

内容摘要

听说能力的培养一直是英语教学的一项重要内容。如何在新的“互补型”教学模式下，利用计算机辅助学习的现代技术，丰富听说手段，提高教学效果是教学改革的新课题。本文旨在前人成就的基础上，从大学英语教学的角度，探讨计算机辅助听说教学的效果。

首先，论文给出了不同教学模式的定义，回顾了计算机辅助语言教学(CALL)的发展概况。作者认为建构主义和自主学习理论是CALL的理论基础。

本文作者接受了2004级新生教学改革试点的任务，以成绩相当的两个班为实验班和对照班。进行了为期一年的英语“互补型”教学模式下的英语听说教学实验。

该实验的目的在于探究“互补型”教学模式是否对英语听说能力的培养有显著的效果，听说能力的提高是否促进综合能力的提高。

实验结果证明“互补型”教学模式有利于提高学生的英语听说技能的培养，并同时促进综合能力的提高。

关键词：“互补型”教学模式；计算机辅助教学；大学英语教学改革；英语听说能力；自主学习

Abstract

This thesis is a tentative endeavor to a new “complementary” teaching mode, which synthesizes the merits of CALL (Computer-Assisted Language Learning) studies thus far made in the world. The new mode is implemented to make up for the deficiencies of the achievements in CET (College English Teaching), with a focus on speaking and listening.

To start with, the thesis gives definitions of different teaching modes, and makes an overview of the development of CALL. The author believes that Constructivism and Autonomous Learning theories are two influential theories for CALL.

The author of this thesis took the task of teaching the students of Grade 2004 for the teaching reform experiments. She chose two classes of students, who had similar level according to the pre-test, as experimental class and control class, and did the “complementary” teaching experiment for a year.

The objective of the research is to find out if the “complementary” teaching mode has significant effect on the improvement of listening and speaking, and if the improvement of listening and speaking abilities promotes the improvement of all-round ability.

The results of the experiment demonstrated that “complementary” teaching mode is helpful for improving listening and speaking skills, and for improving students’ overall ability of English.

Key words: “complementary” teaching mode; CALL; College English Teaching

Reform; listening and speaking skills; autonomous learning

ORIGINALITY RESEARCH STATEMENT

论文原创声明

In light of the principles of academic morals and ethnics, I hereby declare that this thesis represents the original research effort that I have made on the advice of my academic supervisor. To the best of my knowledge, no portion of this thesis has been cited without being properly referenced, and whoever has contributed to this thesis is explicitly identified and appreciated in the acknowledgements section. I am fully responsible for any breach of the copyright law that might arise.

根据学术道德规范，本人承诺如下：

本论文由本人在导师的指导下独立完成。据本人所知，本论文所引用部分均已注明出处，对论文有帮助的人员均已在鸣谢部分阐明，不存在侵犯知识产权的文字。本人对本论文导致的任何违反知识产权的情况承担全部责任。

签名 Signature: 

日期 Date: 2006年5月7日

Acknowledgements

This thesis would not have been completed without much generous assistance. I am grateful to all those who have helped me.

First of all, I would like to express my sincere gratitude to my supervisor Professor Guo Qingzhu for his invaluable guidance, support, and encouragement. He has carefully read the manuscripts, giving me inspiring comments every time. He gave me a lot of pithy scholarly advice on my paper. Also I would thank all the professors in the faculty of English Language and Literature, Tianjin Normal University, who have greatly benefited my intellectual growth through their inspiring lectures.

Special appreciation is also due to my dear colleagues, and students, who helped me do the experiment and offered me many precious suggestions.

Thanks also go to my family, my husband and daughter in particular, who have consistently been a source of encouragement. Without their love and patience, this research and my graduate studies at large might have been foundered.

Chapter 1 Introduction

1.1 Background of CET Listening and Speaking

In spite of the recent improvements, CET is still far from satisfactory. This is partly because the English proficiency requirements are higher now. As an international language, English has become a dominant medium for communication worldwide. Its proficiency has become a major requirement for attaining the highest level of professional and economic success in China as well as around the world. More and more people possess the desire to learn English well. Consequently, CET is facing many problems such as lack of funds, equipment, and teachers. Besides, many colleges and universities have big classes, different levels of freshmen, limited course time and so on, which greatly limit the improvement of English level.

To improve CET, it is important to improve listening and speaking. Research has demonstrated that adults spend 40-50% of communication time listening, 25-30% speaking, 11-16% reading and about 9% writing (Rivers, 1984, quoted from Wang Haihua & Wang Tongshun, 2004: 82). Consequently, listening and speaking are extraordinarily important in our daily communication. The importance of listening and speaking in English instruction is self-evident.

With the spreading of multi-media computers and the Internet, the world seems to become smaller and the people use quicker means to transmit information. As a result, the society requires a much higher standard of language expression. It is clear that listening and speaking competence will become more important in the future.

However, listening and speaking are the weak parts of CET. As it is pointed out in *College English Curriculum Requirements*:

The objective of College English is to develop students' ability to use English in an all-round way, especially in listening and speaking, so that in their future work and social interactions they will be able to exchange information effectively through both spoken and written channels, and at the same time they will be able to enhance their ability to study independently and improve their cultural quality so as to meet the needs of China's social development and international exchanges (*Requirements*, 2004: 22).

In designing College English courses, requirements for competence in listening and speaking should be fully considered... Moreover, the extensive use of advanced information technology should be encouraged, computer- and Web-based English teaching should be promoted, and students should be provided with favorable environment and facilities for language learning. (*Requirements*, 2004: 29)

College English course designing should give a full play to the strengths of traditional classroom teaching, and encourage excellent teachers to offer courses suited to classroom teaching, thus forming a combination with computer- and Web-based courses. (*Requirements*, 2004: 29-30)

Therefore, we experimented on cultivating students' listening and speaking abilities with the "Complementary" teaching mode on college level.

Current advances in computer technology and the rapid pace of change in the communications revolution are affecting the way in which English Language teachers use information technology to develop learners' language skills. There is now a wide range of opportunities open to classroom practitioners from creating online self-access quizzes to the use of authentic online materials as input for activities, and for promoting collaborative projects through computer-mediated communication (Hegelheimer et al, 1996). CALL can benefit both language ability and information ability.

The objective of this paper is to determine how the "complementary" teaching mode can indeed contribute anything to college students' listening and speaking

competence and in what way it can be used best to achieve this. As such, it aims to be not only a theoretical discussion, but also a practical starting point for teachers and schools that are seeking to integrate the computer into the present foreign language curricula.

The thesis is divided into 5 parts. Chapter 1 is an introduction of the essay. Chapter 2 is a literature review about the “complementary” teaching mode for listening and speaking, an overview of the development of CALL, two influential theories, and the features of CALL. In Chapter 3, the necessity of using “complementary” teaching mode for CET listening and speaking is discussed. Then Chapter 4 addresses an experimental research on the new approach, “complementary” college English teaching assisted by the computer. The last chapter is a summary of the whole thesis.

1.2 The Definitions of the Terms:

Teaching mode: Teaching mode is a stable pattern formed from four factors—teachers, students, teaching content, and teaching media—interaction under the guide of teaching philosophy, teaching theories, and learning theories. It is a reflection of the dynamic and synthetical features in the process of the whole teaching.

Conventional teaching mode: It is a classroom-centered collective teaching mode. Its feature is that teachers impart the teaching content to the students through instruction, presentation on the blackboard, and the textbooks. The teachers dominate the whole process of teaching. The students receive the knowledge passively. In this

process, teachers are active instructors; students are passive receivers of exterior stimuli; media becomes a tool that can help teachers to impart the knowledge; textbooks are the contents to be imparted.

Network teaching mode: It is a network-based teaching mode, in which classroom teaching is integrated by network teaching. Network teaching provides the students with virtual class; the teaching of the teachers and the learning of the students can take place in different places; they can have sufficient teachers-students or students-students communication and interaction. The design of network courseware has given attention to both teaching and learning. It not only provides the students with learning contents but also provides the teachers with technological measures of supervising and checking the learning process. Network teaching is open, interactive, sharable, collaborative, and self-accessible.

“Complementary” teaching mode: It is a mixed teaching mode of the face-to-face classroom-teaching mode and computer-and-network-based teaching mode. The process of teaching should give priority to classroom teaching, complemented by network teaching and learning, given priority to textbook, supplemented by network learning resources, student-centered, and teacher-guided. Besides, the face-to-face classroom teaching also guides, facilitates and monitors the computer-and-network-based teaching. Therefore, the two teaching modes complement each other.

Chapter 2 Literature Review

The development of information technology is changing with each passing day. Much literature has proved that the Internet, intranets, campus-network, LAN (Local-Area Network) have been used in teaching, and have provided the teachers and students with individualized teaching and learning environment, and have bettered the teaching effect (Apple and Mullen, 2000; Wible, Kuo.et al, 2001; 刘海平等, 1998; 刘文宇、向华华, 2000, quoted from 庄智象, 2004: 139). Many scholars and experts have done many researches and experiments in CALL (Computer-Assisted Language Learning) . For example, South China University of Technology did The Study of College English Teaching (CET) Mode with LAN Environment. Many universities and colleges are having the study of College English Teaching Mode with LAN Environment for the teaching reform of CET. However, on the whole, the researches and experiments are still in its prophase.

“Complementary” teaching mode integrates CALL into face-to-face classroom teaching. In the face-to-face teaching, the teacher guides the students’ CALL, and has student-centered activities, introduces the strategies of learning (Appendix D), and has many interactive activities. In the CALL, the students prepare oral presentations for the face-to-face teaching, and practice their learning strategies learned in the classroom teaching. In the face-to-face teaching, the teacher gives students the time to show what they have searched in autonomous learning.

New technology, such as the computer and the Internet, gives us a new trend to

solve the problem of how to change from the traditional teacher-centered instruction to communicative, student-centered language learning. The Internet and the rise of computer-mediated communication in particular have reshaped the uses of computers for language learning.

This part includes an overview of development of CALL, ways of using computers for listening and speaking, and a discussion on its features.

2.1 A Brief Overview of the Development of CALL

Computers have been used for instructional purposes since the 1960's. Applications have been implemented on different generations of computers since that time. With the development of personal computers in the 1980's, a plethora of Computer-Assisted Learning software was produced for stand-alone desktop computers. Computer-Assisted Language Learning (CALL) is the application of CAL (Computer-Assisted Learning) for language learning and teaching.

The field of CALL is inherently multidisciplinary. It applies research from the fields of second language acquisition, sociology, linguistics, psychology, cognitive science, cultural studies, and natural language processing to second language pedagogy, and it melds these disciplines with technology-related fields such as computer science, artificial intelligence, and media/communication studies.

2.1.1 The First Three Stages

This 40-year period can be divided into three main stages: behaviorist CALL, communicative CALL, and integrated CALL (Warschauer et al, 1998:57-71). Each stage corresponds to a certain level of technology and certain pedagogical theories.

Table 1: The Three Stages of CALL

Stage	1970s-1980s Structural CALL	1980s-1990s Communicative CALL	21 st Century; Integrative CALL
Technology	Mainframe	PCs	Multimedia and the Internet
English-Teaching Paradigm	Grammar-Translation & Audio-Lingual	Communicative Language Teaching	Content-Based, ESP/EAP
View of Language	Structural (a formal structural system)	Cognitive (a mentally-constructed system)	Socio-cognitive (developed in social interaction)
Principal Use of Computers	Drill and Practice	Communicative Exercises	Authentic Discourse
Principal Objective	Accuracy	And Fluency	And Agency

(Waschauer, 2000)

In the 1960s and 1970s the first form of computer-assisted language learning featured repetitive language drills, the so-called drill-and-practice method. It was based on the behaviorist-learning mode. The computer was viewed as little more than a mechanical tutor that never grew tired or judgmental and allowed students to work at an individual pace. Behaviorist CALL was first designed and implemented in the era of the mainframe. It was mainly used for extensive drills, explicit grammar instruction, and translation tests. (Ahmad et al, 1985: 5).

Communicative CALL emerged in the 1970s and 1980s as a reaction to the behaviorist approach to language learning. Proponents of communicative CALL rejected behaviorist approaches at both the theoretical and pedagogical level. They stressed that CALL should focus more on using forms rather than on the forms themselves. Grammar should be taught implicitly and students should be encouraged to generate original utterances instead of manipulating prefabricated forms (Jones

and Fortescue, 1987; Philips, 1987).

This form of computer-based instruction corresponded to cognitive theories, which recognized that learning was a creative process of discovery, expression, and development. Through interaction, learners can develop language as an internal mental system. The mainframe was replaced by personal computers which allowed greater possibilities for individual work. Popular CALL software in this era included text reconstruction programs and simulations.

The last stage of computer-assisted language learning is integrative CALL. Integrative CALL stresses these issues and additionally lets learners of a language communicate inexpensively with other learners or native speakers. As such, it combines information processing, communication, use of authentic language, and learner autonomy, all of which are of major importance in current language learning theories.

Teachers have moved away from a cognitive view of communicative language teaching to a socio-cognitive view that emphasizes real language use in a meaningful, authentic context. The purpose of interaction is to help students learn to enter new communities and familiarize themselves with new genres and discourses. From this point of view, the content of the interaction and the nature of the community are extremely important. It is not enough to engage in communication for communication's sake. Integrative CALL seeks both to integrate the various skills of language learning (listening, speaking, writing, and reading) and to integrate technology more fully into language teaching (Warschauer et al., 1998).

What we should note is that by dividing so, it does not suggest that these stages have occurred sequentially, with one following the other, from “bad CALL” to “good CALL”. At any time, any of these may be combined for different purposes. However, there has been a general trend or development over the years. With new ideas and uses of computers being introduced in combination with those previous (Warschauer, 2000).

Many of the changes in CALL paradigms flow from economic and social changes. The shift to global information-based economies has meant a dramatic increase in the need to deal with large amounts of information and to communicate across languages and cultures. Memorization is less important in this information-rich time than effective search strategies, and students need the ability to respond and adapt to changes rather than training in a single way to approach a task. The teacher has become a facilitator of learning rather than the font of wisdom, and will find, select, and offer information in a variety of ways based on what their students must learn in order to meet diverse needs. As facilitators, teachers must in many ways know more than they would as directive givers of information.

Future developments in networked communication, multimedia, and artificial intelligence will likely converge, creating a potentially more central role for the computer as a tool for authentic language exploration and use in the second language classroom.

2.1.2 Two Influential Theories

The computer itself can do no good nor harm. Powerful as it is, the computer is

merely a tool. Its effectiveness in CET depends on the way the teachers use it. To integrate computers successfully into college listening and speaking, new teaching concepts are also important. Two theories are influential in CALL use in CET. They are Constructivism and Autonomous Learning.

Constructivism

As a philosophy of learning, constructivism can be traced at least to the eighteenth century and the work of the Neapolitan philosopher Giambattista Vico, who held that humans could only clearly understand what they have themselves constructed. Many others worked with these ideas, but the first major contemporaries to develop a clear idea of constructivism as applied to classrooms and childhood development were Jean Piaget and John Dewey (Powell, 1994).

Constructivism is basically a theory—based on observation and scientific study—about how people learn. It is based on developmental mental stages of Piaget. Moreover, Piaget's constructivism is based on his view of the psychological development of children. “To understand is to discover, or reconstruct by rediscovery...” (Piaget, 1973). Understanding is built up gradually through active involvement. For Dewey, education depended on action. Knowledge and ideas emerged only from a situation in which learners had to draw them out of experiences that had meaning and importance to them (Dewey, 1966). The Russian Lev. S Vygotsky emphasizes on the social context in learning, with a stress on the children creating their own concepts (Vygotsky, 1978). Bruner (1983) focuses on language learning in young children. A major theme in the theoretical framework of Bruner is that learning is an active process in which learners construct new ideas or concepts

based upon their current/past knowledge. He states a theory of instruction should address four major aspects: students' predisposition towards learning; the ways in which a body of knowledge can be structured so that it can be most readily grasped by the learner; the most effective sequences in which to present material; and the nature and pacing of rewards and punishments (Bruner, 1966). Good methods for structuring knowledge should result in simplifying, generating new proposition and increasing the manipulation of information.

Constructivism views that knowledge is not "about" the world, but rather "constructive" of the world (Sherman, 1995). Knowledge is not a fixed object; an individual constructs it through his/ her own experience of that object. Constructivist approach to learning emphasizes authentic, challenging projects that include students, teachers and experts in the learning community.

The constructivist paradigm has led us to understand how learning can be facilitated through certain types of engaging, constructive activities. This mode of learning emphasizes meaning-making through active participation in socially, culturally, historically, and politically situated contexts. A crucial element of active participation is dialogs of shared experiences, through which situated collaborative activities, such as modeling, discourse and decision-making, are necessary to support the negotiation and creation of meaning and understanding.

In sum, the contemporary constructivist theory of learning believes that individuals are active agents, they engage in their knowledge construction by integrating new information into their schema, and by associating and representing it

into a meaningful way. Constructivists argue that it is impractical for teachers to make all the current decisions and dump the information to students without involving students in the decision process and assessing students' abilities to construct knowledge. In other words, guided instruction is suggested that it puts students at the center of learning process, and provides guidance and concrete teaching whenever necessary. Perkins (1991:9-21) indicates that students may easily get lost in management without any experience to guide them through the information jungle. This student-centered guided learning environment is considered, however, more appropriate for ill-structured domains or higher-level learning.

There are four important features of constructivism: individualized teaching and learning, the spirit of exploration and collaboration, the faculty of creative thinking and learning in a certain context (Quinlan, 1997: 15-22).

Constructivism represents one of the big ideas in education. There are significant differences in basic assumptions about knowledge, students, and learning. Its implications for how teachers teach and learn to teach are enormous. If our efforts in reforming education for all students are to succeed, then we must focus on students. A focus on student-centered learning may well be the most important contribution of constructivism.

Constructivism can incorporate a number of teaching practices, such as collaborative, and inquiry-based learning. The methods of constructivism emphasize students' ability to solve real-life practical problems. Students typically work in cooperative groups rather than individually; they tend to focus on projects that

require solutions to problems rather than on instructional sequences that require learning of certain content skills. The job of instructional sequences that require learning of certain content skills. The job of the teacher in constructivist modes is to arrange for required resources, act as a guide to students while they set their own goals, and ‘teach themselves’. Evaluation should serve not only as an assessment of student learning, but also as a way to help students check on their own process (self-analysis). Constructivism aims to reduce the role of the teacher as an expert.

The rapid development of increasingly powerful computer and communication systems has great implication for the constructivist approach to education. It offers a tremendous amount of information, tools for creativity and development, and various environments and forums for communication. Within a student-centered curriculum based on student performance or research, new technology tools provide many opportunities for students and teachers to build knowledge in an authentic setting.

Though constructive instruction concept focuses on learners, it does not mean we can neglect the leading role of teachers. Teachers’ role embodies not only the traditional one of explaining the content, nudging and leading students, but also the new role of designing a context, facilitating related information, and arranging collaborative study. Teachers serve in the role of guides, monitors, coaches, tutors and facilitators. Teachers help students find their own way to solutions by providing multiple representations or perspectives on the content. Teachers analyze and comment on students’ strategies and help them perform at a higher level than they could by themselves, but teachers do not dictate solutions. Teachers also encourage

students to work together. In this way, students will see alternate views while constructing their own approaches to solving these problems. The blending of “teacher-leading” and “student-centered” teaching mode is advisable.

Autonomous Learning

Constructivist approaches encourage and promote self-directed learning as a necessary condition for learner autonomy. The concept of “autonomous learning”—a more popular term later is “learner autonomy”—originated in the 1960’s when there were debates about the development of lifelong learning skills and independent thinking.

Holec (1981:3) defines autonomy as “the ability to take charge of one’s own learning”. In David Little’s terms, learner autonomy is essentially a matter of the learner’s psychological relation to the process and content of learning—a capacity for detachment, critical reflection, decision-making, and independent action (Little, 1991:4). Littlewood (1996:427-435) believes autonomy focuses on the learner’s willingness and capacity to control or oversee his own learning. The autonomous learner is self-activated maker of meaning, an active agent in his own learning process. He is not the one to whom things merely happen; he is the one who, by his own volition, causes things to happen. Learning is seen as the result of his own self-initiated interaction with the world. Benson (1997:29) sees autonomy as “a recognition of the rights of learners within educational systems” and, in the EFL teaching context, as “a recognition of the rights of the ‘non-native speaker’ in relation to the ‘native speaker’ within the global order of English”.

Dickinson (1993: 330) sees autonomy very much as an attitude to language

learning. According to him, although autonomy may not necessarily have many external observable features, autonomous learners are supposed to have the following characteristics: (1) They are able to identify what have been taught. (2) They are able to formulate their own learning objectives. (3) They can and do select and implement appropriate learning strategies, often consciously, and they can monitor their own use of learning strategies. (4) They are able to identify strategies that are not working for them, that are not appropriate, and use others. They have a relatively rich repertoire of strategies and have the confidence to ditch those that are not effective and try something else. (5) They can involve themselves in self-assessment, in other words, monitoring their own learning. An autonomous learner is one who can very skillfully self-manage or monitor his or her own learning in a holistic or all-round way. According to Icy Lee (1998: 282) “learner autonomy involves taking responsibility for the objectives of learning, self-assessing and taking an active role in learning”. She also put forward three factors crucial to the development of learner autonomy: learner choice, supporting environment and self-assessment. Zhang Yanjun (张彦君, 2004: 54-61) also concludes three main elements of autonomy during English learning: 1) Attitude: Learners are willing to have an active attitude, in another word, being responsible for their own study and learning actively. 2) Capacity: Without this, a learner cannot do it independently. 3) Environment: There should be a proper environment where learners have many opportunities for autonomous learning and developing his autonomy.

The concept of learner autonomy is closely linked with learners' actions and

their perceptions toward learning. On one hand, it relates to learners' actions, ability of capacity to take charge of learning individually and cooperatively. On the other hand, learner autonomy refers to learners' perceptions, beliefs and attitudes toward learning. Within such a conception, learning is not simply a matter of rote memorization; it is a constructive process that involves actively seeking meaning from (or even imposing meaning on) events (Candy, 1991:271). According to Boud (quoted in 戚宏波, 2004), learner autonomy is a teaching goal, a teaching concept and a learning approach at the same time.

There are three approaches to gain autonomy: the individual-centered approach, the group-centered approach and the project-centered approach. However, “the fully autonomous learner is an ideal, rather than a reality” (Nunan, 1997:193). Most researchers use the term “self-access” to refer to the approach that assists learners to move from teacher dependence to autonomy. Self-access learning includes, but is not limited to, “learning without a teacher”, which usually happens in uncontrolled environments, like students’ residences and English corners (Bai Shuqin et al, 2003:52-55).

Related experiments have shown that autonomous learning is an effective teaching mode, for, autonomous learning caters to the individual needs of learners at all levels; allowing students more freedom and autonomy will enhance the learner’s motivation and quality of learning (Dickinson, 1995: 165-174).

The development of learner autonomy does not mean that learners work in isolation or have complete autonomy in the classroom. On the contrary, as learners in

China's context are too passive to control everything and they require "varying degrees of control" (Egbert & Hanson Smith, 1999:392, quoted in Fang Ying, 2002). Consultation with and feedback from the instructor are necessary. While we strongly emphasize the importance of learner autonomy, we must not ignore the role of teachers. We must have a clear idea that no autonomous learning is actually purely or truly autonomous. When students learn in controlled or semi-controlled environments like self-access centers and libraries, counseling service may be provided. In this case, teachers take on new roles of counselors, facilitators, assessors, and administrators (Bai Shuqin et al, 2003). In other words, the teacher still plays an indispensable role in working towards autonomous learning.

To conclude, autonomous learning should be cultivated and developed among college English learners in China. As we all know, teacher-centered approaches and spoon-fed methods have been prevalent for a long time in China's EFL context. Many learners have been so accustomed to depending on teachers' feeding that without teachers' timely and adequate help, they have felt disoriented, lost confidence and failed to pinpoint their goals in learning. Moreover, learning is a lifelong endeavor (Pemberton, 1996). The situation calls for the urgent need of cultivating learners' initiatives and learner autonomy. While other researches (Littlewood, 2000: 31-36, 戚宏波, 2004) proved that there is not much difference between Chinese learners and western learners with respect to autonomy. Maybe that suggests autonomous learning is both necessary and feasible.

Learner autonomy is very important to listening and speaking. As we know,

improving listening and speaking is a time-consuming process. We promote autonomous learning to stimulate students' motivation and potential. While doing so, they may well acquire a life-long learning skill and a habit of independent thinking, which will benefit them long after leaving university.

Due to the present situation of CET and college students' autonomy, many teachers and researchers (戚宏波, 2004; 崔玲 2004; 14-21; Li Ming, 2001:2-5) suggest that we develop autonomy through in-class and after-class activities under the instruction of teachers.

Conditions in Higher Education also have made the instruction of autonomous learning possible. CALL project or Computer software for language learning is a case in point. In addition, there are on-line College English System, which was co-developed by Shanghai Foreign Language Education Press and Shanghai Science and Technology University.

2.2 The Internet

It is the rise of computer-mediated communication (CMC) and the Internet, rather than anything else that has reshaped the uses of computers for language learning at the end of the 20th century. With the advent of the Internet, the computer—both in society and in the classroom—has been transformed from a tool for information processing and display to a tool for information processing and communication.

CMC can be broadly defined as “human communication via computers”(Higgins, 1991). What is significant is that the communication takes place “through a computer

between human beings, instead of to an already determined computer system" (Ferrara et al, 1991:31, quoted in Ho, 2003). Today, the technology for CMC has advanced to incorporating aural and visual input into text. The overall "empowerment and emancipation effects" (Higgins, 1991) of CMC is widely acknowledged in the educational context, given its accessibility, economical and inexpensive use relative to other technologies (Turoff, 1990, quoted in Ho, 2003). An important part of teaching is to structure opportunities for communication for the learner. The learner must be communicating about something real and interesting. Through CMC, a wide range of communication channels is possible.

Owing to computers, learners of a language can now communicate inexpensively and quickly with other learners of speakers of the target language all over the world. This communication can be either synchronous (real-time communication) or asynchronous (e-mail). Synchronous communication refers to real time communication, interaction with live audiences. Synchronous communication can be achieved either by specific software programs for local area networks or via the Internet, using Yahoo Chat room, MSN messenger, for instance.

CALL for listening has been proved to be effective and beneficial. It is time to integrate computers into college English learning. In addition, it is feasible too. With the development of more advanced techniques and better economy situations, the early barriers such as finance problems, low speed, unexpected broken-down, have mostly been moved away.

2.3 The Features of CALL

Computer technology is integrated, interactive, multimedia with the features of fantastic speed and enormous content. The computer technology combines text, audio, video, and animated graphics. The computer is very good at storing, manipulating, and retrieving large amounts of information. It provides easy access to large quantities of information, such as dictionaries, and encyclopedias. The computer is interactive. Students can get real communication with English speakers or other learners conveniently via it. Therefore, CALL teaching has also these features. It is fast, vivid, interactive and rich. Besides, the teaching contents are easy to up-date.

2.3.1 Advantages of CALL

Table 2: Comparison of Conventional & Network-Based Language Learning

Conventional Language Learning	Network-Based Language Learning
Linear Expression	Hypertext, Multimedia
Lack of Motivation	High Motivation
Imparted Learning	Self-Directed Learning Content and Pace
Controlled by the Teachers	Controlled by the Students Themselves
One Teacher, Many Students	Individualized Learning + Students-to-Students Interaction
Limited Resources	Unlimited Resources
Classmates' Interaction	Continuously Updated Information, Contact with Native Speakers and Specialists.

(Translated from 胡壮麟, 2004: 346-350)

Comparing to traditional English teaching, from table 3 we can see that CALL has the following beneficial features (Warschauer, 1996: 3-20):

- 1) CALL offers a better, authentic learning environment.
- 2) CALL supports individual learning and stimulates motivation and self-esteem.
- 3) CALL benefits creative thinking, the spirit of collaboration and learner autonomy.

- 4) CALL benefits Computer literacy
- 5) Teaching with CALL saves time in the long run.

It is obvious that CALL saves students a lot of precious time due to its high density and good effect, and it will save the teachers' time, too. It can release teachers from the routine and repetitive teaching tasks, which used to take up teachers' most efforts and time. If one considers the time it takes to compile a handout (looking for material, typing it, printing it, duplicating it and distributing it), it would save a lot of time if these handouts could be turned into their electronic counterparts. They are easy to update and save work in the end. Besides, teachers can share their work easily.

2.3.2 Limitations of CALL

Though CALL has many advantages, it is not easy to implement it in a certain instruction. There are some limitations, for example, the financial and technical difficulties, and the lack of emotional elements.

Teachers should support students with special help and give more encouragement to students. Apart from these, teachers may worry that the “computer class” betrays the ultimate goal of language learning, namely, communicative competence (Zhang Ying, 2003). The cause for concern is that when engaged in a computer-motivated game or activity, learners are either too absorbed in the tasks to communicate or too excited to communicate in the target language. Some scholars warn that too much audio-visual input in CALL courses may result in the decrease in abstract thinking ability.

CALL has more advantages than disadvantages and has a promising future. We

educators must keep up with the development of the society and technology, but before integrating computers into CET, we need to understand fully the problems, and we should innovate the principles and techniques to facilitate this transition from conventional teaching methodologies because technology is only as good as the people using it. As Garrett (quoted in Warschaucer, 1995: 60) pointed out: “the use of the computer does not constitute a method”. Rather, it is a “medium in which a variety of methods, approaches, and pedagogical philosophies may be implemented”. The effectiveness of CALL cannot reside in the medium itself but only in how it is put to use. The efforts of the government and university authorities are essentials in popularizing CALL, but the educators and students will also play a very important role in it. If people misuse it because they cannot understand its strengths and weakness, the end will be worse than before any technology was introduced.

The computer does not promote learning on its own. Despite the various and powerful functions, the computers’ role in education is that of a medium by nature. Therefore, the effectiveness of CALL depends greatly on the teachers. Since CALL works best with the guiding of teachers, it is better for us to carry it out as an assistant part of the College English course, and not as a stand-alone task for self-access use in order to use this environment to ensure optimum conditions for college students. It will work well if a “computer + teacher” mode is adopted (蔡基刚 et al, 2003: 2-7).

Chapter 3 Listening and Speaking in College English Teaching

The importance of English instruction is self-evident. Speaking of English teaching, we can never miss the four skills: listening, speaking, reading, and writing. The present English language teaching reform emphasizes listening and speaking.

3.1 General Listening and Speaking Competence Requirements for College Students

As is stated in the new *Requirements*, our aim is to "... meet the needs of China's social development and international exchanges" (*Requirements*: 24), and to prepare students for future study and work. It must keep up with the time. As we can see, China's Internet users have increased rapidly these years. This fast growth has not only brought about sweeping changes to many facets of life but has also posed new challenges to China's university graduates as job hunters. More and more enterprises, especially foreign invested ones, require applicants to have both adequate English proficiency and a new literacy termed "electronic literacy" (Shetzer et al, 2000). In fact, the information-driven society has higher demand for literacy because computers have radically changed not only the way we communicate, but also our perception of literacy. The New London Group has coined a term—"multiliteracies"—which undermines the traditional understanding of the term "literacy". It is defined as a diverse range of functional, academic, critical and electronic skills that determine success in today's world (Marzano et al, 1988). College students are expected to become equally competent in the following four

areas:

Functional literacy: the ability to speak, understand, read and write English as well as to use English to articulate and expand their knowledge.

Academic literacy: the ability to read and understand interdisciplinary texts, analyze and respond to those texts through various modes of written and oral discourse and expand their knowledge through research.

Critical literacy: the ability to evaluate the validity and reliability of informational sources so that they may draw conclusions.

Electronic literacy: the ability to select and use electronic tools for communication, construction, research and autonomous learning (Schetzer, 1998, quoted in Kasper, 2000).

As it can be easily noticed, traditional college English teaching focuses on the first aspect of literacy. This basic training is insufficient for the majority of college students. The urgent need to prepare students for these future challenges has made it a priority to incorporate technology into university English teaching programs.

3.2 The Conventional College English Teaching

To explore a suitable teaching method for college English teaching in China, it is necessary to have a deep understanding of the conventional teaching method prevalent in China. Its characteristics are discussed and its problems and causes are analyzed in this part.

3.2.1 Characteristics

A nation-wide investigation in the condition of College English Teaching in

China was conducted by Zheng Shutang (1996). This investigation covered twenty colleges, universities and some working units that had recruited college students. A questionnaire was used as means of collecting data. According to the investigation, the CET in China takes on the following characteristics:

The data collected through the survey of Zheng Shutang shows that 87.8% of the teachers often deal with difficult sentences and new words. Teachers who often teach new words and grammar account for 82.3%. There are 83.3% of teachers who often engage students in doing simulation tests. 67.2% of the teachers often require students to do translation work. 67.2% of the teachers often check students' spelling. In contrast, only 27.6% of the teachers organize group work and 15.7% of the teachers often involve students in role-play. Based on the data collected above, a conclusion can be drawn that CET is language-centered. Teachers are preoccupied with form of English. They teach English mainly as knowledge instead of as expression of meaning.

According to the investigation, 45.6% of the teachers admit that 61% to 80% of the class time is spent on explanation of grammar and new words. 22.5% of teachers admit that more than 80% of the class time is spent for grammar and new words. In all, there are 68.1% of the teachers who admit that teacher's talk occupies most of the class time.

According to the investigation, 69.5% of the teachers often use textbooks and reference books. Only 3.1% of the teachers seldom use textbook and reference book. 4% sometimes use textbooks and reference books. As to the teaching equipment,

90.6% of the teachers often use blackboard. 60.4% of the teachers often use recorder. 23.6% of the teachers often use language labs. 5.1% of the teachers often use projecting apparatus. The data demonstrate that English teaching is mainly text-based. The teaching equipment in use is chiefly blackboard and recorder.

3.2.2 The Causes of Pedagogical Problem

With the prevalent analytic method, the problem of low effectiveness and efficiency of CET has aroused concern from the society. After graduation from college the students are still deficient in understanding and using English to communicate. Causes of the problem can be analyzed as follows:

Firstly, in the case of low efficiency and effectiveness, the head of Higher Education Bureau of China points out that inefficient development of communicative competence is partly due to the neglect of the language output. The focus on presentation and practice of grammatical patterns and vocabulary directly hinders development of comprehensive ability (吴一安, 2002).

Communicative output refers to the “activities in which students use language as a vehicle of communication and where the students’ main purpose is to complete some kind of communication task” (Hammer J, 1983:37). According to Swain’s (1985) “comprehensible output” hypothesis, opportunities to produce language are important for acquisition. Firstly, output promotes noticing gaps between what a learner wants to say and what he can say. Secondly, output is one way of testing a hypothesis about comprehensibility and linguistic well-formedness. Thirdly, output serves a metalinguistic function, enabling the learner to control and internalize

linguistic knowledge. Output helps students to convert the input into intake. Without the stage of communicative output, students may end up with the mastery of the declarative knowledge. However, declarative knowledge does not automatically lead to procedural knowledge. The teachers need to provide students with opportunities to activate knowledge through communicative activities.

Secondly, college English Teaching is teacher-centered. Teacher takes up most of the class time to impart knowledge to students and students seldom have chances to use English for the purpose of communication at class. With EFL situation in China English learning occurs mainly in class with the instruction of teacher. After class students seldom communicate in English owing to the EFL environment. Thus, the chances for communicative output of English either at class or out of class are far from being adequate for students to develop communicative ability. As a consequence, after so many years of learning, what the college students master is “dumb English” and “deaf English”.

In college English classroom the teacher is the center of the class. The teacher is the authority that imparts knowledge and initiate practice activities. Students on the other hand are just the ignorant audience who are trying their best to absorb what the teacher imparts and do exercises according to teacher’s instruction. The teacher’s domination over the class and students’ passive reception frustrates students’ creativity and novelty. The teacher needs to learn to withdraw from the central position and provide more opportunities for students to engage in the use of the language.

Thirdly, in college English teaching, reading skill is the main concern of teachers and students. The effectiveness of solely developing the reading skill is called into question and linguistics and scholars begin to see the need for the development of the four skills integratedly (吴一安, 2002). At Zhejiang University, an integrative approach is being developed and tried. In its report, the experimental classes do better than others in listening comprehension, reading comprehension, composition writing and cloze tests (王宗炎, 1999).

Brown (1994:219) lists several reasons for the integration of the four skills within a communicative, interactive framework:

- 1) Production and reception are quite simply two sides of the same coin and cannot split the coin into two.
- 2) Interaction means sending and receiving messages.
- 3) Written and spoken language often bear a relationship to each other, to ignore that relationship is to ignore the richness of language.
- 4) For literate learners, the interrelationship of written and spoken language is an intrinsically motivating reflection of language and culture and society.
- 5) Often one skill will reinforce another; we learn to speak, for example, in part by modeling what we hear, and we learn to write by examining what we can read.

Stern (1983: 399) argued that as language acquisition is in fact a process in which input and output affect each other, different language skills are best assumed to develop simultaneously and to complement each other through the process. In

other words, since the four language skills are interrelated, the teacher should help students develop the overall ability of using English for communicative purpose.

Chapter 4 Experimental Research

The reform of College English is a revolution of the mode of cultivating qualified personnel, and a revolution of the mode of the education, and will have a significant effect on the future development of our country. In order to probe into the problem existing in English teaching, and to find out the percentage of the support of the reform of English teaching among the students in the school, Foreign Language College sent out and recalled 1800 copies of Investigation Questionnaires of College English Teaching Reform in Tianjin Medical University, in January, 2003. It was found that most students thought that the process of teaching attached too much importance to the knowledge of language, and neglected the practical skills of the language, and stressed the teacher-centered mode, and neglected the principal part of students' learning; the teaching mode was unitary, still following the conventional-“book+blackboard+chalk”-teaching mode; the content of teaching was focused on fostering the reading skill, which was not appropriate for the training of listening and speaking skills. Almost 100% of the students supported the reform of English teaching.

With the fast development of computer and web technology, the Internet, intranet-or-campus-network applied in teaching has had a great impact on conventional teaching mode. Conventional teaching mode cannot acclimatize itself to the requirements of training new qualified personnel and of optimizing the

teaching quality, and it lags behind the development of the age. Without doubt, to introduce the modern information technology in college English teaching doesn't mean to completely negate conventional classroom teaching, which has features and advantages that can't be replaced by the computer. Therefore, in the new circumstances, it is necessary to reform the conventional teaching methods, teaching content, to improve the teaching effect, to make the modern web-based teaching and conventional classroom teaching complement each other, and to find a "complementary" teaching mode that was suitable to our modern English teaching. In this way, we might break through the restraint of conventional classroom teaching, and make English teaching and learning extend infinitely in time and space, so that it is possible to achieve the goal of optimizing and improving the effect and quality of teaching and learning.

4.1 The Background of the Research

In December 2003, State Education Ministry formally started the project of "College English Teaching Reform". A Multi-media English Teaching mode is raised in *College English Curriculum Requirements*. This Mode has improved the traditional teacher-centered mode, placing a premium in individualized teaching and independent learning. The project included the contents of three aspects:

1) To reform the *Outline of College English Teaching of 1999*, to establish a new *College English Curriculum Requirements (For Trial Implementation)*, and to orientate the objective of College English Teaching as "...to develop students' ability to use English in an all-round way, especially in listening and speaking, so that in

their future work and social interactions they will be able to exchange information effectively through both spoken and written channels, and at the same time they will be able to enhance their ability to study independently and improve their cultural quality so as to meet the needs of China's social development and international exchanges (*Requirements*, 2004: 22).";

2) To reform the conventional teaching mode, and to change the teaching mode of teacher's instruction and students passive listening to a new teaching mode, which is computer-multimedia-based or web-based and dimensional, individualized, self-directed;

3) To reform the CET evaluation system, i.e. to change from the unitary summative assessment to the integration of formative and summative assessment. State Education Ministry formally approved 180 universities of implementing the reform experiments for a period of one year, and Tianjin Medical University became one of the universities.

The *College English Curriculum Requirements (For Trial Implementation)* (2004, 34) pointed out that College and universities should each design a PC-based or intranet-or campus-network-based multimedia listening and speaking teaching mode that suits their own needs in line with their own conditions and student situation, and that those in more favorable situations may deliver listening and speaking course via the Internet. It also pointed out that changes in the teaching mode by no means call for changes in teaching practices or approaches only, but, more important, consist in changes in teaching philosophy, and in a shift from the

teacher-centered pattern, in which knowledge of the language and skills are imparted by the teacher in class only, to the student-centered pattern, in which the ability to use the language and the ability to learn independently are cultivated in addition to language knowledge and skills. From the above, we can see that the establishment of computer-based multimedia listening and speaking teaching mode and the cultivation of self-learning ability become the core of this college English teaching reform.

The teachers should not only teach the students “what to learn”, but also “how to learn”. Teachers should not play the role of providers of knowledge and answers, but should play the role of facilitators, guides, and tutors. Teachers should not only train the students’ lower order thinking skills, but also their higher order thinking skills.

The skills to memorize and recall facts or information are called the lower-order thinking skills, as they do not require wide and deep thinking. Thinking skills such as clarifying, making analysis, generating ideas, making decisions, problem solving and planning all involve wider and deeper thinking, so they are called higher-order thinking skills. Teachers should train the students to practise their higher order thinking skills, so that the students could think critically and creatively.

Critical thinking is a skill required to make a skillful assessment of data and information. This involves breaking the data and information into parts and studying each in more detail. It makes use of the skills: comparing and contrasting, classifying, arranging and sequencing, identifying facts and opinions, identifying bias statements, predicting, making inferences, generalization, interpreting and summarizing.

Creative thinking means generating new ideas—thinking “outside the box”. Critical and creative thinking skills are very important in this information-rich age. They can help students evaluate and analyze the information. They can guide them through information jungle. They can help them generate new ideas of their own on the basis of the information they assess.

The development of computer network technology changes with each passing day. Using Local Area Network (LAN), Campus Web, or the Internet for teaching, providing individualized teaching context, and bettering the teaching effect were proved by a lot of literature (Apple and Mullen, 2000; Wible, Kuo. et al, 2001; 刘文宇、向毕华, 2000). Many scholars and experts have had large quantity of research and experiments. For Example, the South China University of Technology had discussed about the “The Study of College English Teaching mode with LAN Environment” (贾国栋, 2004). In 2004, many universities are having the research and experiment of “College English Teaching mode based on Network (especially LAN)”. For instance, Fudan University is having a tentative study of “A new College English Teaching mode”. However, LAN-based multimedia College English Teaching is not widely used in colleges and universities in China. The research and experiments are still in the early stage of the experiment, and the research of web-based “complimentary” listening and speaking teaching mode is still rare.

About self-access, different scholars have different understandings. The concept of “autonomous learning” stemmed from the debates about the development of life-long learning skills and the development of independent thinkers both of which

originated in the 1960s. By 1981 Holec (1981:3) had defined autonomy as “the ability to take charge of one’s own learning”. He developed this definition further in 1985 by talking about autonomy as a conceptual tool. Holec has been a major influence in the debate about autonomy in language learning and his initial definition has been taken as a starting point in much subsequent work in the area. Dickinson (1987: 11), for example, accepts the definition of autonomy as a “situation in which the learner is totally responsible for all of the decisions concerned with his/her learning and the implementation of those decisions”.

Now we should try to develop and cultivate the autonomous learning ability of the students. Lack of ability of autonomous learning has become an important obstacle for the students in new learning mode. CET needs to pay special concern about the development and cultivation of autonomous learning ability. A recent research (张信和、苏毅超, 2002) about students under network environment showed that students had great dependence on the teachers and conventional face-to-face teaching mode.

We hope that through the teaching experiment, we want to research about cultivation of listening and speaking ability in “complementary teaching” mode.

4.2 Research Objective

According to the *College English Curriculum Requirements (For Trial Implementation)*, the objective of this research was to reform the conventional teaching mode and to achieve a “complementary” teaching mode that integrated the modern information technology of multimedia and web into the conventional

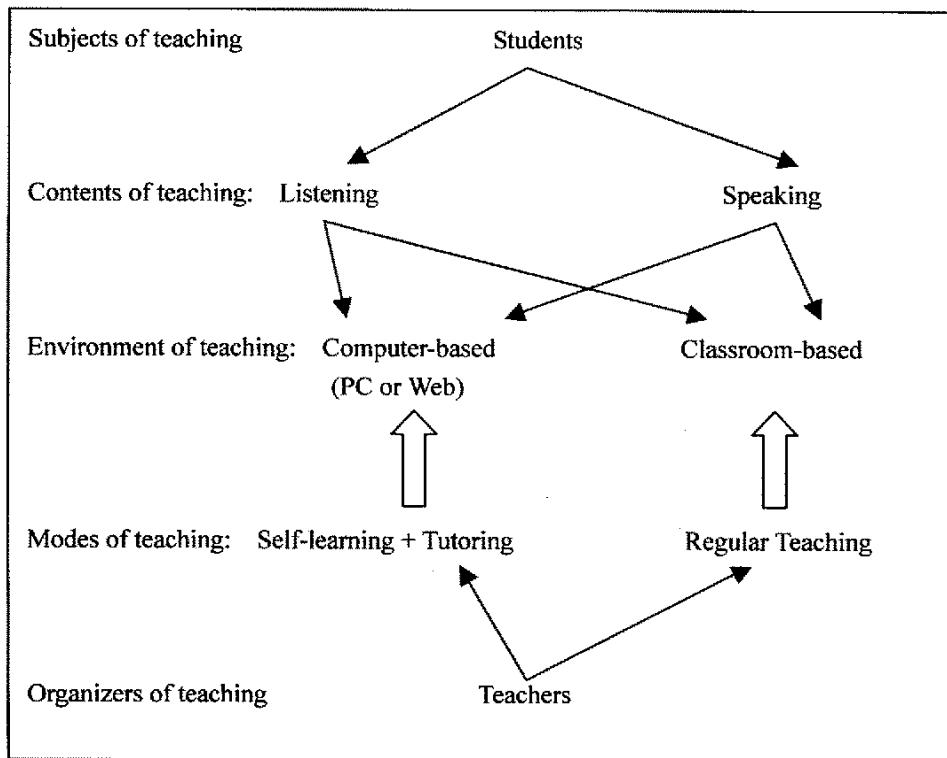
teaching mode. It is possible to explore the “complementary” teaching mode that could positively affect the all-round skills of the students, especially the listening and speaking skills, so that teachers could achieve the best teaching effect, form a teaching and learning mode under modern information technology environment, and accumulate the experience for the reform of the English teaching in the whole school.

4.3 Using Computer- and Classroom-Based Multimedia College English Teaching mode

The new College English teaching mode based on the computer and the classroom is designed to help Chinese students achieve the objective set by the *requirements*. The mode places a premium on individualized teaching and independent learning and makes full use of the special function of the computers in assisting learners with individualized and repeated language practice, especially with the training of listening and speaking abilities. While taking advantage of the teachers' lectures and coaching, students can be assisted by computers in choosing the appropriate content of learning according to their specific needs, proficiency and schedule under the guidance of teachers, so that their all-round ability to use English can be improved and the best effects of learning achieved. (*Requirements*: 38)

4.3.1 Structure of the Mode for Listening and Speaking

Figure 1: Structure of the Mode for Listening and Speaking



Computer-and Classroom-based Multimedia College English Teaching mode

(Based on the mode in the *Requirements*: 39)

With this computer-and classroom-based multimedia college English teaching mode, students could not only have face-to-face communication with their classmates and teachers, but also got access to Web, and study with web coursewares and also got access to the Internet to search information, gather information, evaluate information, so that they could get the electronic literacy when they explored different web sites. They could also collaborate with each other when they searched for information with different searching engines. The teacher guided their exploration when tutoring and encouraged their collaboration. Therefore, the web-based learning and face-to-face learning complemented each other.

The author tried to:

- i. Teach the students with CD-ROMs, and CNN, VOA, BBC broadcasts or newspapers and magazines, which are downloaded from the Internet. She encouraged the students to express their ideas, thoughts, feelings, and emotions in English, and let them try to think in English. She thought real learning environment was very important.
- ii. Design a creative learning environment that promoted active learning. In this way, students could acquire knowledge, which was directly experienced, constructed, and acted upon, tested, or revised. She tried her best to teach in encouraging environment.
- iii. Try to link constructivism, technology, and learning as we can see in computer-based learning environment. Let the students experience and explore an authentic virtual world.
- iv. Use the Internet to enhance the learning environment. Let the students use the World Wide Web to research information needed to solve problems, identify pictures, graphics, video clips, because hypermedia provides a number of advantages for language learning. First of all, a more authentic learning environment was created, since listening was combined with seeing. Secondly, skills were easily integrated, since the variety of media made it natural to combine reading, writing, speaking and listening in a single activity. Third, students had great control over their learning, since they could not only go at their own pace, going forward and backwards to different parts of the program, honing in on particular aspects and skipping other aspects altogether.
- v. Teach English not only as a language course but also a capacity enhancement that helped students to broaden their horizon and learn about different cultures in the world.
- vi. Enable students to have a solid foundation in the English language while developing their ability to use English; develop the individualized study methods and autonomous learning ability on the part of students; enable students to select materials suited to their individual need, make up for the limitation of the conventional classroom teaching, and track down, record and

check the progress of learning as well as teaching and coaching, so that students would be supervised to learn on their own initiative, and their language abilities would be improved at a faster pace.

vii. Shift from the teacher-centered pattern, in which knowledge of the language and skills were imparted by the teacher in class only, to the student-centered pattern, in which the ability to use the language and the ability to learn independently were cultivated in addition to language knowledge and skills.

4.3.2 Process of Computer-Based English Learning

In the process of computer-based English learning (*Requirements*, 2004: 40), students of the experimental class had the autonomous learning with web-based environment. After they completed the course of each unit they took a test. When they passed the test, they entered the next course. They were ready for tutoring, so the teachers gave them tips, assignments, and strategies to go on learning in the new course.

The writer of this paper mainly used the CD-ROMs, which were published by the University of Science and Technology of China cooperating with Shanghai Foreign Education Press. This set of listening CD-ROMs was used in face-to-face classroom teaching and also for self-study after class. There are altogether eight CD-ROMs, with two for each semester. The advantages of using CD-ROMs not only cut down the cost of the Internet connection on the student part, but ensured the steady and better sound and movie quality. Furthermore, the CD-ROMs also provided some new listening materials and movie clips for students.

Besides 3-hour face-to-face teaching, the students in the experimental class had

access to web-based learning for 2 hours each week for autonomous learning. They could go to the electronic library to study the web course by themselves (Appendix C).

The author introduced the language learning strategies to guide their autonomous learning via the Internet, and also introduced some good websites for them to search, such as <http://www.listeningexpress.net>, <http://www.esl-lab.com/>, and <http://www.englishlearner.com/tests/test.html>, etc.

During the break, the author also played some interesting movie clips, such as *Friends*, *Sound of Music*, *Nemo*, *Legally Blonde*, *Roman Holiday*, *King Lion*, and course wares, like *Family Album* and CNN programs. The students displayed great interest in this type of . The author also suggested they watch DVDs in English and listen to English songs on their own.

All those DVDs and CD-Roms provide the students a lot of images. Learning theorists have long held that images enhance comprehension, storage, and recall of information (Pavio, 1965: 1-12). In the language classroom, use of visual material of all kinds has been a predominant tool for instruction for quite some time. Pictures, slides, drawings, and the like serve many roles in language learning activities. In listening skills development, activities that focus learner attention simultaneously on visuals and accompanying aural input are common. Visuals support comprehension, which contribute to higher levels of learner motivation. While combining input modalities in the classroom is based largely on intuition, a handful of empirical investigations on the effects of combining perceptual

modalities support the use of text and visuals as aids to aural skills development. Support for this sort of multi modal processing is comprised of evidence pertaining to the positive effects of visual accompaniments to the listening process. Evidence suggests that processing aural texts in the target language be facilitated by co-occurring still pictures (Mueller, 1980: 335-340), video (Snyder & Colon, 1980: 343-348) as well as combinations of visual, aural, and textual forms of input (Brownfield, 1990).

The ways mentioned above assisted the students to gain sufficient listening input, which caused more and more speaking output. After watching some movie clips, they attempted to tell what they saw just now, and predicted what might happen later. According to the pictures, listening, and language focus, they could try to express their own understanding, feeling, emotion, thoughts, and experiences in English.

The part C & D are assigned as homework that they could study for themselves with CD-Roms or Networked environment. During the tutoring time or in class, we dealt with some of the problems they had in their autonomous learning with networked environment.

In this way, they had more speaking practice in the classroom teaching, and the teacher mainly attempted to be a good organizer and facilitator. They did have a lot of interaction with the teacher and their classmates in English.

4.4 Hypotheses of the Research

Research Direction: Adopting “Complementary” teaching mode and reforming the teaching methods have some relevance to the students’ all-round ability,

especially listening and speaking skills.

Problem: Can “Complementary” teaching mode, the new English teaching mode really overcome some malpractice of conventional teaching, and improve the listening and speaking skills of the students?

Hypotheses: When we cultivate the listening and speaking skills in “complementary” teaching mode, the listening and speaking skills will improve more efficiently than those in conventional teaching mode, and all-round ability is in direct proportion to the listening and speaking ability in “complementary” teaching mode.

4.5 Theoretical Basis

Constructivism is important in cognitive learning theory. It provides us with a different learning theory compared with conventional objectivism. Constructive learning theory considers that knowledge is not only acquired through the instruction of the teachers, but acquired through meaning construction with the assistance of other people (including teachers and learning partners), making use of necessary learning resources; context, interaction, collaboration, and meaning construction is the four basic elements of learning environment. Constructivists advocate teacher-guided and learner-centered learning. Students are the principal part of cognition, and active part of meaning construction. (Piaget, 1973)

The teaching mode under constructive learning theory is student-centered. In the whole process of teaching, the teacher is an organizer and supervisor, making use of the context, collaboration, and interaction, and tries to develop the students' initiative, enthusiasm, and creativity, and tries to effectively achieve the goal of meaning

construction of the knowledge. Constructivism stresses important roles of the creative context, collaborative learning, and stresses using all kinds of information resources.

Therefore, constructivist theory profoundly and completely explains the teaching mode under the modern information technology in *College English Curriculum Requirements (For Trial Implementation)*, and laid solid theoretical basis for the implementation of quality education.

4.6 Research Procedure

The experimental class applies the “complementary” teaching mode; the control class applies the conventional teaching mode.

The experimental class adopted “3+1+1” teaching mode, that was, 3-hour classroom activities per week (including speaking, listening, reading, writing, and translating), 1-hour autonomous learning and 1-hour tutoring with network-based environment; the control class adopted “4+1” teaching mode, 4-hour class activities per week (including speaking, listening, reading, writing, and translating), and 1-hour tutoring in the teachers’ office. They should reach the objective of “Basic Requirements” in *College English Curriculum Requirements (For Trial Implementation)* in July 2006.

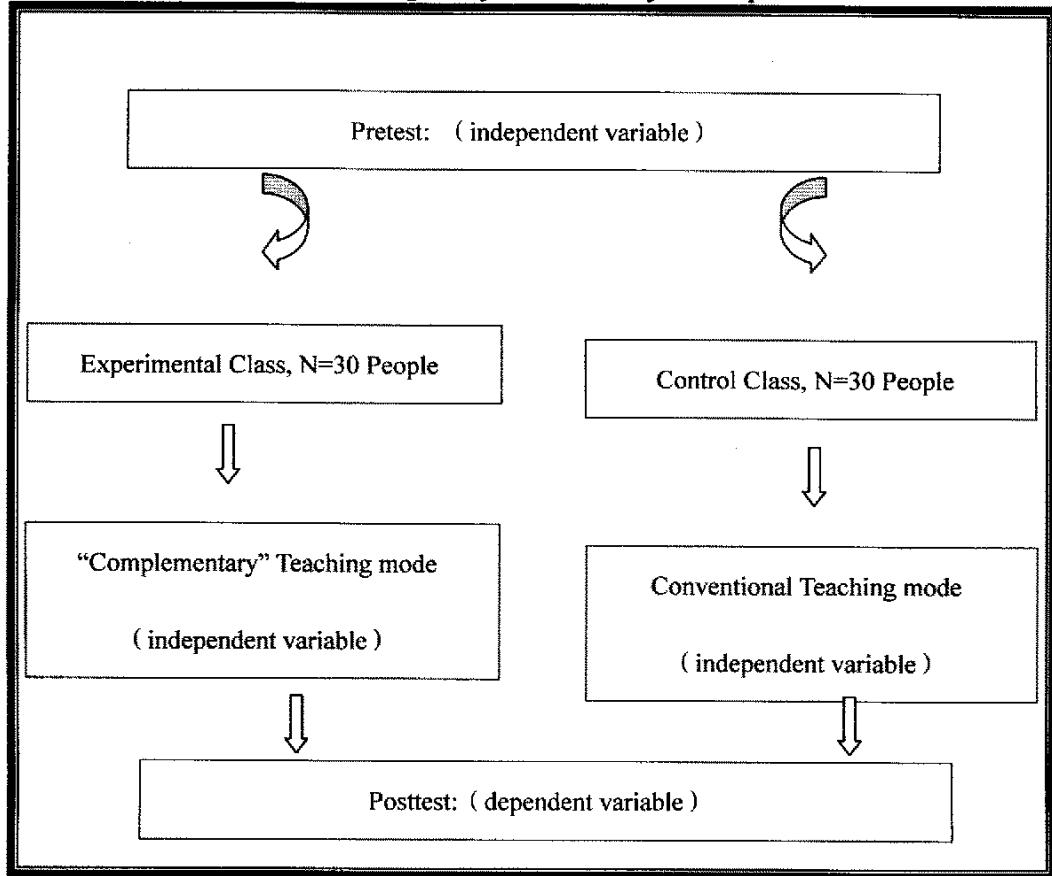
In the process of cultivating the listening and speaking abilities, the author gave the subjects the pretest, and posttest, endeavoring to determine if the listening and speaking skills of the students in “complementary” teaching mode are higher than those in conventional teaching mode or not.

Table 3: Table of Conventional and “Complementary” Teaching Mode:

		“3 + 1+1” Teaching mode				
Experimental	Class	Classroom-Based	Tutoring	Multimedia-Based Autonomous Learning	Requirements	
		$3 \times 18=54$ hours / semester	$1 \times 18=18$ hours / semester	$1 \times 18=18$ hours / semester	<i>College English</i> (New Edition)	
		Place	Place	Place	Listening & Speaking: 1.5 hours Integrated Course: 1.5 hours	
“4+1” Teaching mode						
Control	Class	Classroom-Based	Tutoring		<i>College English</i> (New Edition)	
		$4 \times 18=72$ hours/semester	$1 \times 18=18$ hours/semester		Listening & Speaking: 2 hours	
		Place	Place	Teachers’ Office (try to solve the problems together when the students have problems)	Integrated Course: 2 hours	

In the process of cultivating the students’ all-round skills of English, the author gave the subjects pretest, and posttest of reading, writing and translating abilities, once again to determine if the listening and speaking skills of the students in the “complementary” teaching mode were in direct proportion to the all-round skills.

Figure 2: The Figure of Procedure of the Experiment



4.6.1 Description of the Research Design

The experimental class and the control class were studied under different teaching modes. They had a pretest, and a posttest. The author analyzed the data with SPSS10.0, and compared the listening and speaking skills of the two classes of students.

4.6.2 Description of the Subjects

The author selected two classes of 2004 majoring in Clinic, in Tianjin Medical University. There were 30 students in each class. The experimental research and the

following questionnaires were done in the first school year.

The Subjects: In view of objectivity and scientific rigor, we gave our attention to moderator invariables: sex, major, teaching hours, etc.

Table 4: Description of the Subjects

Classes	Major	Number	Male/Female	Requirements
Experimental Class	Clinic	30	10:20	Basic Requirements
Control Class	Clinic	30	10:20	Basic Requirements

The students of Grade 2004 were chosen as the subjects because:

- (1) According to the new *College English Curriculum Requirements (For Trial Implementation)*, which was published in 2004, it was required that the students should develop their ability to use English in an all-round way, especially in listening and speaking, and at the same time they will be able to enhance their ability to study independently with computer-and-network based multimedia environment.
- (2) They had been studying English for at least six years, and they had already formed strategies (though of which they may not be aware of) of their own on how to learn English.

The modern information technology develops very quickly. The college students need some abilities of autonomous learning with computer-and-network based multimedia environment, because they should learn much more efficiently in colleges than in middle schools.

4.6.3 The Description of Research Implementation

In the process of experiment, we had two kinds of experimental tools: pretest, and posttest papers and questionnaires.

(1) Pretest, and Posttest

In the pretest examination paper, we used the listening part of College English Achievement Test for *College English (New Edition)* Band 2 provided by Shanghai Foreign Language Education Press as the pretest. It is a little difficult for the freshmen. For the spoken test, we used “Time to Talk” in Part C of the CD of *College English Listening and Speaking Book 1 (New Edition)*.

The pretest was administered to all 60 students in the research. Before receiving the test, students received no explanation of the purpose, but were told that their overall English level was being assessed.

After a year’s cultivation program, all 60 students took part in the posttest, which still contained two tests, one aimed at checking the students’ overall abilities in listening, grammar, reading and writing. The teachers adopted the listening part of College English Achievement Test for *College English (New Edition)* Band 3 provided by Shanghai Foreign Language Education Press as the posttest. The items and the points in it were similar to that of the pretest. The time and the score for the test were the same as those of the pretest. For the posttest of spoken English, we used “Time to Talk” in Part C of the CD of *College English Listening and Speaking Book 3 (New Edition) (Appendix B)*.

(2) Questionnaires

Before the experiment, we sent out questionnaires to the 2002 and 2003 students to determine the percentage of students' support for English-teaching reform and we found that most of the students supported the reform of English teaching.

During the experiment, the author sent out other questionnaires to the Experimental Class: Learning Strategy Questionnaire, Learning Styles Questionnaire, and Self-Assessment/Peer Assessment Form of Students' English Competence (Basic Requirements).

4.6.4 Summary of Statistics and Analysis

We collected all the data of the students of experimental and control classes.

The SPSS (Statistical Packages for the Social Sciences) Version 10.0 for Windows was used to analyze the data.

4.7 Data analysis

Under the guidelines of College English Curriculum (for Trial Implementation), the results of the initial teaching practice indicated that the effect of listening and speaking abilities of the experimental class were higher than those of the control class, especially in the posttest, though we shortened the hours of face-to-face classroom teaching.

4.7.1 Data Analysis of Pretest & Posttest of Listening and Speaking

The author wanted to find out whether the students were at the same level at the beginning of the semester in Sep., 2004. The students took the pretest and posttest, and the results of the statistic analyses of the listening and speaking scores are as

follows:

Table 5: The Score of the Pretest

Tests	Classes	N	Mean	SD	T	P
Listening	Experimental Class	30	11.8667	2.67470	0.546	0.520
	Control Class	30	11.4667	2.99117		
Speaking	Experimental Class	30	9.9000	1.0289	0.900	0.929
	Control Class	30	9.8667	1.7564		

P=0.929 P=0.520

By comparing the difference of scores in the pretest between the experimental class and the control class, the author determined to find out whether their listening ability was at the same level. The result is shown in table 6: the mean score of the experimental class is 11.8667, and SD is 2.67470; the mean score of the control class is 11.4667, and SD is 2.99117 and p=0.520. The result of the pretest of listening demonstrated that there was no significant difference between the two classes.

The other test was the pretest of spoken English. We applied the CET Spoken English Test System to give relatively objective scores to the examinees. Firstly, the examiners watched the VCD of CET Spoken English Test, studied about the criteria of scoring of the CET Spoken English Test (Appendix B).

The spoken test was about 15 minutes for each group with three examinees. The total score of the oral test was 15, according to the standard of scoring of CET Spoken English Test (Appendix B). Three examiners gave the spoken test to three examinees. In the first part, one of the examiners asked each examinee a question. In

the second part, each student described a picture. The third part, three examinees had a group discussion about the topic for about 5 minutes.

In the CET Spoken English Test, the examinees participated in spoken communication of different topics, and the examiners scored their performances.

As shown in table 5, the results of the spoken test showed that there was no significant difference between the two classes in listening and spoken English. From the pretest, we could see the two classes were at the same level before the cultivation program, and the experiment could be considered valid at the beginning.

Table 6 showed the degree of the progress of the two classes after a year's experiment. There was significant difference between the two classes. The result of the posttest indicated that Complementary Teaching mode could improve the learner's integrated performance. The data in table 6 demonstrated that the students of the experimental class had improved their abilities; the new teaching methods were efficient in improving the students' integrative abilities in English.

Table 6: The Score of the Posttest

Tests	Classes	N	Mean	SD	T	P
Listening	Experimental Class	30	12.7333	2.9587	3.270	0.002
	Control Class	30	10.3333	2.7207		
Speaking	Experimental Class	30	12.2667	0.9260	5.998	0.004
	Control Class	30	10.2667	1.5742		

P=0.000<0.01 P=0.001<0.01

The other test in posttest was spoken test, and all the 60 students took part in the

spoken test. The items and the points of the items in the paper were similar to that of the spoken test in the pretest.

Besides, the related p value of listening & speaking score with reading, writing, and translation score, had no significant relationship in the pretest; while after the experiment in the “complementary” teaching mode, the related p value showed significant difference ($p<0.01$). It showed that the improvement in listening and speaking could bring along the improvement of the all-round ability.

The results demonstrated that there was a significant difference between the experimental class and the control class in their integrated abilities. The finding lent support for the positive effect of the application of “complementary” teaching mode to students.

The analysis of experimental data indicated that there was significant difference between the experimental class and control class after the experiment. The optimized “complementary” teaching mode can mobilize the inherent potential of the students, inspired the students to be interested in English study, and enhanced the autonomous learning ability. Compared with the conventional teaching mode, it has significant teaching effect, especially in listening and speaking.

4.7.2 Questionnaires

(1) Questionnaires:

The author analyzed the Questionnaire1 (Appendix D), and determined that different students had different learning styles. And in the Questionnaire 1, there were suggestions for different styles of learners

(http://phys.udallas.edu/C3P/s_pak/ha/HASRC/H006.PDF).

With this questionnaire the students knew about their own style, and they tried to follow the suggestions, which fit them most. In this way they could learn how to have individualized learning in autonomous learning, especially with network environment.

The author also presented the learning strategy questionnaire (Appendix E) to the students of the experimental class, so that they could be familiar with these learning strategies and help them in their autonomous learning. The author strove to empower the students to establish learning goals for themselves, to monitor or assess their own learning goals and behavior. The author also gave some instruction on learning strategies as to arouse the students' interest in learning by frequent approval, encouragement to students' performance.

These questionnaires were quite helpful on guiding the students' autonomous learning with network environment.

(2) Self-Assessment/Peer Assessment Form of Students' English Competence

Self-assessment of the individuals can increase awareness of individual progress, not only in terms of language, but also in terms of communicative objects, so that skill can be seen as a gradual, rather than all-or-nothing process. Self-assessment encouraged students to think about how they went about learning and helped to promote their autonomous learning abilities. Traditional testing followed a typical objective format, and the criteria measured in these countless objective tests were confined to knowledge and skills. Usually students and teachers at all levels had come to focus merely on the test scores rather than on testing as a learning tool.

Gardener pointed out (1993) “a better approach to assessment is to allow students to explain the material in their own ways using the different intelligence.” So some changes in ways of assessing our students would not only help to improve our teaching, but also to prepare them well for the future, in which what one can research by themselves is more important than what one knows. Therefore, the author used the self-assessment table in the *Requirements* (2004: 38) to let the students assess their own competence in listening and speaking (Appendix E).

Like it is pointed out in *Requirements*:

Evaluation consists of formative assessment and summative assessment.

Formative assessment includes students' self-assessment, peer assessment, and assessment conducted by teachers and school administrators. By keeping a record of students' in and outside of classroom activities and online self-learning data, keeping files on students' study results, conducting interviews and holding meetings, students' learning process is under observation, evaluation and supervision, thus contributing to the enhancement of their learning efficiency. Formative assessment is particularly important in computer-based teaching which is characterized by students' independent learning.

(Requirements, 2004: 34)

Self-Assessment/Peer Assessment Form of Students' English Competence (Basic Requirements):

Please make assessments on your English competence in the Self-Assessment column; write “Y” if you can do it, and “YY” if you can do it effortlessly. Please ask your classmates to make assessments on your English competence in the Peer Assessment column in the same way. Please mark the English skills that you consider important but haven't mastered yet in the Objectives column; write “O” for “objective” and “P” for “priority”.

Listening

- L1: Can understand lessons given in English. Can join in discussions and speak in class according to requirements.
- L2: Can understand the main points of audio-visual materials, for example, dialogues, short passages or reports, related to what is taught in class and delivered at slow speed (about 130 words per minute).
- L3: Can understand English broadcasts, for example, news reports, science reports and stories about history, delivered at slow speed.
- L4: Can understand directions to places, instructions to do things, and manuals. Can understand numbers (both cardinal and ordinal) and time expressions.
- L5: Can understand the topic of the discussion, and grasp the main idea and major points.
- L6: Can use basic listening skills.

Speaking

- S1: Can answer questions in class, use familiar simple expressions and sentences to exchange opinions with classmates, and give short prepared speeches on familiar topics.
- S2: Can introduce himself, classmates and friends, and respond to other people's introductions.
- S3: Can give directions, do shopping, leave messages and make requests in simple English.

- S4: Can use English numbers to report time, inquire about prices and give telephone numbers and e-mail addresses.
- S5: Can hold simple conversations with native English-speakers on everyday topics.
- S6: Have mastered basic conversational strategies, for example, initiating maintaining and closing a conversation, and asking people to repeat what they have said.

L1: From table 7, the author found that in the listening part the L1 was the easiest for the students. They could all understand lessons given in English, and they could join in discussions and speak in English according to requirements. The author believed that this was the basic and most important for the students. Therefore, the author spoke English for almost 100% in class, and also required that they speak English in all activities in the class. In this way, the author trained the students to think directly in English, not in Chinese, so the students greeted her in English even when they met on campus. It became a kind of habitual way of thinking in English. The author suggested to the students that they should practise thinking in English whenever or wherever they could. It was really quite helpful for them in their quest to understand English very quickly and easily when they were listening. It was also beneficial for them to speak in English, without translating their ideas from Chinese into English in their mind before they spoke. In this way, they could speak more fluently.

From the comparison between self-assessment and peer-assessment, we could see

that they were quite modest. The peer-assessment for YY, which meant that they could do effortlessly, is higher than self-assessment in most items.

Table 7: A Brief Table of Self-Assessment Form of Students' English Competence
(Form I: Basic Requirements)

	Percentage								
	Self-Assessment			Peer Assessment			Objectives		
	Listening	YY	Y		YY	Y		P	O
L1.	46.7%	53.3%	0%		56.7%	40.0%	3.3%		
L2.	6.7%	76.7%	16.7%		16.7%	76.7%	6.7%	10%	6.7%
L3.	3.3%	50.0%	46.7%		0%	73.3%	26.7%	16.7%	6.7%
L4.	20.0%	76.7%	3.3%		30%	70%	0%		
L5.	20.0%	73.3%	6.7%		36.7%	60%	3.3%	6.7%	
L6.	6.7%	76.7%	16.7%		30%	66.7%	3.3%	3.3%	3.3%
Speaking									
S1.	23.3%	73.3%	3.3%		43.3%	56.7%			
S2.	26.7%	70%	3.3%		40%	60%		3.3%	
S3.	33.3%	56.7%	10.0%		40%	56.7%	3.3%	3.3%	3.3%
S4.	43.3%	56.7%			43.3%	56.7%			
S5.	6.7%	60%	33.3%		10%	66.7%	23.3%	3.3%	
S6.	3.3%	90%	6.7%		20%	76.7%	3.3%	3.3%	3.3%

L2: According to self-assessment, 83.3% of the students could understand the main points of audio-visual materials, for example, dialogues, short passages or reports, related to what was taught in class and delivered at slow speed (about 130 words per minute). And according to peer assessment, 93.3% students could do that.

L3: According to the self-assessment, 50% of the students could understand English broadcasts, for example, news reports, science reports and stories about

history, delivered at slow speed. 73.3% students could do that. This was the most difficult part in listening. In peer assessment, they thought no one could do it effortlessly. However, in self-assessment part only one student thought that she could do it easily.

L4: 96.7% (100%) of the students could use English numbers to report time, inquire about prices, give telephone numbers, and e-mail addresses.

S5: The author found that S5 was the most difficult part in speaking. It showed that students rarely had this kind of opportunities to communicate with native-speakers. And to chat with native speakers online would help them in some way.

From the table of assessment form, the students knew more explicitly about their own English competence of listening and speaking, so that they could have their own objectives and priorities in their individualized autonomous learning. And the teacher also knew about the students, so that she knew how to guide and facilitate the students' study. With the same objectives and priorities, the students could cooperate better. And the author can give individualized guiding to the individual students.

4.8 The Results of Research

With the independent T-test, we found that in the pretest, the listening and speaking level of the students in two classes were similar, and that in posttest there was significant difference ($P<0.01$). (Table 6)

With the independent T-test, we found that in the pretest the students' overall abilities were almost at the same level, but in posttest there was significant difference

(P<0.01). (Table 5)

Under different teaching modes, the scores of listening and speaking of the experimental class and control class had highly significant difference in the posttest.

(Table 6)

The author found that in the process of pretest and posttest the students' improvement of listening and speaking correlated significantly with the improvement of all-round ability of English.

Correlation of listening and speaking with all-round ability:

In the pretest, the correlation sig. $r=0.244$ ($P=0.061$), it had no significant correlation between listening and speaking with all-round English ability; in the posttest, the correlation sig. $r=0.704$ ($P=0.000$), it had highly significant correlation between listening and speaking with all-round English ability.

Chapter 5 Conclusion

5.1 The Significance of the Research

According to the spirit of *College English Requirements (for Trial Implementation)*, our school decided to grasp the chance, to overcome the difficulties, to communicate experiences with other universities, to improve the cognition, and to improve the English Teaching quality in all-round way. Under the guidelines of deepening the reform of education, Foreign Languages College of Tianjin Medical University decided to introduce the computer-multimedia-based web teaching system, while going on using the reasonable and effective elements of conventional teaching mode. In this way, face-to-face classroom teaching and network autonomous learning complemented each other. The purpose of the research was to enrich our teaching philosophy, better the teaching mode, and had a relative research of improving the listening and speaking abilities in “complementary” teaching mode.

We made great effort to break through the limit of conventional teaching, and to integrate information technology into our curriculum, and to improve the efficiency of teaching and learning. We attempted to find a new teaching mode appropriate for medical universities, and to motivate the enthusiasm of the students' participation in teaching and learning, so that we could improve students' all-round ability of English, especially listening and speaking; at the same time, we hoped that we could accumulate experiences for teaching reform of the whole school.

We trained the students with learning strategies, and helped them study autonomously with network-based environment, and laid some foundation for their life long learning.

We changed the old teaching mode by empowering students to have more freedom in learning, by enhancing their autonomous learning ability. By using rich resource of the Internet and campus-net and LAN.

The teachers had a new teaching philosophy, and guided their own teaching with modern education theories, and improved their own information literacy.

5.2 Further Implications

Important implications could be drawn from the experimental research. First, if we wish to exploit the rich potential of CALL, and to integrate CALL successfully into CET, the support of school administrators and technical experts are necessary, especially in its babyhood, for the first step is always the most difficult one to go. It is not practical for College English teachers to do it all by themselves. The technical problems alone are a big headache, not to mention other things. Most language teachers who have not grown up with computers have to learn it from the very beginning. Even if they are willing to learn, they would still need help and time. Second, collaboration among colleges and among college English teachers is also advisable in order to achieve greater success, for it is a rather complicated project, in which the teachers must devote a lot –love, time and energy to guarantee its smooth going. It is convenient for people to collaborate on the project as it is based on the computer. They had better design it together, discuss the problems they meet and

work out the best solutions together.

5.3 Limitation of the Research

We got only initial results of the research effect, because it is only one year among the students of 2004.

When we go deep into the reform of CET, we plan to go on with our experiment next year.

Besides, we will better our evaluation system, and probe into different teaching modes.

5.4 Conclusion of the Research

It is beneficial to teach with the computers. In merely 50 years, CALL has experienced three main phases and now reached an era of both humans' interaction with computers and interaction with other humans via computers, which suggests the unlimited potential of the usage of the computer in education.

Its superiority in English teaching is obvious: It can handle multi-media materials. The dynamic modes, animation and rich colors make information presentation more vivid, interesting and impressive; it is patient and efficient in dealing with some repeated and routine work; it can handle a much wider range of activities, and much more powerfully than other technological aids; it is powerful in dealing with enormous information. The authentic language environment created by the computer will arouse greater interest in English learning. Under an instructor's skillful guidance, students can gain valuable language practice, create digital video class projects, and establish contacts with students in other cities and countries

through the Internet-based, multi-user, interactive environments.

With the fantastic spurt in computer technology and the improved conditions of most colleges, “complementary” teaching mode in CET is feasible.

The point to note is that the computer does not promote learning on its own. Despite the various and powerful functions, the computer’s role in education is that of a medium by nature. Therefore, the effectiveness of CALL depends greatly on the teachers. Since CALL works best with the guiding of teachers, it is better for us to carry it out as an assistant part of the College English course, and not as a stand-alone task of self-access use, in order to use this environment to ensure optimum conditions for college students. It is advised that a “complementary”-“teacher +computer”- mode be adopted.

From the set of affairs described above, a conclusion can be reached that “Complementary” Teaching mode is an efficient and promising new approach. It improves learners’ English language skills, develops their autonomy as language learners and helps them acquire the whole range of literacy that ensures success in the information-driven environment of the 21st century.

Bibliography

Ahmad, K., Corbett, G., Rodgers, M., and Sussex, M., 1985. *Computers, Language Learning and Language Teaching*. Cambridge: Cambridge University Press.

Appel, M. C., and Mullen, T., 2000. Pedagogical Considerations for a Web-Based Tandem Language Learning Environment. *Computers and Education*, 37(3-4): 291-308. New York: Pergoman Press.

Bai Shuqin and Jing Jianbo. 2003. Promoting EFL Learner Autonomy in China: From Theory to Practice. *Teaching English in China*, (3).

Benson. 1997. "The Philosophy and Politics of Learner Autonomy" In P. Voller (eds.) *Autonomy and Independence in Language Learning*. London: Longman

Brown, H.D. 1994. *Teaching Principle: An Interactive Approach to Language Pedagogy*, New Jersy: Prentice Hall Regents.

Brownfield, S. 1990. *Project Athena Alpha Evaluation: French Video Disc*. Report of the Center for Educational Computer Initiative, Massachusetts Institute of Technology.

Bruner, J. S. 1966. *Toward a Theory of Instruction*, Cambridge, Mass.: Belkapp Press, 176-179.

Bruner, J. S. 1983. *Child Talk: Learning to Use Language*. New York: Norton.

Candy, H. 1991, *Self-direction for Lifelong Learning* [M]. California: Jossey-Bass Publishers.

Dewey, J. 1966. *Democracy and Education*. New York: Free Press.

Dickinson Leslie. 1987. *Self-Instruction in Language Learning*. Cambridge

University Press.

Dickinson Leslie. 1993. Talking Shop: Aspects of Autonomy Learning—An Interview with Leslie Dickinson. *ELT Journal, 1993, (4)*.

Dickinson Leslie. 1995. *Autonomy and Motivation: A Literature Review, System*. Volume 23, Issue 2.

Fang Ying, 2002. Promoting Learner Autonomy Through CALL Projects in China' EFL Context, *Teaching English With Technology*, Volume 2, Issue 5.

Hammer, J. 1983. *The Practice of English Language Teaching*. Longman: London.

Higgins, R. 1991. *Computer-Mediated Cooperative Learning: Synchronous and Asynchronous Communication Between Students Learning Nursing Diagnosis*. Unpublished doctoral dissertation. University of Toronto.

Holec, Henri. 1981. *Autonomy and Foreign Language Learning*. Oxford: Pergaman Press.

Icy Lee, 1998. Supporting greater autonomy in language learning, *ELT Journal*, Oxford University Press.

Kasper, L. F. et al. 2000. *Content-based college ESL instruction*. Mahwah, NJ: Erlbaum.

Li Ming, 2001, Learner Autonomy and the Need For Learner Training in ELT in China, *TEJC Journal, (4)*.

Littlewood, W. 1996. Autonomy: An Anatomy and a Framework, *System, 24 (4): 427-435*.

Littlewood, W. 2000. Do Asian Students Really Want to Listen and Obey? *ELT*

Journal, Volume 54 (1): 31-36.

Marzano, R.J. and Brand, R.S. 1988. *Dimensions of Thinking: A Framework for Curriculum and Instruction*. Alexandria, Va.: Association for Supervision and Curriculum Development.

Mueller G. 1980. Visual Contextual Cues and Listening Comprehension: an Experiment, *Modern Language Journal*, 64, 3.

Nunan, D. 1997. *Designing and Adapting Materials to Encourage Learner Autonomy*. Benson Press.

Pavio, A. 1965. Abstractions, Imagery, and Meaningfulness in Paired Associated Learning. *Journal of Verbal Learning and Verbal Behavior*, 10.

Pemberton, R., 1996. *Taking Control: Autonomy in Language Learning*. Hong Kong: Hong Kong University Press.

Perkins, 1991, *What Constructivism Demands of the Learner* [M]. Hong Kong: Hong Kong University Press, 9-21.

Piaget, J. 1973. *To Understand Is to Invent*, New York, Grossman.

Powell, M.J. 1994. *Building on an Understanding of Constructivism, Classroom Campus* (3).

Quinlan, L.A., 1997. Creating Classroom Kaleidoscope With the World Wide Web, *Educational Technology*, 37 (3): 15-22.

Shetzer, H. Warschaeur, 2000. M. An Electronic Literacy Approach to Network-Based Language Teaching [On-line].
<http://thecity.sfsu.edu/~funweb/thesis.html>

Sherman, L.W., 1995. *A Postmodern Constructivist and Cooperative Pedagogy For Teaching Educational Technologies Assisted by Computer Mediated Communications*. A paper presentation to the CSCL95' Conference, Bloomington, Indiana, 17-20 October, 1995.

Smith, Kenneth J. 2003. Instructional Theory Design, *Computer Applications on Education: 411-511*. <http://www.u.arizona.edu/ic/edp511/isd1.html>

Snyder, H. and Colon, I., 1980. Foreign Language Acquisition and Audio-Visual Aids, *Foreign Language Annals*, 21, 4.

Stern, H., 1983. *Fundamental Concepts of Language Teaching*. Oxford: Oxford University Press.

Vygotsky, L. S., 1978. *Mind in Society: The Development of Higher Psychological Process* [M]. Cambridge, MA: Harvard University Press.

Wang Haihua & Wang Tongshun, 2004, The Importance of Authentic Materials in Testing Listening Skills, *CELEA Journal*, Vol.27, No.6: 82-85.

Warschauer, M., 1996. Computer-assisted language learning: An introduction. In S. Fotos (Ed.), *Multimedia language teaching*. Tokyo: Logos International: 3-20.

Warschauer, and Healey D. 1998, *Computers and Language Learning: An Overview* [J], (31), 57-71.

Warschauer, M. 2000, The Death of Cyberspace and the Rebirth of CALL [J], *English Teacher's Journal*, (53): 61-67.

Wible, D. Kuo, C., Chien, F., Liu, A., Tsao, A., 2001, Web-Based EFL Writing Environment, Integrating Information for Learners, Teachers, and Researchers [J],

Computers and Education, 37 (3-4): 297-315.

Zhang Ying, 2003, Using Computers Effectively in the EFL Class, *Teaching English in China*, (3): 56-57.

蔡基刚、武世兴, 2003, 引进多媒体网络技术, 改革传统的教学模式. 《外语界》, 第 6 期: 2-6 页。

崔玲, 2004, 多媒体投影式大学英语课堂教学模式: 学生角色探析。《外语界》, 第 2 期: 14-21 页。

胡壮麟, 2004. 英语教学的个性化, 协作化, 模块化和超文本化——谈《教学要求》的基本理念, 《外语教学与研究》, (5)。

贾国栋, 刘丽燕, 2004, 基于局域网的大学英语教学模式研究, 《外语电化教学》, vol. 95:36-40 页。

教育部高教司, 2004, 大学英语课程教学要求。 上海外语教育出版社。

刘海平等, 1998, “计算机网络与英语教学”, 《外语界》 (2).

刘文字, 向毕华, 2000, 网络与大学英语教学, 《外语与外语教学》, 第 10 期

戚宏波, 2004, 中国外语学习者自主意识分析[J]。《外语教学》, 第 3 期: 90-92 页。

王宗炎, 1999, “Trends of ELT in China”, 《外国语》, 第 6 期。

吴一安, 2002, 高校英语教学改革笔谈, 《外语教学与研究》, 第 6 期。

张信和, 苏毅超, 2002, 电大学生个体客观因素对课程学习支持服务影响的调查研究, 中国远程教育 (1), 30-34。

郑树棠, 卫乃兴, 1996, “关于大学英语课培养语言能力等情况的研究——大学英语教学现状研究之一”, 《外语界》, 第 4 期。

Appendixes

Appendix A

Pretest of Listening

I. Listening Comprehension (20%)

Section A

Directions: In this section, you will hear 10 short conversations. At the end of each conversation, a question will be asked about what was said. Both the conversation and the question will be spoken only once. After each question there will be a pause. During the pause, you must read the four choices marked A), B), C) and D), and decide which is the best answer. Then mark the corresponding letter with a single line through the center.

1. A. Salesgirl and customer. B. Tailor and customer.
C. Consultant and customer. D. Shopkeeper and customer.
2. A. Boss—secretary. B. Teacher—student.
C. Customer— waitress. D. Lawyer—client.
3. A. To go dancing with the man. B. To take examinations.
C. To prepare for the coming tests. D. To listen to a lecture.
4. A. \$150. B. \$200. C. \$175. D. \$225.
5. A. Meeting girlfriends. B. Working hard on his courses.
C. Staying at home reading. D. Giving advice to his parents.
6. A. Delivery of the parts has been delayed.
B. She doesn't have any more time for redecorating.
C. It's time for the work to be finished.
D. The redecorating is being done gradually.
7. A. She has been traveling throughout the town.
B. She has been doing shopping the whole afternoon.
C. She has been looking for a suitable dress for herself.
D. She has been late for cooking the dinner for her family.
8. A. Go to the concert. B. Go to work.
C. See her friends as planned. D. Finish her homework.
9. A. Very sarcastic. B. Very pleased. C. Very unhappy. D. Very proud.
10. A. She has finished only one step. B. She doesn't have any more time for redecorating.
C. She will reorder the parts. D. The redecorating is being done gradually.

Section B

Directions: In this section, you will hear 3 short passages. At the end of each passage, you will

hear some questions. Both the passage and the questions will be spoken only once. After you hear a question, you must choose the best answer from the four choices marked A), B), C) and D). Then mark the corresponding letter with a single line through the center.

Passage One

Questions 11 to 14 are based on the passage you have just heard.

11. A. 010 2612597. B. 010 3712597. C. 010 3622597. D. 010 3612597.
12. A. London. B. Australia. C. America. D. Canada.
13. A. There are eighty thousand sheep on it. B. There are ninety thousand sheep on it.
C. There are seventy thousand sheep on it. D. There are eighty thousand sheep on it.
14. A. Robert West will visit Don Flower.
B. Don Flower will call Robert West on his birthday next year.
C. Robert West will call Don Flower again next year.
D. Don Flower will visit Robert West.

Passage Two

Questions 15 to 17 are based on the passage you have just heard.

15. A. The sun in the sky. B. The sunshine in bad weather.
C. The name in the passport. D. The appearance of the student.
16. A. A rude person. B. A wise person.
C. An amusing person. D. A humorous person.
17. A. There was something wrong with his passport and visa.
B. He was going to be arrested.
C. He brought sunshine to England.
D. His name was pronounced just like the England word “sun”.

Passage Three

Questions 18 to 20 are based on the passage you have just heard.

18. A. It meant something for people's spare time.
B. It meant hunting animals and birds.
C. It meant organized games.
D. It meant something for advertisement.
19. A. More than £50,000. B. More than stars.
C. Over £3,000. D. As much as tennis champions.
20. A. By advertising watches and food.
B. By allowing companies to use their fame for their products.
C. By selling shirts and shoes.
D. By selling photographs.

Posttest of Listening

I. Listening Comprehension (20%)

Section A (10%)

Directions: In this section, you will hear 10 short conversations. At the end of each conversation, a question will be asked about what was said. Both the conversation and the question will be spoken only once. After each question there will be a pause. During the pause, you must read the four choices marked A), B), C) and D), and decide which is the best answer. Then mark the corresponding letter with a single line through the center.

Example: You will hear: M: Is it possible for you to work late, Miss Grey?
W: Work late? I suppose so, if you really think it's necessary.
Q: Where do you think this conversation most probably took place?

You will read: A) At the office.
B) In the waiting room.
C) At the airport.
D) In a restaurant.

From the conversation we know that the two were talking about some work they had to finish in the evening. This is most likely to have taken place at the office. Therefore, A) "At the office" is the best answer. You should choose [A] and mark it with a single line through the center.

1. A. \$114. B. \$104. C. \$40. D. \$140.
2. A. Wife – Husband. B. Shop assistant – Customer.
C. Waitress – Customer. D. Secretary – Boss.
3. A. Lock the door carefully. B. Open the door.
C. Fix the lock himself. D. Call the repairman.
4. A. 20 copies. B. 40 copies. C. 50 copies. D. 25 copies.
5. A. At 12:00. B. At 1:00. C. At 11:30. D. At 12:30.
6. A. Mr. Thomson is a kind man. B. She is sympathetic for the man.
C. The man needn't be worried about. D. Mr. Thomson is not reliable.
7. A. It was caught in fog. B. It wrecked on a rock.
C. It turned over in the storm. D. Its anchor couldn't work because of the fog.
8. A. 8:15. B. 8:50. C. 9:15. D. 9:50.
9. A. One month. B. One week. C. Two weeks. D. Three weeks.
10. A. Down the Fifth Avenue. B. In Greenwich Village.
C. At the back of the bus. D. In the front of the vehicle.

Section B (10%)

Directions: In this section, you will hear 3 short passages. At the end of each passage, you will hear some questions. Both the passage and the questions will be spoken only once. After you hear a question, you must choose the best answer from the four choices marked A), B), C) and D). Then mark the corresponding letter with a single line through the center.

Passage One

Questions 11 to 13 are based on the passage you have just heard.

11. A. Planes had to carry more passengers.
B. The plane was smaller than other transportation.
C. Luggage was more dangerous.
D. For the safety.
12. A. The luggage has to be weighed and measured.
B. The luggage has to be measured only.
C. The luggage has to be weighed only.
D. The luggage has to be weighed with its passenger.
13. A. A passenger has to be weighed. B. Luggage has to be weighed.
C. It still uses small aeroplanes. D. A passenger's clothes have to be weighed.

Passage Two

Questions 14 to 16 are based on the passage you have just heard.

14. A. The flashing and moving pictures may hurt our eyes.
B. Some television programmes may be terrible and ugly.
C. We may come to take television for granted.
D. People tend to spend too much time on watching television.
15. A. How much time they had spent watching television.
B. How little they had to say to one another.
C. How many things they had to do.
D. How little thinking they had done.
16. A. It is neither good nor bad in itself. B. It leaves very much to be desired.
C. It has great value to society. D. It is good for adults, bad for children.

Passage Three

Questions 17 to 20 are based on the passage you have just heard.

17. A. Living on an American farm.
B. Differences between Asian farmers and American farmers.
C. The rich U.S. farmers.
D. Farm life in Asia.
18. A. Farm families live on their own farms in the U.S.
B. The farmers go a long way on Saturdays for shopping and on Sundays for church.
C. Farm life is much the same in every part of the world.
D. Farm life in the U.S. has been changed a lot.
19. A. By train. B. By bus. C. By car. D. By bicycle.
20. A. To help each other. B. To deal with their problems on their own efforts.
C. To depend on modern machines. D. To follow older ways.

Appendix B

Pretest of Speaking

Three students form a group. Each one of them should describe one of the pictures, and they talk about the topic together. Two teachers score the students according to the Grading Standard of College English Spoken Test.



Topic 1: Campus



Topic 2: Fun with Language



Topic 3: School Life



Topic 4: Party



Topic 5: Telephoning



Topic 6: Shopping



Topic 7: A Job Interview



Topic 8: Employment



Topic 9: Going on Vacation



Topic 10: Places of Interests

Posttest of Speaking

Three students form a group. Each one of them should describe one of the pictures, and they talk about the topic together. Two teachers score the students according to the Grading Standard of College English Spoken Test.



Topic 1: Parents



Topic 2: The Cinema



Topic 3: Marriage



Topic 4 Stress



Topic 5: Youth



Topic 6: The Natural World



Topic 7: Courage



Topic 8: Left-handedness



Topic 9: The Business World



Topic 10: Humor

The Scoring Criteria of College English Speaking Test

语言准确性和范围		话语的长短和连贯性	语言灵活性和适切性
5分	<ul style="list-style-type: none"> * 语法和词汇基本正确 * 表达过程中词汇丰富、语法结构较为复杂 * 发音较好，但允许有一些不影响理解的母语口音 	<ul style="list-style-type: none"> * 在讨论有关话题时能进行较长时间的、语言连贯的发言，但允许由于无法找到合适的词语而造成的偶尔停顿 	<ul style="list-style-type: none"> * 能够自然、积极地参与讨论 * 语言的使用总体上能与语境、功能和目的相适应
4分	<ul style="list-style-type: none"> * 语法和词汇有一些错误，但未严重影响交际 * 表达过程中词汇较丰富 * 发音尚可 	<ul style="list-style-type: none"> * 能进行较连贯的发言，但多数发言较简短 * 组织思想和搜寻词语时频繁停顿，有时会影响交际 	<ul style="list-style-type: none"> * 能够较积极地参与讨论，但有时内容不切题或未能与小组成员直接交流 * 语言的使用基本上能与语境、功能和目的相适应
3分	<ul style="list-style-type: none"> * 语法和词汇有错误，且有时会影响交际 * 表达过程中词汇不丰富，语法结构较简单 * 发音有缺陷，有时会影响交际 	<ul style="list-style-type: none"> * 发言简短 * 组织思想和搜寻词语时频繁出现较长时间的停顿，影响交际，但能够基本完成交际任务 	<ul style="list-style-type: none"> * 不能积极参与讨论，有时无法适应新话题或讨论内容的改变
2分	<ul style="list-style-type: none"> * 语法和词汇有较多错误，以致妨碍理解 * 表达过程中因缺乏词汇和语法结构而影响交际 * 发音较差，以致交际时常中断 	<ul style="list-style-type: none"> * 发言简短且毫无连贯性，几乎无法进行交际 	<ul style="list-style-type: none"> * 不能参与小组讨论

大学口语测试评分标准

Appendix C

Pictures of Autonomous Learning



Appendix D

A Questionnaire of Learning Styles

学习风格调查问卷

同学们：学习风格是学生学习过程中的思维方式和稳定的个人偏好，没有好坏对错之分。了解自己的学习风格，就能在学习中找到与个人学习风格相匹配的方法，从而提高学习效率。

请根据你自己的实际情况，在各项陈述前写上标志着不同程度的数字。

5—几乎总是 4—经常 3—有时 2—很少 1—几乎从不

例如：第一项“我把要记的事情写下来才会记得更牢”如你几乎总是这样做的，就在横线上方写上数字 5。

- (1) 我把要记的东西写下来，这样才会记得更牢
- (2) 在阅读时，我听着脑子里读的声音，或者我自己高声朗读。
- (3) 我在与人讨论后才能更好地理解问题。
- (4) 我不喜欢读或听任务指南，而是喜欢拿起来就做。
- (5) 我能够在脑子里形成画面。
- (6) 我在放着音乐的情况下学习得更好。
- (7) 学习时我得频繁地休息休息。
- (8) 我在走来走去的情况下可以更好地思考问题。坐在桌前冥思苦不适合我。
- (9) 我在阅读和听的过程中记了大量的笔记。
- (10) 别人在说话时我得看着对方才能保持注意力集中。
- (11) 在有背景杂音的情况下，我很难听明白别人说话的内容。
- (12) 我喜欢别人告诉我如何做某事，而不想自己阅读操作指南。
- (13) 我喜欢听老师讲课或听课文磁带，而不喜欢阅读课文。
- (14) 当我不会说某个单词时，我不断地打手势，并说“什么来着”之类的话。
- (15) 我不看说话人也完全能听懂对方的话。
- (16) 我在安静的地方更便于学习。
- (17) 我对地图、表格、图形一看就懂。
- (18) 我在读文章或书时，喜欢偷窥一下结尾。
- (19) 我对别人说话内容比对此人的长相记得更牢。
- (20) 我要是与别人一起出声地学习，会记得更牢。
- (21) 我记笔记，但从不过头去读一读这些笔记。
- (22) 当我专心读或写时，如有收声机的声音，我会受到干扰。
- (23) 在我头脑中形成影像很困难。
- (24) 我感到一边做作业一边自言自语对我做作业有帮助。
- (25) 我的笔记本和书桌看上去乱糟糟，但我知道东西在那里，并一找就找到。
- (26) 当考试时，我仿佛在脑子里可以“看到”课本和正确答案。
- (27) 听了笑话后我不能做到事后再给人家讲出来。(即我听了笑话不久便忘了)。
- (28) 在学习新事物时，我喜欢先听有关情况，再读有关资料，最后才开始做。

(29) 我喜欢做完一件事后再开始做另一件事。
 (30) 我用手数数，在阅读时嘴唇要动。
 (31) 我不喜欢写完文章后通读一下，以便找出错误。
 (32) 在记忆过程中，如记电话号码，我喜欢在脑子里形成个画面记得更牢。
 (33) 为了得到更多学分，我宁愿将报告录下音，也不愿写出来。
 (34) 我在上课时常做白日梦。
 (35) 如果能得到更多学分，我宁愿去做新课题，也不愿写报告。
 (36) 当有了好想法时，我必须马上写下来，否则就忘了。

当你完成上述问卷后，请将每一项的得分填在下列表格的相应号码中，并将每列中的各项相加，算出得分：

1._____	2._____	4._____
5._____	3._____	6._____
9._____	12._____	7._____
10._____	13._____	8._____
11._____	15._____	14._____
16._____	19._____	18._____
17._____	20._____	21._____
22._____	23._____	25._____
26._____	24._____	30._____
27._____	28._____	31._____
32._____	29._____	34._____
36._____	33._____	35._____

视觉型风格得分合计 _____ 听觉型风格得分合计 _____ 触觉型风格得分合计 _____

三种风格得分总计： _____

分数换算方法如下：

视觉型得分

视觉型风格 = _____ = _____ %

三种类型风格总合得分

听觉型得分

听觉型风格 = _____ = _____ %

三种类型风格总合得分

触觉型得分

触觉型风格 = _____ = _____ %

三种类型风格总合得分

你已经知道自己的学习风格了。

Appendix E

A Questionnaire of Foreign Language Teaching Reform

外语教学改革问卷调查

年级_____系别_____姓名(可略)_____

目前,教育部决定采取三项具体措施,大力推动全国大学本科公共英语教学改革:1. 制定新的大学英语教学指导性文件,即《大学英语课程教学要求(试行)》,以适应高等教育发展的新形势;2. 广泛采用先进的信息技术,推动基于计算机的英语教学改革,改革传统的课本+黑板+粉笔的教学模式;3. 进一步改革大学英语四、六级英语考试。作为211学校,天津医科大学决定以此为契机,突破传统的外语教学模式,用新的教学理念指导外语教学,逐步实现《大学英语课程教学要求(试行)》所规定的大学英语教学改革的目标,深化大学英语教学改革,是我校的英语教学形成新的特色。作为本校学生,

1. 对本校的外语教学所持的态度: _____ 赞成; _____ 无所谓; _____ 反对。
2. 你是否满足于目前外语课上课本+黑板+粉笔的教学模式? _____ 是; _____ 否。
3. 你认为目前学习上感到最吃力的 _____ 听说; _____ 阅读; _____ 写作; _____ 翻译。
4. 为了满足不同层次学生的需求,我们打算在新学年的新生重视是应与分级教学,你对此的态度是: _____ 赞成; _____ 反对。
5. 你对目前应与选修课的建议: _____。
6. 你是否认为应该增加应与选修课的科目: _____ 是; _____ 否。
7. 在基础学习阶段(一、二年级)的学习期间,你最希望开设的应与选修课有:“英语综合能力同步提高课程”; _____ “外台听力”; _____ “原版电影赏析”;“外刊选读”; _____ “高级口语”; _____ “英语写作”; _____ “英美名作赏析”。(请按顺序写出序列号)
8. 在能力提高阶段(三年级)的学习期间,你最希望开设的英语选修课有: _____ “基础英语文献选读”; _____ “科技英语”; _____ “专业英语摘要写作”; _____ “专业口语交流”; _____ “国际会议陈述”; _____ “英美名著赏析”。
9. 你还建议开设那些选修课: _____。
10. 最希望参加的第二课堂活动有: _____ 外籍教师讲座; _____ 外聘英语专家、教授讲座; _____ 英语朗读比赛; _____ 英语朗读比赛; _____ 英语书法比赛; _____ 英语歌咏比赛; _____ “英语角”活动。(请按顺序写出序列号)
11. 你还建议开展哪些课外活动: _____。
12. 你是否满意我校目前1-2年级使用的清华大学出版社的《新英语教程》: _____ 是; _____ 否。
13. 你认为目前的英语课堂教学是否应与校园网上运行的英语教学软件相结合: _____ 是; _____ 否。
14. 你对目前的英语期中期末考试是否满意: _____ 是; _____ 否。原因: _____。
15. 你认为在哪些方面英语教学应当如何改进,才能更好地体现医科院校外语教学的特色:

Appendix F

Self-Assessment/Peer Assessment Form of Students' English Competence

(Basic Requirements)

<p>Please make assessments on your English competence in the Self-Assessment column; write "Y" if you can do it, and "YY" if you can do it effortlessly. Please ask your classmates to make assessments on your English competence in the Peer Assessment column in the same way. Please mark the English skills that you consider important but haven't mastered yet in the Objectives column; write "O" for "objective" and "P" for "priority". Please list (or ask your classmates and teachers to help list) all the English skills that you think you have but are not listed on this form, or the objectives you expect to achieve, in the blank space provided after each section.</p>			Self-Assessment	Peer Assessment	Objectives
Listening	A	B	C		
1. Can understand lessons given in English. Can join in discussions and speak in class according to requirements.					
2. Can understand the main points of audio-visual materials, for example, dialogues, short passages or reports, related to what is taught in class and delivered at slow speed (about 130 words per minute).					
3. Can understand English broadcasts, for example, news reports, science reports and stories about history, delivered at slow speed.					
4. Can understand directions to places, instructions to do things, and manuals. Can understand numbers (both cardinal and ordinal) and time expressions.					
5. Can understand the topic of the discussion, and grasp the main idea and major points.					
6. Can use basic listening skills.					
Speaking	A	B	C		
1. Can answer questions in class, use familiar simple expressions and sentences to exchange opinions with classmates, and give short prepared speeches on familiar topics.					
2. Can introduce classmates, friends, and myself and respond to other people's introductions.					

3. Can give directions, do shopping, leave messages and make requests in simple English.			
4. Can use English numbers to report time, inquire about prices and give telephone numbers and e-mail addresses.			
5. Can hold simple conversations with native English-speakers on everyday topics.			
6. Have mastered basic conversational strategies, for example, initiating maintaining and closing a conversation, and asking people to repeat what they have said.			