner Mongolian University for the Nationalities are at different English levels. Some of the students have a good command of English and can read English documents and speak with foreigners at ease, some are able to conduct daily dialogues with teachers and students in English but have some difficulty in reading comprehensive materials, While others do not attach importance to English, and can not conduct simple communication with others due to a lack of necessary English knowledge. However, most of the students do not have enthusiasm and initiative of learning English. They do not change their learning concepts, and fully rely on the teacher's supervision and guidance. With the development of science and technology, some new and innovative teaching technologies have sprung up. Among them the application of computer assisted language teaching is popular and welcomed by teachers and students. This is an attempt to improve learners' autonomous learning ability and thus improve the quality of foreign language teaching. Therefore, how to use computer cyber source to meet the needs of both the teachers and students is a problem that must be solved. Any glance at commercial materials for computer assisted language Learning(CALL) will show that they are essentially audiolingual in their emphasis on drill and practice, though they depend primarily on the written language because of the computer's limitations in dealing with speech.

4. Theoretical Foundations

4.1 Monitor Theory

Richards & Rodgers (2000) illustrate in detail Monitor Theory. From the viewpoints of Richards & Rodgers, "Stephen D. Krashen's Monitor Model of second language development(1981) is an example of a learning theory on which a method has been built. Monitor theory addresses both the process and the condition dimensions of learning. At the level of process, Krashen distinguishes between acquisition and learning. Acquisition refers to the natural assimilation of language rules through using language for communication. Learning refers to the formal study of language rules and is a conscious process. According to Krashen, however, learning is available only as a "monitor". The monitor is the repository of conscious grammatical knowledge about a language that is learned through formal instruction and that is called upon in the editing of utterances produced through the acquired system. Krashen's theory also addresses the conditions necessary for the process of "acquisition" to take place. Krashen describes these in terms of the type of "input" the learner receives. Input must be comprehensible, slightly above the learner's present level of competence, interesting or relevant, not grammatically sequenced, in sufficient quantity, and experienced in low-anxiety contexts." (Richards & Rodgers, 2000)

4.2 Theory of Learning: Constructivism

Constructivism is a theory of knowledge that argues that humans generate knowledge and meaning from an interaction between their experiences and their ideas. It has influenced a number of disciplines, including psychology, sociology, education and the history of science. During its infancy, constructivism examined the interaction between human experiences and their reflexes or behavior-patterns. Jean Piaget called these systems of knowledge schemata. Constructivism is not a specific pedagogy, although it is often confused with constructionism, an educational theory developed by Seymour Papert, inspired by constructivist and experiential learning ideas of Piaget. Piaget's theory of constructivist learning has had wide ranging impact on learning theories and teaching methods in education and is an underlying theme of many education reform movements. Research support for constructivist teaching techniques has been mixed, with some research supporting these techniques and other research contradicting those results.([https://en.wikipedia.org/wiki/Constructivism_\(philosophy_of_education\)](https://en.wikipedia.org/wiki/Constructivism_(philosophy_of_education)))

5. The Roles of Teachers and Students

5.1 The Role of the Teacher

The role of the teacher in computer-assisted language teaching has been different from the prior one. Using a framework suggested by Harmer(1991), it is possible to identify the teacher in a number of roles in a lesson: as controller in eliciting nationality words; as assessor of accuracy as students try to pronounce the words; as corrector of pronunciation; as organizer in giving instructions for pair work, initiating it, monitoring it, and organizing feedback; as prompter while students are working together; and as resource if students need help with words and

structures during the pair work .As Todor(1993) claims, teachers need to prepare learners for their new role by developing learners' self-awareness as language learners and their awareness of learning goals and options and of language itself. The teacher should assist learners to identify their own preferred ways of learning. He needs to encourage learners to set their own learning goals and provide learners with efficient learning skills. He is responsible to help learners develop their skills of cooperation, negotiation and self-evaluation.

5.2 The Role of the Students

The key difference between learner-centered and traditional curriculum development is that, in the former, the curriculum is a collaborative effort between teachers and learners, since learners are closely involved in the decision-making process regarding the content of the curriculum and how it is taught.(Nunan, 2001). Students need to change their old-fashioned ideas as being passive and negative listeners in class. They should be aware that they are the center of the class and they should take on their new roles to get themselves involved in learning activities as being a planner, an organizer, a manager and an evaluator.

6. Computer Assisted Instruction in ELT

Under the computer assisted learning environment, students are able to independently choose their learning time to complete their learning tasks. students can use the computer assisted system such as Longman interactive system to discuss the questions and problems they meet with in their learning process themselves and also with the teacher and the teacher may answer students' questions in the discussion area online. This is a good way to get rid of the embarrassment and worry of students because of a face to face questioning, so that the communication between teachers and students becomes more direct, comprehensive and effective. And the exchange of ideas between the students and the teacher not only provides a variety of solutions, but also provides a guidance for the improvement of teaching methods. Take the Foreign Language Teaching in Inner Mongolia University for the Nationalities as an example. According to the modern learning theory advocated by the new learning style and the modern foreign language teaching theory, the department of foreign language teaching in Inner Mongolia University for the Nationalities carried out a three-dimensional network of college English teaching trial reform under the multimedia environment in 2005.Following the foreign language teaching principles, the teacher's real lectures have been reduced and more time are spared for students to practice their listening and speaking skills in the autonomous learning center. In 2010, more time is given to students to improve their autonomous learning abilities. It is in urgent need for the teacher to carry out the teaching reform to change his traditional teaching mode into a more appropriate one. Therefore, the department of foreign language teaching has introduced a series of learning system such as "Blue Pigeon Language Learning Platform", "College English Learning System", "New Horizon College English" and "Longman Interactive English Learning System". These resources provide a platform for students to learn independently and make up for insufficient training in classroom teaching. The language teaching platform and autonomous learning software system, such as "Longman Interactive English Learning System", "College English Learning System", and "New Horizons Audio-visual System", have set up many intelligent functions to help promote the communication between students and teachers and improve the students' overall abilities of using English. In 2005, the teachers in Inner Mongolia University for the Nationalities began to carry out the reform of College English teaching. They have installed the local network for English listening and speaking and set up the autonomous learning mode of "University English learning System", which is the establishment of autonomous learning center. In 2012, this university, as one of the universities in western underdeveloped areas, initiated to select the international and leading learning system of "Longman Interactive English", which offers a good platform for teachers and students to interact with each other. Through the use of Longman Interactive English Learning System, the teachers have a trail on their teaching practice and bravely meet with challenges and difficulties. Based on the teaching concept of cooperation and negotiation, the teachers take advantage of the task-based teaching method and the communicative teaching method in the teaching reform to stimulate students' learning interest and desire, and cultivate their metacognitive learning strategies. After a few years' teaching practice, the teaching reform proves to be a relatively effective way to improve students' autonomous learning abilities.

7. Results and Discussions

7.1 The Advantages of Computer-Assisted Instruction

a) Computer aided teaching can make students select learning materials and learning software according to their own language, language acquisition ability and interest .Students have changed their roles from passive listeners into

active learners and they have developed themselves by means of individualized learning. Computer assisted instruction allows for exploratory learning, and it emphasizes student-centered teaching. It is a good way for students to explore the acquisition of knowledge and cultivate students' ability to find and settle problems in the process of autonomous learning. Students may enjoy a lot of fun by learning independently. Computer aided teaching provides a good network platform for students and teachers and makes it possible for them to interact with each other beyond the restrictions of time and space. It is to some extent an effective approach to strengthen the ties between teachers and students. Computer aided instruction has changed the traditional teacher-centered teaching mode. Teachers' teaching concepts have been changed from the knowledge transfer of grammar rules and vocabulary into the cultivation of students' overall abilities of listening, speaking, reading and writing. Computer assisted instruction, which is a multiple interactive teaching mode, mainly takes the student as the main body and the teacher as the dominant player. The teacher often employs the task driven teaching mode to exert students' initiative and creativity, evoke their learning interest and make them participate in various kinds of activities actively.

b) It has become a fashion to use computers and multimedia system in most of the universities in China, which aims to encourage students to learn independently. Students are offered more opportunities to conduct their autonomous learning. Cooperative learning, which is a good way for students to generate questions and exchange ideas freely with each other, is encouraged in the teaching process. Cooperative learning can provide an environment in which students may be engaged in learning tasks and students are able to complete a task better by themselves in such an environment, because their critical and independent thinking abilities have been enhanced. Learner-centered curriculum can finally be achieved in second language teaching by the application of high-tech equipment.

7.2 The Disadvantages of Computer-Assisted Instruction

a) In view of the development of multimedia computer assisted English teaching and the actual use of our teaching experiments, the limitations of computer assisted language learning are obvious. There is still a long way to go for computer assisted teaching because it is not able to realize the interpersonal communication. The teacher can not blindly pursue the display of multimedia courseware in language teaching in the classroom. The interaction between teachers and students can not be replaced by a man-machine dialogue. A good command of English must go through constant and practical communication between teachers and students in class. Computer is just a tool to facilitate teaching, and it can't completely replace the teacher in the classroom teaching activities. Students' communication ability can only be cultivated by a face to face communication between teachers and students. Therefore, multimedia is not a substitute for the teacher. The integration of multimedia teaching into the whole process of language teaching is a necessary step for the teacher in order to minimize the disadvantages.

b) The use of multimedia and computer in language teaching puts forward great challenges to the foreign language teachers in all aspects. The workload of English teachers is significantly increased. Multimedia English teaching needs teachers to be equipped with information technologies as well as good qualities of using information skills. To make the multimedia teaching equipment play a good teaching effect, teacher training is of utmost importance. There is a big difference between the teaching conducted in multimedia network and in the ordinary classroom. If teachers are not trained in advance before they proceed their teaching in multimedia system, they will not be familiar with the operation of the equipment, and they will fail to design sound teaching activities. In that case, the teacher's role will not be changed from a "leading role" to a facilitator, a supporter and an inspector. Even if the English teacher has high academic standards, he is not expected to get a good teaching effect due to a lack of information literacy.

7.3 Implications for Language Teaching

a) The appraisal of students' achievements can fully mobilize their initiative. In view of the disadvantages of computer assisted instruction, special attention should be paid to the teacher's real instruction. The teacher's real instruction may be carried out in group forms. The teacher should give priority to check the effect of students' autonomous learning. According to students' learning situation, the teacher should give them some guidance and help. Though there is not an exact time as to how many hours the teacher should spare to instruct students, in principle, the teacher should give at least one or two hours of tutoring when students have finished their independent learning after a short period of time.

b) There are always some limitations when students are learning independently. For example, students may not carefully finish their homework which is assigned online by the teacher. Some of them may spend a little time on their homework or learning tasks, and some even copy other students' answers. How to avoid these phenomena is very essential for the teachers. The teacher should monitor students' learning behaviors and make use of a valid evaluation method. Students' learning outcome can be assessed by the evaluation of students' learning behaviors,

learning time, scores and peer response.

8. Conclusion

The goal of College English teaching is to cultivate students' comprehensive abilities, especially their listening and speaking ability, so that they can communicate effectively in future and enhance their ability of independent learning. Therefore, the design of College English curriculum should take full account of the requirements of quality teaching, make full use of the advanced information technology to develop students' communicative abilities so as to meet the needs of social development and international exchanges. With the increasing use of CAI system, a variety of computer and network courses are constructed to provide students with a good language learning environment and conditions. The Enlightenment of modern teaching theory to us is to carry on the multimedia Computer Assisted Instruction to focus on the development of students. Students are required to develop their integrative language skills in the process of mastering knowledge. The teacher is required to create attractive learning environment for students to indulge themselves into a variety of learning activities so as to promote the development of their minds and emotions. More practices are needed to experience computer assisted instruction and more research are to be made to throw light on foreign language teaching in China.

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