On the Methods and Strategies of Language Learning in the Background of Computer Technology

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Abstract. The development of computer technology has brought many potential benefits to language learners, and is beneficial to both of language teaching and learning. This paper summarizes many different characteristics and advantages of language learning in a computer environment. Based on the author's practical experience, form of learning methods in the new environment, and puts forward corresponding language learning strategies for the purpose of adapting to development and improving efficiency.

Keywords: Computer Technology, Language learning, Methods, Strategies

1. Introduction

With the deepening of information in contemporary society, it is difficult for traditional foreign language teaching to fully meet the needs of the current situation, and some problems have been gradually exposed. Under this background, computer-aided language teaching emerges as the times require, and plays an increasingly important role in the process of foreign language teaching. It has established a modern teaching mode with students at the center, learning as the center and tasking as the center. Through the organization and guidance of teachers and the help of other software and hardware, let students learn to learn by themselves, explore by themselves to achieve the purpose of acquiring knowledge and developing skills \cite{1}. With the promotion and implementation of college English teaching reform, the research and experimentation of cooperative learning have appeared in our country, and some results have been achieved. Cooperative learning, also known as "group learning ", "team learning" or "shared learning ", refers to the mutual learning that students have a clear division of responsibilities in order to complete common learning tasks in groups or teams. How to use computer-aided language teaching as an important teaching method in the computer environment to carry out cooperative learning in language teaching, to promote the practical transformation of students' learning methods, and to truly achieve the use of learning, has become a
major facing the current reform of language teaching in China.

2. Characteristics and advantages of language learning in a computer environment

In computer environment, language learning can use computer technology (especially multimedia and network technology) to assist and support collaborative language learning, and make creative use of new technology developed by computer, so that more effective language learning methods and more optimized learning strategies can be obtained. It represents the convergence of two trends. That is, the convergence of computer technology that permeates society generally and the new learning style, that is, collaborative learning. Learners learn in groups and use computers as tools to cooperate and help each other to accomplish learning tasks and achieve common learning goals. The use of computer enables learners to cross the limitation of time and space to carry out cooperative learning, which has the advantages that cannot be compared with the previous face-to-face learning. These characteristics and advantages can be summarized in four aspects.

2.1. Providing multi-point communication between teaching and learning

Computer-aided collaborative language learning is no longer the individual behavior of learners, but the interaction behavior between language learners and the number of interactions can be changed (one-to-one, one-to-many, many-to-one and many-to-many), synchronous, asynchronous interaction can be, and the process of interaction can be recorded and saved.

2.2. Providing learner collaboration platforms

Members work together to complete learning tasks and share learning outcomes. Through communication and cooperation, group members are often able to learn more deeply, retain knowledge for a longer time, and learn ways of critical thinking, develop the ability to find and solve new problems, develop the ability of social interaction, develop the emotion of cooperative members and the attitude of active learning of knowledge, and build good social relations and cohesion of learning groups.

2.3. Bringing about changes in learner and teacher roles

Learners take active and active learning by participating in group activities. Learners have to take responsibility for their own learning. Learners are constantly encouraged to produce their own ideas and reflect this process. Collaborative members complete learning tasks through the process of making suggestions, discussing each other, arguing, making concessions, reaching agreement. Teachers are transformed into mentors, consultants, designers, mediators and teachers should master not only the reasonable arrangement of teaching content and objectives, but also the students' cooperation situation, the planning and design of learning process [2].

2.4. Computer Role Joining

Computer technology can be used as an enabler of personal cognitive ability, it is a learning partner, but it is only a component. To achieve the goal of learning, to produce meaningful learning, cannot be separated from the syllabus, teaching process, teacher participation, learning activities and so on.

3. New methods and forms of language learning in the background of computer technology
3.1. Synchronous communications

Studies have shown that learners are more willing to participate in computer-aided language communication than face-to-face language communication. In this environment, learners are more relaxed and feel less embarrassed even if they make mistakes than in face-to-face situations, so they are more inclined to use more complex sentences with vocabulary and syntax [3]. And there is an equal partnership between communicators, and research shows that the proportion of women and men who first propose problem-solving methods in computer-assisted collaborative language learning is similar, while in face-to-face communication the proportion of men who first propose solutions is five times that of women. Figure 1 shows the influencing factors of the computer environment in the form of learning methods for language learners.

![Factors Affecting Choice of LLS](image)

**Figure 1.** Influencing Factors of Computer Environment on the Form of Learning of Language Learners

3.2. Asynchronous

Asynchronous communication can better reflect the potential advantages of network communication. Because there is no need for immediate feedback, learners can have time for in-depth analysis and critical thinking of the problem. E-mail can be used as a way of one-to-one asynchronous remote communication. An example of the rapid development of German after a German learner and a German use E-mail communication in previous experiments illustrates the importance of this one-to-one communication for language learning [4]. After learning the new vocabulary in the German E-mail, the German learner looked back at the letter and tried to use it. In the process, he corrected his previous mistakes, learned a lot of vocabulary and idioms, and also learned a lot of grammar knowledge. Six months later, the experimenter found that he had made great progress in syntax, that he was able to use more complex and long sentences, that the word order was correct and that the language was more authentic. This example fully demonstrates Bakhtin's theory that each individual's language experience is a creative assimilation of the language of others when communicating with others [5]. E-mail can also be used as a way of multi-to-many asynchronous remote communication. A class of 10th-grade students in a Hong Kong secondary school had a 12-week E-mail exchange with 11th-grade students in a secondary school in Iowa, USA. During this process, students practice social communication skills (including initiating discussions, agreeing, raising objections, making

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concessions, reaching agreements, summing up) through E-mail communication. and then each wrote
the first draft, passed the E-mail to each other, the two sides on the organizational structure of the
article, transfer between paragraphs, grammar and words and other aspects of mutual evaluation and
correction, and then sent back to modify, several back and forth, the teacher finally evaluated, formed
the final article, and published in online journals [6]. The questionnaire shows that students are very
interested in such asynchronous distance communication practice writing and feel that they can learn
progress and share the results of common labor with others.

4. Design and implementation of language learning strategies in the context of computer
technology
The first sign of successful classroom teaching is students' concentration and strong interest in
learning. Attracting students' attention, arousing their interest and enthusiasm for active participation
are the basic requirements of English teaching and the basic conditions of any teaching. In order to
fully arouse the students’ enthusiasm and stimulate their interest in learning, the following is an
example of the higher vocational English audio-visual course, using computer-aided language teaching
means to try to design the course teaching cooperative learning. In second language teaching, emotion
refers to the feelings, feelings, emotions, attitudes and so on of learners in the process of learning.
Learners' emotional state directly affects their learning behavior and learning results. The same applies
to computer-aided collaborative language learning. Therefore, the activities of collaborative language
learning must mobilize learners' emotions and make them in a positive state. Figure 3 is a schematic
diagram of language learning strategy system in computer technology environment.

![Figure 2. Schematic diagram of language learning strategy system in computer technology environment](image)

4.1. Curiosity and self-confidence
Curiosity is one of the most important sources of all learning motivation. Because of curiosity about
new knowledge and new things, it drives learners to tend to knowledge, approach things, know things,
explore and solve problems, and its role in computer-aided collaborative language learning is equally
important. Only when the learners are full of curiosity and interest in knowledge, the learners are
willing to cooperate with each other and solve problems together with great interest. Otherwise, for a
boring problem, learners have no enthusiasm and just passively cooperate to complete the task.
Self-confidence is also an important source of learning motivation. For collaborative learning, learners
are only willing to cooperate with others on the premise of full confidence in their knowledge and
ability, and fully demonstrate their ability in the process of cooperation, and contribute their own strength to collaborative learning, so as to achieve successful collaboration. Otherwise, learners may think they are inferior to others, afraid of being criticized by other collaborators, or fear that they will fail to complete the task and drag down the group instead of participating in collaborative learning. Even if they do, some may rely on other members to accomplish the tasks that should have been done by them, thus failing to achieve truly collaborative learning.

4.2. Self-control

In computer-aided collaborative language learning, control is manifested in learners' control of learning goals and tasks, that is, they have the right to choose learning goals and the right to choose the size of the degree of their own efforts; control is also manifested in mastering the computer technology needed to complete learning tasks. If they cannot take the initiative in these two aspects, the mood will be anxious, unable to achieve harmonious cooperation between each other.

4.3. Correct treatments and handling of partnerships

Computer-aided collaborative language learning is based on mutual trust and expectation among cooperative partners, so they must first establish a relationship of mutual respect and willingness to cooperate or otherwise collaborative learning cannot be completed. This relationship between collaborative partners must rely on three elements: the attraction among members, trust among members, and group cohesion. Attraction among members refers to the impression, awareness and understanding of one member of the group of other members as communication continues to strengthen; if members believe that their mutual dependence can successfully complete the task, they will constantly contact and thus build a relationship of trust; group cohesion refers to mutual trust, mutual respect between members in cognition and emotion, and even hope to stay in the group and do not want to leave. The realization of these three elements has a great relationship with cognitive ability and empathy among members. Members' current and potential cognitive abilities affect their cooperation. If one of the members is much more cognitive than the other members, then the member may be in control of the cooperation activities, and the other members will lose the motivation to cooperate, think that it would be better to let the more capable people do the task, so that a good cooperative partnership cannot be established. Empathy is a kind of consciousness or behavior that puts oneself in the perspective of others. Empathy is important to establish a good cooperative partnership in computer-aided collaborative language learning.

5. Conclusion

The computer technology environment provides a good language barrier and a relaxed learning environment for language learners, which greatly arouses learners' interest and initiative in learning language, can take into account the individual differences of learners, and make learners' self-study ability to get exercise. We should give great support to the application of computer-aided language teaching in teaching, increase the investment of funds, ensure the smooth implementation of software and hardware construction, and realize the goal of training language education talents with ability as the center.

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