Research of College English Reading Teaching in CALL Mode

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ABSTRACT

The research on computer-assisted language learning in college English has been fruitful in China. But aiming at general English teaching in colleges, the research in this field has been neither detailed nor in-depth enough. Although researches on CALL reading have been springing up these years, very few related researches are seen in China. Reading is essential to acquiring overall proficiency in English for learners. However, quite a few college students are basically weak in English and lack the motivation to further study. The current monotonous teaching media and boring teaching methods of English reading make things worse. Therefore, it becomes especially urgent to improve and enrich the teaching media and teaching methods of English reading in colleges so as to further improve the teaching efficiency and effectiveness, and better stimulate students’ interest and initiative in learning English. In this paper, an experiment was conducted to discuss and explore the necessity, possibility and feasibility of applying CALL in college English reading.

Key words: College English; teaching; computer assisted language learning; mode

INTRODUCTION

Computer Assisted Language Learning (CALL) is the new trend in the development of English teaching, which focuses on guiding student learning language by means of computers. Its purpose is to get the best learning effects through the utilization of teaching process, teaching contents, and computer assisting. Since some universities were appointed to launch pilot projects for the application of CALL, the research on CALL has been the hot topic in the field of foreign language teaching [1]. Among all the language skills, reading has been most stressed in college English classes in China. Nowadays, one tough problem faced by college students is that they don’t have satisfactory comprehensive ability. Many of the students have not gained fitting reward as far as the time and effort they have put in English learning. Being aware of the deficiencies in current English language teaching, many teachers and researchers are now calling for reforms in education concepts, teaching contents, methodology and techniques [2]. Above all, it is a fact that students have difficulty in reaching and the current teaching method is no longer suitable for students to enhance their reading ability. It is time for teachers to think about how to improve the reading teaching by other teaching aids. Fortunately computer technological advances have created the possibility of new ways of teaching and learning. CALL involves all kinds of language learning activities that use computers for assisting the teaching and learning process and makes possible student-centered and learning.

CALL has developed gradually over the last 30 years, this development can be classified into three phases which refers to as behavioristic CALL, communicative CALL, and integrative CALL [3]. As we will see, the introduction of a new phase does not necessarily entail rejecting the programs and methods of a previous phase; rather the old is subsumed within the new. The first phase of CALL, conceived in the 1950s and implemented in the 1960s and 1970s, is called Behavioristic CALL. Programs of this phase entailed repetitive language drills and can be referred to as “drill and practice”. The role of the computer was a vehicle to deliver instructional materials to learners. The second phase of the CALL was based on communication, which became prominent in the 1979s and 1980s [4]. It’s believed that the drill and practice programs did not allow enough communication. Several types of CALL programs were developed and used during this phase, while the distinction between the first two phases involves not only
which software is used, but also how the software is put to use by the students and teachers [5]. The third phase is called integrative CALL. Educators integrated different language skills – speaking, listening, reading and writing into language learning. The purpose of this phase was to overcome the obstacles of language learning and teaching, and create opportunities to integrate new technologies into language learning. The history of CALL suggests that the computer can serve a variety of uses for language teaching. It can be a tutor which offers language skills or skill practice; a stimulus for discussion and interaction; or a tool for writing and research. With the advent of the Internet, it can also be a medium of global communication and a source of limitless authentic materials. Influenced by the idea of the revolution of the College English Teaching, the aim of the research is to construct a new interactive mode of teaching English reading in the college, by taking into consideration of CALL environment.

THEORETICAL BASIS

The term – schema was first put forward by Barlett. After that many definitions were given to schema in psycholinguistic field. American human intelligence expert Rumelhart adds, the knowledge in our mind is packed into units and these units are the schemata [6]. He also holds the idea that the schema has the stereotyped structure and containing elements. According to Carrell and Eisterhold only when new information and knowledge build the relation with the previously acquired knowledge and experiences, can they have the meaning in comprehension. These acquired knowledge and experiences are called schemata [7]. Various definitions have been given to schema, but the core of schema theory is that schema is organized knowledge structure just like a network which can provide framework and directing for reading comprehension.

The schema theory is about how comprehension is achieved through schema, the knowledge representation in mind. Figure 1 Nuttall shows the relationship between a writer and a reader from which we can see the existence of influences of schemata in reading [8]

![Figure 1 Presuppositions and communications](image)

Figure 1 is a simple way to show how some kinds of experiences are shared while others are not. The area of shared assumptions where the circles overlap represents what the two people have in common is flexible because of many factors. This area shows all the knowledge – including knowledge of language – which they share. It also includes more things like attitudes, beliefs, values and the entire unspoken assumptions share by people brought up in the same society. The rest two areas show things not shared: the experiences and knowledge that are unique to each individual. The kinds of assumption we make about the world depend on what we have experienced and how our minds have organized the knowledge we have got from our experiences [9]. A schema theory is a mental structure because it is a structure organized in our minds and it includes the relationships between its components. There is much debate about its preciseness, whereas, a good mastery of schema theory is enough for us to use understand how we are able to interpret texts. The way we interpret depends on the schemata activated by the text; and whether we interpret successfully depends on whether our schemata are sufficiently similar to the writes’ [10].

RESEARCH DESIGN

Though students give great importance to English reading in the language learning, but their reading competence is not very satisfactory. Many students have spent much time and effort in reading but only to find inefficiency. In the foreign language teaching, especially for the non-English majors, there are some problems which hinder them from improving their English reading competence. These problems are as follows: (a) Ideas and mythology have fallen behind. Most language learning occurs in large class context. So there is not enough time for each student to practice in class. In the teacher-centered classroom, teaching is the center, teachers leave few time for students to engage in communicative interaction. (b) Students read very slowly because they believe slow reading may help them better answer the comprehension questions. Actually, it’s wrong since it may become more difficult for readers to have a better understanding over the whole passage. Relating previous information with newly-read information becomes very difficult. (c) Many Chinese students pay much attention to words learning rather than sentence learning to improve their reading competence. They try to learn each word and then accumulate the meanings of those words, sentences and then the whole passage. (d) For most Chinese students, they do not have a very good environment for
English learning, because it is investigated that most non-English major students’ English learning is motivated by CET-4/6 which is an indispensable condition for them to get their graduation certificate.

Based on the problems discussed above, to improve college students’ reading ability, a research was conducted during the academic term from September to December 2015 to explore the effects of computer on the teaching of college English reading in the college where the author teaches, Luoyang Institute of Science and Technology. In this college, a computer-based language lab, with reading software installed, was established in 2012 to improve student’s English learning ability. The software provides various kinds of reading materials including novels, news, poems, and jokes and short stories and so on. It includes a large amount of reading comprehension exercises for college students. The reading procedure is shown as follows:

![Figure 2 Reading Procedure on the software](image)

The research problems are as follows:
(1) What are the effects of the adoption of CALL on student’s reading ability?
(2) How does CALL improve student’s interests of English learning?

The participants of the research were all sophomore undergraduates from Luoyang Institute of Science and Technology. The sample size is 120 students, who are from two different classes, class A and class B. Each class has 30 students. They have learned English for more than 1 year in college. There are 2 periods of English for each class per week. Class 1, the control class, was taught by author with the tradition way. Class 2, the experimental class, was taught by adoption of CALL in class. In this research, questionnaire and interview are adopted. In terms of the questionnaire, two same sets of questions were used before and after the experiments to investigate the students’ interests in learning English and their reactions to CALL application. In this part, a five-point Likert scale was adopted to test effects of the adoption of CALL on College English learning, where “1” = “Always or almost true of me”, “2” = “Usually true of me”, “3” = “Somewhat true of me”, “4” = “Usually not true of me”, “5” = “Never or almost never true of me”. Students can choose anywhere in between 1-5 to show their degree of agreement on the statements listed in the question. As for interviews, in total 10 students were randomly selected to be interviewed to check the effects of CALL on college English reading teaching.

**DATA ANALYSIS**

In this section, data analysis and discussion are included. In the experiment, all 120 tested students submitted valid questionnaires. During this experiment, data are collected from three Sources: questionnaire and interviews. Firstly, the questionnaires were distributed to the control class and the experimental class. After three months, questionnaires were submitted to the teacher to see the changes in their attitude and interests. The data obtained from the experimental class and the control classes were listed in Table 1 and Table 2 respectively.
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Table 1 Data of the Experimental Class

<table>
<thead>
<tr>
<th>Items</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I don’t think English Class is boring.</td>
<td>12 14 12 11 11</td>
<td>16 18 12 8 6</td>
</tr>
<tr>
<td>2. We like taking English class more than before.</td>
<td>12 16 12 11 9</td>
<td>14 18 14 9 5</td>
</tr>
<tr>
<td>3. It’s easy for you to use a computer</td>
<td>28 16 8 6 2</td>
<td>38 8 7 3 3</td>
</tr>
<tr>
<td>4. I prefer reading on computer to reading textbook.</td>
<td>9 15 14 15 7</td>
<td>16 18 9 6 2</td>
</tr>
<tr>
<td>5. I know how to use courseware.</td>
<td>8 8 18 18 8</td>
<td>28 13 11 5 3</td>
</tr>
<tr>
<td>6. I am more happy and relaxed in CALL-based class.</td>
<td>9 14 15 12 10</td>
<td>22 15 9 9 5</td>
</tr>
<tr>
<td>7. Reading materials provided on software are more interesting and useful</td>
<td>11 12 18 12 7</td>
<td>20 15 10 10 5</td>
</tr>
<tr>
<td>8. I can get immediate feedback to what I have read on computer.</td>
<td>12 14 9 21 4</td>
<td>30 15 8 6 1</td>
</tr>
<tr>
<td>9. I think the CALL teaching method will be very efficient for reading.</td>
<td>12 15 12 9 12</td>
<td>22 20 12 3 3</td>
</tr>
<tr>
<td>10. You can solve problems in English reading class by yourself.</td>
<td>14 12 15 14 5</td>
<td>19 15 7 4</td>
</tr>
<tr>
<td>11. When online dictionary are provided in class, I usually refer to them.</td>
<td>30 19 8 2 1</td>
<td>45 9 6 0 0</td>
</tr>
<tr>
<td>12. With reading software, I have no worries about losing face at errors.</td>
<td>12 14 18 13 3</td>
<td>30 14 12 3 1</td>
</tr>
</tbody>
</table>

According to Table 2-Data collected from the control class, it can be easily seen there is no big difference before and after experiment. So here focus are put on the data collected from the experimental class. Table 1 shows changes in student’s attitude, interests, computer skills and their autonomous English learning ability. As for Item 1- I don’t think English is boring, after the experiment, the proposition of students who believe it is “always or almost true of me” increased from 20% to 30%, the proposition of students who believe “never or almost never true of me” decreases from 18% to 10%. As for Item 2- We like taking English class more than before, before the test, 20% students believes that it is always or almost true of them, while after the test, 23% students think it is always or almost true of them. And the proportion of students who believe it is “never or almost never true of me” decreased from 15% to 8%. As for Item 3-It is easy for you to use a computer, after the test, students who believe that it is “always or almost true of me” increased from 28% to 38%, 1% increase occurred in the number of students who believe that it is “never or almost never true of me”. As for Item 4- I prefer reading on computer to reading textbook,
From the data collected, it can easily be seen that statements 1, 2, 4, 6, 7, 9 were designed to find the changes in student’s attitudes and interests towards CALL-based English reading teaching. There is an increase in the number of students who become more interested in CALL-based English reading teaching, and only very few students feel the English class boring. And the number of students who become more happy and relaxed in CALL-based class, 15% students think it is “always or almost true of me”, while after the test, the proportion increased by 22%. The proportion of students who believe that it is “never or almost never true of me” decreased from 10% to 5%. As for Item 7- Reading materials provided on software are more interesting and useful, 18% students believe that it is “always or almost always true of me”, while after the test, 25% totally agree with the statement. Meanwhile, the number of students who do not think they can get immediate feedback to what they have read on computer decreased from 6% to 2%. As for Item 9- I think the CALL teaching method will be very efficient for reading, before the test, 20% students think it is “always or almost true of me”, while after the test, the proportion increased by 17% to 37%. The students who totally disagree with the statement decreased by 15% from 20% to 5%. As for Item 10- you can solve problems in English reading class by yourself, before the test, 23% students totally agree with the statement, while after the experiment, the number increased from 23% to 31% by 8%. Meanwhile, the proportion of students who totally disagree with the statement decreased from 8% to 2%. As for Item 11- When online dictionary are provided in class, I usually refer to them, the proportion of students who totally agree with the statement increased from 50% to 75%. And students who totally disagree with the statement decreased to 0%. As for Item 12- With reading software, I have no worries about losing face at errors, before the experiment, 20% students believe it is “always or almost always true of me”, while after the experiment, 50% students agree with the statement. Meanwhile, students who do not agree with the statement decreased a lot.

From the data collected, it can easily be seen that statements 1, 2, 4, 6, 7, 9 were designed to find the changes in student’s attitudes and interests towards CALL-based English reading teaching. There is an increase in the number of students who become more interested in CALL-based English reading teaching, and only very few students feel the English class boring. And the number of students who become more happy and relaxed in CALL-based class, 15% students think it is “always or almost true of me”, while after the test, the proportion increased by 22%. The proportion of students who believe that it is “never or almost never true of me” decreased from 10% to 5%. As for Item 7- Reading materials provided on software are more interesting and useful, 18% students believe that it is “always or almost always true of me”, while after the test, 25% totally agree with the statement. Meanwhile, the number of students who do not think they can get immediate feedback to what they have read on computer decreased from 6% to 2%. As for Item 9- I think the CALL teaching method will be very efficient for reading, before the test, 20% students think it is “always or almost true of me”, while after the test, the proportion increased by 17% to 37%. The students who totally disagree with the statement decreased by 15% from 20% to 5%. As for Item 10- you can solve problems in English reading class by yourself, before the test, 23% students totally agree with the statement, while after the experiment, the number increased from 23% to 31% by 8%. Meanwhile, the proportion of students who totally disagree with the statement decreased from 8% to 2%. As for Item 11- When online dictionary are provided in class, I usually refer to them, the proportion of students who totally agree with the statement increased from 50% to 75%. And students who totally disagree with the statement decreased to 0%. As for Item 12- With reading software, I have no worries about losing face at errors, before the experiment, 20% students believe it is “always or almost always true of me”, while after the experiment, 50% students agree with the statement. Meanwhile, students who do not agree with the statement decreased a lot.

In terms of the data collected from the interviews, 10 students answered the designed questions. And the answers help us to get in-depth information about computer-assisted English learning and teaching. As for the question: What’s your motivation of computer-assisted English learning? And do you like it? Most students gave negative feedback. Many students said that the only one motivation of learning English is to pass the national College English Test, but they are interested in computer-assisted English learning and teaching. Because they feel at ease and comfortable with the help of computer, and they believe their English reading ability will be greatly improved with the systematic English reading learning. In terms of the question: Do you think computer-assisted English learning is an effective way to learn English reading, 90% of the ten students gave a positive answer. One of them said, “today, it is easy for students to gain access to the Internet resources, I have a computer, and I can search information online, I can easily visit English websites to learn what I want to learn, and I can download lots of reading materials which are more interesting than our reading textbook, I think it is a very useful and effective way to learn English reading.” CALL is a vital supplementary tool for English language teaching and learning. However, we have to take all aspects of CALL into consideration.
Research of reading theories is an essential branch of language study. The rapid development of educational theories for teaching reform and of multimedia technology provide theoretical basis and a reliable technology platform, making possible the application of CALL in English teaching and improving the quality of teaching. Researchers in the fields of language learning and applied linguistics recognize the value of work in CALL, and they draw on CALL research and pedagogical innovations to further research in their own fields. To research into CALL at Luoyang Institute of Science and Technology, the author conducted a study of non-English major sophomore students, the purpose of which is to examine the effect of CALL on college English reading teaching and learning. From the research conducted in this paper, we find that the adoption of CALL to college English reading has achieved great success. The reading ability of tested students has been greatly improved.

CALL realized the transformation for static state to dynamic state by applying the computer and internet-based modern teaching methods. It integrates words, pictures, audio, and video into the English teaching. The results of this study indicate that CALL is an effective way of teaching English reading. This is shown in the pre-test and post-test tables. Since these inspiring findings are both statistically significant and educationally meaningful, the author illustrates that CALL well-built on the schema theory will make the teaching system more reasonable and effective. It is strongly recommended that administrators and instructors use CALL as a motivator in promoting students’ interest and motivation in English learning. In this information age, computer technological advances have made new ways of teaching and learning language possible. A textbook and a teaching reference book cannot meet the requirements of students themselves and the society. With the availability of computer hardware and software, more and more English teachers have been engaged in or are trying the practice and research of CALL. At the same time, we must clearly understand that things will change with the rapid development of modern technology. Engaging in CALL is a challenge that requires time and commitment. Some research will be out of date soon and new ways to improve the teaching of reading will be under discussion. The reform of the teaching model is a major breakthrough in the reform of teaching, which may bring all kinds of unexpected problems.

IMPLICATIONS
To improve student’s English learning ability, based on analysed data above, several suggestions and implications are concluded: (1) Well-designed multimedia courseware. Teaching must be student-centred, students are the main body of the teaching process, and therefore the design of the English teaching software should fully consider the main role of students in the learning process. Multimedia courseware is ultimately a kind of auxiliary tools to assisting English learning. It should not only have a rich educational content, help students learn, but also help to improve the effectiveness of teaching. During the process of English reading courseware, particular attention should be given before class and after class, learning activities should be designed to be reasonable and scientific. Before reading, teachers should take some time to introduce the theme of reading, encourage students to use skimming, scanning and other reading skills to activate students’ schemata. Furthermore, make students fully adopt their knowledge and skills into their learning and to maximize their reading efficiency. In the process of reading, since not all materials are Extensive reading material, some knowledge of the language is required for students to master, so students should have a clear goal in the reading process, not just read for reading purposes. (2) A correct understanding over CALL and traditional teaching methods, teachers will always be in a dominant position in class English learning. Multimedia can create an intelligent learning environment in which combining illustrations, audio-visual materials, it not only increases teaching capacity, but also effectively stimulates students’ thinking to improve student learning. With this kind of new teaching model, teachers can be more flexible, more creative in the selection of teaching methods. Therefore, the application of multimedia technology will change the future of teaching content, teaching methods, and teaching Mode. But, after all, multimedia teaching is just a teaching method, it is impossible to solve the problem of language teaching. Although the computer can provide timely feedback, but the feedback is limited to simple answers and comments by default. So it is impossible to use computer - assisted teaching substitute the traditional teaching. As Garreau said, the use of computers is not a pedagogical method, but a medium in which the various methods are applied therein. The effectiveness of CALL not entirely lies in the media itself, but in that how to effectively apply it to teaching practice. (3) Improvement of teacher’s accomplishment in theory and classroom teaching ability. Using the computer does not automatically promote learning, the use of computer-based methods largely determines the learning effect. As Schramm put it, “any media, within the limits of its own, is able to complete any education task, whether a student can learn more from this media than that kind of media heavily depends on how the media is being used. Currently, it is increasingly recognized the importance of teachers as media users. Teacher training issue has become one of the main themes of the 1996 World Conference on Computers in Education. Only those teachers who have gained specialized computer-aided teaching training can take full use of computer to improve their English teaching.
REFERENCES