

Research on English Learning Mode Based on Computer Network Ecological Environment

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Abstract: As the cradle of cultivating high-end talents, colleges and universities must adapt to the needs of the development of the times and pay attention to college English teaching to improve college students' English cultural quality and improve their overall abilities. Today, in the information age, computer network technology is widely used in college English teaching, which makes the original college English learning model has revolutionized the times. In the information technology environment, computer networks are widely used in all areas of society. The introduction of computer network technology in the teaching of college English has enriched the learning situation of English and brought about changes in the original teaching ecology. This needs help to understand the original cause of the imbalance fully in college English learning, in order to build a new college English classroom teaching ecological balance in the computer network environment. To this end, the study of the ecology of college English courses in the context of computer networks is underway.

1. Introduction

The excessive use of computer network tools has led to an imbalance in English learning. In the era of computer networks, computer networks have used as vehicles to establish ecological links between various contents related to college English learning as ecological factors and improve the efficiency of college English learning. Especially when college students are generally familiar with computer network technology, applying this technology in college English learning can not only improve students' interest in English learning, but also develop students' autonomous English learning ability (Gahm, 2016). However, judging from the current situation of college English classroom teaching, computer network technology has applied to teaching, it has excessively highlighted the tools and operations of computer network technology. Such as the extensive use of computer network resources and the over-abundance of courseware content to make students, more attention has been paid to the application of computers and ignoring English learning, which have affected the effect of undergraduates' English learning, and has led students to rely too much on teaching courseware in a passive learning state. English teachers have mainly based on courseware teaching and lack the innovation of English learning. As a result, college English learning has lost its ecological balance.

In English learning, the relationship between teaching, learning, and use is not well balanced. Although the reform of college English learning has made students no longer passive learning, teachers are used as guides to guide students to actively participate in English learning. However, due to the inertia of the traditional college English classroom teaching, although the teaching style has changed, but the teaching of the internal quality has not changed, but still the English teacher to the students to carry out knowledge transfer. The difference is that the transfer of English knowledge has transformed from mechanical transmission to the use of computer networks as the main method of transmission. The purpose of English language teaching is to cultivate students' English communication skills (Hwang, 2014). At the same time, they can also learn more about English language and culture in order to expand the cultural perspective. Being in a single English learning environment without constructing an interactive language context leads to a lack of ecological balance between English learning and students' English learning.

In the process of accepting English knowledge, teachers do not pay attention to the cultivation of English learning ability, and students will not participate in English learning autonomously. The main purpose of college English learning is to cultivate the students' ability to use knowledge comprehensively, master the English language, and be able to use it flexibly according to their own needs. This is the ability that college students need. College English learning has mainly based on the content of teaching materials, and the use of computer network technology is to create a good English learning environment for students in order to cultivate students' ability to use English (Mendes, 2016). If English teaching adheres to the teaching of "teaching" rather than "learning", it is difficult to rise to "use", resulting in students' English learning and the application of the English language has lost balance.

2. The Related Theories and Knowledge

2.1. The meaning of curriculum ecology

"Ecology" belongs to the professional term in the field of biology. As the concept of "ecology" has transformed into descriptive language, it gradually permeates into all areas of society. It is mainly used to emphasize the connection between things and the development of things, and to build related things into an ecosystem. In the 1970s, the famous American educator Lawrence A. Cremin elaborated on "educational ecology" in his book "Public Education", which is the application of ecological thinking mode to the study of educational phenomena. It will constitute a systematic, dynamic development system in the field of education. At the same time, the American linguistics researcher Hogan in his book "Language Ecology" emphasized the relationship between language and environment and proposed that the language is ecological due to environmental factors and provides a study for linguistics. On this basis, the "linguistic ecology" proposed leads people to establish ecological awareness in language learning and can use language to think about language issues. English is a widely used language in the world. To improve the efficiency of English learning in college English learning, it is necessary to proceed from the perspective of the current world cultural environment, and to realize the ecologicalization of English classroom teaching from the perspective of language ecology.

The main body of college English learning is students. Teachers are the guides of English knowledge. Every step of English classroom teaching content and teaching have taken as the teaching ecological elements, and incorporated into the teaching ecological system as needed to establish a new teacher-student relationship. Together, we will build a new classroom-teaching model and build the English classroom into a language environment for English learning so that undergraduates can improve their English language ability. The ecologicalization of college English learning embodies the ecologicalization of the classroom environment, including the teaching of language basic knowledge, the development of language and technical skills, and the ability to use language. It has carried out in English classrooms, making college English classroom teaching an open system. Ensure a new ecological balance in English learning.

2.2. New model of foreign language teaching

The requirements of College English Teaching are the programmatic document of the reform of college English teaching. Based on the Constructivist learning theory, the course sets forth the goals, means and evaluation system of college English Teaching, and expounds the requirements of college English teaching in a comprehensive way (Álvarez Valencia, 2016). Summed up mainly include: a goal, three levels of requirements, two concept changes and a teaching model, and other content, see the Table as follows:

Table 1 Basic content of the course

Project	Content
Goal	To cultivate students' ability of comprehensive use of English, especially the ability of listening and speaking, enables them to communicate verbally and in writing effectively in the future work and social intercourse, while enhancing their autonomous learning ability and improving their comprehensive cultural attainment to meet the needs of China's economic development and international communication.
Three levels of requirements	General English proficiency requirements, higher English proficiency requirements
Two conceptual shifts	From "teacher-centered" teaching to "student-centered" teaching; from complete classroom teaching to computer network Autonomous Learning
teaching model	English teaching model based on computer and classroom

Teaching mode is actually the core of the reform of college English Teaching, "the new public English teaching mode should be based on the teaching mode of combining classroom teaching with English teaching software running on campus." (Sun, 2016). Thus, the curriculum proposes a new model of foreign language teaching, "English teaching mode based on computer and classroom" (hereinafter referred to as "New Model") (see Figure 1).

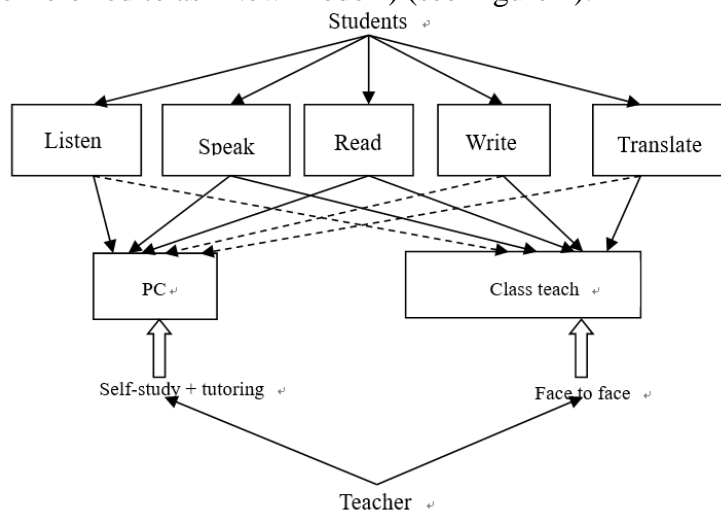


Figure 1. English teaching mode based on computer and classroom

According to the new model, English listening, speaking, reading, writing, translation and other teaching activities have carried out through the computer, but also through the teacher's classroom teaching to carry out; Figure 1 has shown the solid line arrows represent a teaching environment dominated by a dotted arrow that has supplemented by a teaching environment. In other words, "listen" training in the computer network environment, supplemented by classroom teaching, "speaking" and "reading" training both in the computer network environment, but also in the classroom teaching, "writing" and "translation" training in the classroom teaching, with the computer network environment teaching supplemented. In the specific implementation of the model, "curriculum" not only puts forward a very specific multimedia teaching mode in the form of attachment, but also has proposed on the computer "students each learning 16-20 hours, teachers should be given 1 instruction in hours. The proportion of students learns credits on their computers should account for the total credits of English studies. 30%-50%. It is obvious that autonomous learning based on computer network occupies a very important position in college English curriculum.

Traditional foreign language teaching does not use the computer, even if uses, the computer also are one kind of auxiliary tool. Therefore, the computer is not in the traditional foreign language curriculum, but the curriculum in the history of foreign language education in China explicitly put

the computer as an organic part of the curriculum, the computer began from the auxiliary position to the teaching foreground, that is, the computer in the curriculum status has been fundamentally changed. The computer becomes an integral part of the curriculum and is a key element in the teaching process, which lays the foundation for learner-centered self-directed learning and various other learning activities.

3. The Application of Computer Network in English Learning

3.1. Classroom Observation

Classroom observation is one of the main means of our field visits. Through observation, we have obtained a lot of firsthand information about the current college English classroom teaching situation has a general understanding and understanding. The following two classroom observations are more representative because of the observation records, which are collated in Table 2.

Table 2. Application of modern information technology

Teachers	female, Master, 7 Year teaching experience
Students	first-year students (approx . person)
Place	Multimedia classroom of a university in Shandong
Course	Intensive Reading Course
Textbooks	New Horizons University English: Reading and writing tutorial first volume Cheng editor Foreign Research publication
Content	Unit 3 A the Heart to Lean on demonstrate, analyze, and explain the language points of the text
Process	The teacher put a recording at the beginning and then made some questions and illuminating explanations to give students a general understanding of the subject, structure, and characteristics of the text. Since then, the teacher began to use the CD-ROM to start the text of Word analysis and explanation (probably because the CD content and the text the same, students do not seem to be much focused). The teacher's explanation is quite careful and humorous, often combine four class examination extrapolate give example examples. The teacher explained and then let the students listen to the text recordings, and on the text content and language key questions, inspire students. Due to the time relationship, the teacher arranged after class practice.
Summarize	The use of computers, but mainly for presentation and explanation, has mainly taught by teachers to listen to students.

The above example of teaching form and the traditional "blackboard" + Chalk "classroom teaching compared to only a lot of CD-ROM and computer, the essence of teaching has not changed, is a more traditional teacher-centered computer-assisted teaching of the classroom form. The first teacher to use CD-ROM to explain the text, the computer just played a role in the auxiliary teaching; teachers are still talking about the situation of listening to students, and the contents of the CD and the content of the paper textbooks the same. Therefore, it is very difficult to make students develop their learning potentials, to study independently and to highlight individualized learning. It should be said that these two ways of applying information technology to teaching are very typical in college English teaching at present. Teachers are still the center of teaching, students or passively learning, it is impossible to cultivate their ability to learn independently. Accordingly, it seems to be concluded that although computers can improve the efficiency of foreign language teaching, but because the computer is only as a general auxiliary tool applied to teaching, its super function is far from full play and use.

3.2. Student Survey Analysis

During the field visit, we investigated the Southeast University of Nanjing (hereinafter referred to as "Dongda") and the Shanghai University of Engineering and Technology (hereinafter referred to, as "The project is Big"). Southeast University belongs to the national 985 key universities,

teachers and students, is one of the pilot colleges of education reform. Shanghai University of Engineering and Technology is a local university in Shanghai (belong to two colleges and universities), the teacher and the source of students relatively more general, it is not the Ministry of Education College English teaching reform of the pilot schools. We selected the two universities to conduct a survey to compare the similarities and differences in college English teaching between pilot and non-pilot colleges and try to find out the practical function and role of computer network in foreign language teaching. The survey has conducted in a combination of questionnaires and interviews. The questionnaire is mainly concerned with the following aspects.1) classroom activities after the reform of college English teaching; 2) views on the application of computer networks to teaching. 3) The role of computer networks and autonomous learning;4) teacher role and computer network English teaching mode.

3.2.1. Classroom activities after the reform of college English

Classroom activities on English teaching, we have designed 3 things with a problem, the specific results and analysis are as follows:

Table 3. In your English class, the teacher's main activity

Options	Dongda (%)	Project Large (%)
Using multimedia courseware to explain vocabulary, grammar, translation texts	83.33	78.33
Explain CET mock test	0	11.66
Practice vocabulary and sentence patterns	21.66	6.67
Using multimedia courseware to introduce text structure and cultural background knowledge	78.33	60
Organize students' discussion, role performance, simulated situational dialogues and other classroom activities	63.33	16.66
Other	3.33	1.66

Table 4. In your English class, the student's main activity

Options	Dongda (%)	Project Large (%)
Look at the courseware display, listen to the teacher explain, take notes	86.66	93.33
Words practice and English-Chinese translation	28.33	6.67
Take part in a class discussion, a role show, etc	71.66	18.33
Collective collaboration to complete the learning task	68.33	16.66
Do CET mock test	0	14.29
Other:	6.67	0

From the results of the survey, the two schools because of the different teachers and students, the overall teacher and student classroom activities vary, but the proportion of activities is the same. Table 3 and Table 4 options, east and project major have 83.33%, and 78.33 % the students think that the main teaching activity of teachers in English class is "using multimedia courseware to explain lexical grammar and text translation". In addition, there are 78.33 % and 60. These two options are the highest selected in the 6 option, and others such as "CET" and "practicing vocabulary, sentence patterns" and other engineering students ' Choice only 11.66 % and 6.67 %, while the students at east of the university choose only the 0 % and 21.66 %. Another example of students in the main classroom activities, we found that two proofing "to see the courseware display and listen to the teacher to take notes," The approval of the option has an astonishing consistency, the East College students choose this has 86.66%, and engineering students choose this item as high as 93.33%. There are 71.66% and 68.33 for "participation in class discussions, role-playing activities, in comparison, the engineering students who made the choice of other options did not

exceed, which is 6.67 %, 18.33 %, 16.66 % and 14.29 %. The above results can at least illustrate the fact that after the reform of college English Teaching, the institutions of higher learning have changed the traditional teaching means to some extent, and have applied the modern information technology to our foreign language teaching (Liao, 2015). These analyses can also be validated from the Table 5 statistics.

Table 5. The type of English class you want

Options	Dongda (%)	Project Large (%)
The use of Blackboard and other traditional teaching equipment, teacher explanation and classroom activities combined	10	11.66
Using multimedia courseware, teachers' explanation and classroom activity combination	25	53.33
The combination of web-based Multimedia autonomous Learning and classroom teaching and classroom activities	71.66	40
Self-study-oriented and teachers' troubleshooting	10	15
Student Activities mainly	0	8.33
Other	0	1.66

East college students to the choice of the level of identity are as follows. These results from one side show that the East university students tend to web-based autonomous learning, the main reason may be that the Southeast University is the national 985 School, students from a better source than engineering students, students have a strong independent learning ability, and engineering students are more inclined to rely on teachers to teach in class. In any case, the students in both schools have a sense of using modern information technology for foreign language learning and the need to construct knowledge.

3.2.2. Students' views on the application of computer network to teaching

Regarding students' views on the application of computer network to teaching, we designed the 3 a question, as detailed in the following analysis.

Table 6. Do you think computer network learning (optional):

Options	Dongda (%)	Project Large (%)
Vivid, make the text explain more interesting	55	53.33
Large amount of information enhances classroom efficiency	50	51.66
Make classroom activities richer and diverse	43.33	31.66
There is no difference from the traditional teaching, but using computer network instead of Blackboard Chalk	10	6.67
Other:	0	0

From the survey results, more than half of the students (East % and A % and project size 53.33 % and 51.66 %) It is believed that the application of computer network in foreign language teaching can make classroom teaching lively and interesting, increase the amount of information, and improve the efficiency of classroom teaching, which shows that it is closely related to the efficiency and effect of foreign language teaching (whether it is national or not). Similarly, the students of these two schools hold a more positive view on the application of information technology in foreign language teaching, such as the idea that computer networks can be applied to foreign language teaching and traditional teaching, and that the students who make up the difference between them only account for the subjects' % (east) and 6.67 % (engineering Large).

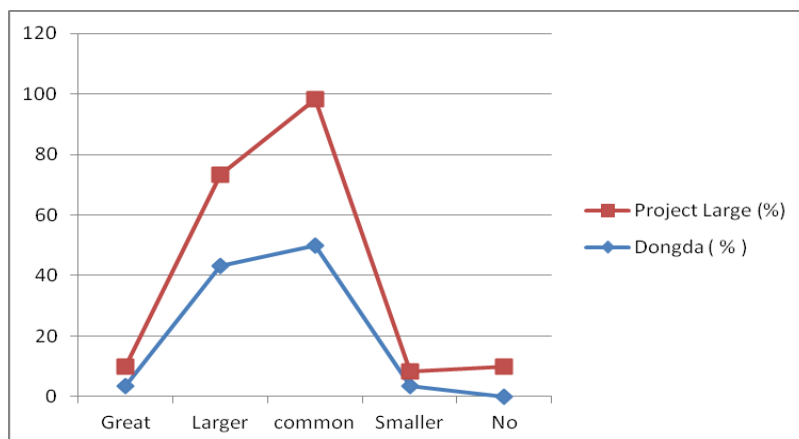


Figure 2. Teach English through a computer network

Figure 2 shows the results of the survey show that nearly half of the students (East A % and Project large 48.33 %), who think that learning English through the computer network is generally harvested, and the harvest is very large only accounted for the survey of the subjects of the 3.33% and 6.67 %. In addition, almost the same proportion of students thinks the harvest is small. At this point, the results of the Table 8 are clearly inconsistent with the results of the teaching effect shown in figure 2. To this end, we interviewed a number of respondents, according to their response: "The feeling of harvest is not as big as imagined, because this is related to our school equipment, always failure, waste a lot of time" (engineering big classmate A). "This is mainly because the teaching software design is not good, as the content of textbooks, after class self-study effect is particularly poor, do not want to see" (East students A). It has said that the two students reflect the situation is a more common phenomenon in colleges and universities, equipment and courseware has really greatly affected the actual effect of teaching, but also affected the students to treat the computer network English teaching attitude; as shown in the figure 3. The students surveyed in the two universities are not very positive about the English teaching of computer network.

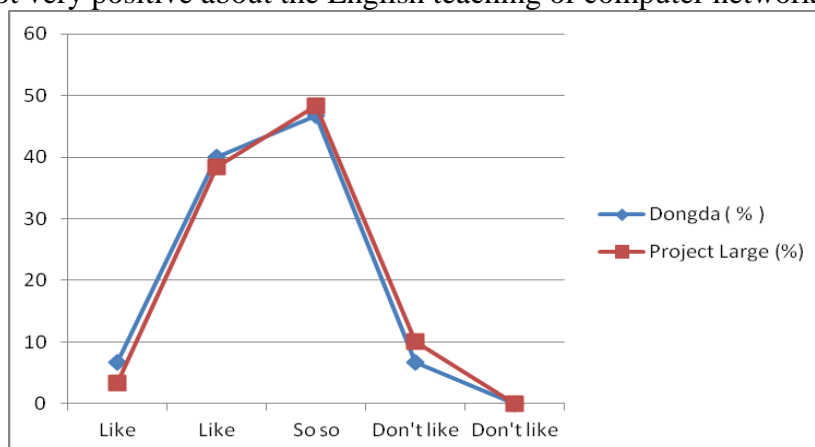


Figure 3. Your attitude towards computer network English teaching

Very much like the computer network English teaching is only accounted for by the respondents 6.67 % (east) and 3.33 % (engineering Large), some students choose "like" (East % and engineering large 38.33 %) and "General liking" (East 46.66 % and engineering large 48.33 %), but none of the two options is more than half.

3.3. Discussion and suggestion

In college English learning, computer network technology should have applied to the right place without being overwhelming. The combination of the English language teaching mode setting and the multimedia platform has based on the functionalities of the English language. For example, when English teachers teach English related to tourism, they can use multimedia courseware to play the pictures of tourist attractions, have English explanations, and have Chinese subtitles, allowing

students to understand the English language from a cultural perspective. After that, the English teacher switched the playing content to the signage of the tourist attraction, so that the students tried to translate the Chinese signboard into English. When students realize the importance of language, culture, and context understanding in English language learning, they can accurately grasp English translation. Adopting this open ecological teaching model will help students learn language from the environment and improve their ability to learn English language in the application field.

3.3.1. The development of college English learning environment

According to the teaching requirements of college English courses, the main goal of college English education is to construct students' English cultural thinking and improve students' comprehensive ability in using English so that they can use English in their social activities and professional positions. For this reason, college English teachers must adjust the goal of college English learning accordingly, and incorporate the English learning ideas into every aspect of teaching activities, such as the teaching of English theoretical knowledge, the shaping of English language environment, and the development of English communicative competence. And so on, the English learning goals and the students' English comprehensive quality training objectives are consistent, so that college English teachers in the ecological teaching process is more directional, in order to play the environmental effects of English learning. To make the college English learning environment ecological, it is necessary to pay attention to the interaction between teachers and students. In line with the concept of student-centered teaching, the student-centered teaching is to reorganize the content of teaching materials into multimedia courseware content using computer network technology, and build a harmonious English culture atmosphere (Huang, 2015). Teachers and students have fully immersed in the computer network-teaching environment.

3.3.2. Utilize online news resources to develop students' ability to learn and learn independently

Most students complain that there are too few listening lessons, and the classroom training for a week has no obvious effect on hearing improvement. In addition, the current listening teaching model is that the teacher is responsible for selecting materials or using fixed materials, doing exercises, answering the answers, and having fewer opportunities for students to participate, and it is difficult to reflect student autonomy. Therefore, it is very urgent to urge students to develop self-learning habits and make full use of the network's vast audiovisual resources. The Internet is a multimedia world. Web broadcasts, online television, online movies, and online songs are all our inexhaustible listening resources. Furthermore, English learning using network audio and video resources can be limited by geographic area, time, content, progress, and speed. News audio-visual materials are good listening training materials. In advance of the students' understanding of these words and their elimination of strangeness, the fear in their hearts will eliminate and their interest in news will increase. Web news resources are also suitable for developing students' verbal communication skills. The author made some attempts in teaching, and there must be a daily report system before each class lecture. Ask students to download their selected news report materials from the Internet before class. If the material is too difficult, it should abbreviate. If it is too long, it should abbreviate. Then make a statement to the class in class and briefly outline the main points of the news. In this process, students not only fully enjoyed the joy of actively searching for, processing, and sorting materials, but also had the opportunity to demonstrate their oral expression skills, fostering confidence in their ability to express spoken language. After a period of training, students generally reflect that they can now actively and skillfully search websites and select appropriate materials, such as timely materials, hot topics, and major news reports at home and abroad. They have already felt the sense of accomplishment of their own masters of learning. Such a teaching model not only improves students' listening and speaking, but also more importantly, the students' self-learning awareness has been cultivated.

In summary, computer network technology has penetrated into English learning, and while leveraging the advantages of information transmission, it has led to the imbalance in the teaching of college English. To promote the integration of computer network technology and English learning,

we must uphold the concept of development, from the perspective of the times, constantly adjust and improve the English learning model, in order to establish a new teaching ecological balance and improve the quality of college English learning.

4. Conclusion

With the wide application of computer network technology in education and teaching, it has led to profound changes in the classroom-teaching model. English teaching has had a tremendous influence on English teaching and learning. In order to adapt to the comprehensive needs of talents in the 21st century and explore a new type of classroom teaching model that adapts to quality education, students can learn and use English as a tool for foreign exchange, and serve as a test base for network information teaching, providing us with a wide range of Practice space. Then, in the integration of information technology and disciplines, especially in English classroom teaching, how can we integrate information technology content into primary school English curriculum, so that the cultivation of the basic knowledge ability of information technology can be closely integrated with the teaching process of English subjects. Get up, give full play to students' initiative, and explore modern teaching theories to explore new teaching models? Understanding these issues has important implications for guiding our educational practice. In summary, computer network technology penetrates into English teaching, and while exerting the advantages of information transmission, it leads to the imbalance in the teaching of college English education. To promote the integration of computer network technology and English teaching, we must uphold the concept of development, from the perspective of the era of the environment, continue to adjust and improve the English teaching model, in order to establish a new teaching ecological balance and improve the quality of college English teaching.

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