A research on a student-centred teaching model in an ICT-based English audio-video speaking class[1]

Zhihong Lu, Leijuan Hou and Xiaohui Huang
Beijing University of Posts and Telecommunications, P. R. C.

ABSTRACT

The development and application of Information and Communication Technologies (ICT) in the field of Foreign Language Teaching (FLT) have had a considerable impact on the teaching methodologies in China. With an increasing emphasis on strengthening students' learning initiative and adopting a "student-centred" teaching concept in FLT, language teachers and researchers in China have resolved to explore effective and appropriate teaching models both in theory and practice. A range of reforms of college English teaching in China has demonstrated the shift of the teaching focus from enhancing students' reading ability to their listening and speaking abilities. More focus has been put on improving students' communicative language ability (CLA). This paper aims to examine the feasibility of the student-centred teaching model utilised in an English audio-video speaking class (EAVSC) in computer-assisted language learning (CALL) environments at the authors' university by carrying out two quantitative longitudinal case studies. Analysis of correlated data shows that this specific teaching model in general is both plausible and effective in improving students' communicative language abilities, especially in their speaking abilities.

Keywords: ICT; student-centred teaching model; listening and speaking abilities; CLA; EAVSC; CALL

INTRODUCTION

The extensive use of Information Communication Technologies (ICT) in China has greatly changed the college English teaching methodologies. In CALL environments, the focus of college English teaching has shifted from focusing on students' linguistic ability towards focusing on students' communicative language ability and pragmatic competence. The teaching model is changing from a traditional "teacher-centred" one to a "student-centred" multi-dimensional one, which aims to develop students' communicative language ability.

In English class taught in the past, the teacher tended to spend most of the classroom time lecturing while students would often passively receive linguistic knowledge either from the teacher or from the textbook, but their speaking ability could not be adequately trained and developed. An ICT-based **audio-video speaking class (**EAVSC) in CALL environments, however, integrates viewing, listening and speaking into the students' practice. The aim is to develop students' listening and speaking abilities, as well as their comprehensive language ability. In such ICT-based language learning environments, the teaching model must change accordingly.

BACKGROUND OF THE STUDY

For many years, teaching methodology adopted in English speaking class consisted of audio-lingual repetition in China. With the acceleration of globalisation and widespread of mass media in the English language, the urgent need for international communication and the demand for people's communicative language ability is incredibly increasing. As a result, the College English Curriculum Requirements issued by China's Department of Higher Education (2007) clearly

stated that college English teaching should emphasise developing students' practical skills, especially listening and speaking abilities. For the first time, that:

> *colleges and universities should remold the existing unitary teacher-centred pattern of language teaching by introducing computer- and classroom-based teaching models* (Department of Higher Education 2007, p.25)

with the objective of developing:

> *students' ability to use English in a well-rounded way, especially in listening and speaking* (Department of Higher Education 2007, p.25).

However, teaching English speaking class, especially in CALL environments, is quite a complex undertaking.

With the research going in depth, many researchers and teachers realised that children and second language learners acquire their language abilities through interacting with others. This awareness pushed the emergence of Communicative Language Teaching (CLT), which advocates that foreign language classes should provide various opportunities for students to communicate in the target language, since students learn through interaction (Bailey 2004). Methodologically, Task-Based Language Teaching (TBLT) is an effective way to develop students' communicative ability in the target language. By putting students directly into all kinds of authentic tasks (covering tasks happened in daily life, learning and working), the teacher not only successfully realises his teaching objectives, but also improves students' communicative ability in the target language (Nunan 2004b).

Therefore, in an EAVSC, the teacher should adapt himself / herself to the new teaching environments, take full advantages of ICT and search for an appropriate teaching model, to enhance students' communicative language ability maximally. The teacher is also expected to design and organise group-work activities, so as to provide opportunities for students to communicate in the target language without the teacher's interference (Bailey 2004). Furthermore, when speaking is the focus of classroom activities, the teaching should also involve other aspects, like raising students' awareness of some socio-linguistic or pragmatic point (Hughes 2005, p.6). Hence, providing enough cultural knowledge and background information is another important aspect that cannot be neglected in the speaking class.

Under such macro context of teaching English in China, what the authors in this study have been engaging in belongs to one of the pioneering attempts at exploring effective teaching models of spoken English by utilising modern ICT facilities in CALL environments. It is expected that this case study of teaching English at the authors' university can be applicable for other universities or colleges both in China and other countries in their EFL or ESL course.

LITERATURE REVIEW

The Teaching Model under Constructivism

According to Constructivism, learning is a process of meaning construction under a certain situation (i.e. socio-cultural background), through resourcing, cooperating and interacting with people. Therefore, a learning environment contains four major features – situation, cooperation, conversation, and meaning construction (Brent 1995; Chris 1995). Constructivists advocated a learning model with learners as the centre and the teacher as the guide. Therefore, in an EAVSC, the students acquire the target language through communicating with the teacher and their classmates in various tasks and activities.

Bachman's CLA Model

According to Bachman's Communicative Language Ability (CLA) model, an individual's facility with a language depends on language competence, strategic competence and psycho-physiological mechanisms. In Bachman's eyes, language competence comprises essentially a set of specific knowledge components that are utilised in communication via language (Bachman 1990, pp.84-85). It includes organisational competence, which consists of grammatical and textual competence, and pragmatic competence, which consists of illocutionary and sociolinguistic competence. Strategic competence is seen as the capacity that relates language competence, or knowledge of language, to the language user's knowledge structures and the features of the context in which communication takes place. Psycho-physiological mechanisms involved in language use characterise the channel (auditory, visual) and mode (receptive, productive) in which competence is implemented (Bachman 1990, pp.107-108). The interactions of these components of CLA with the language use context and with language user's knowledge structures are illustrated in the following two figures.
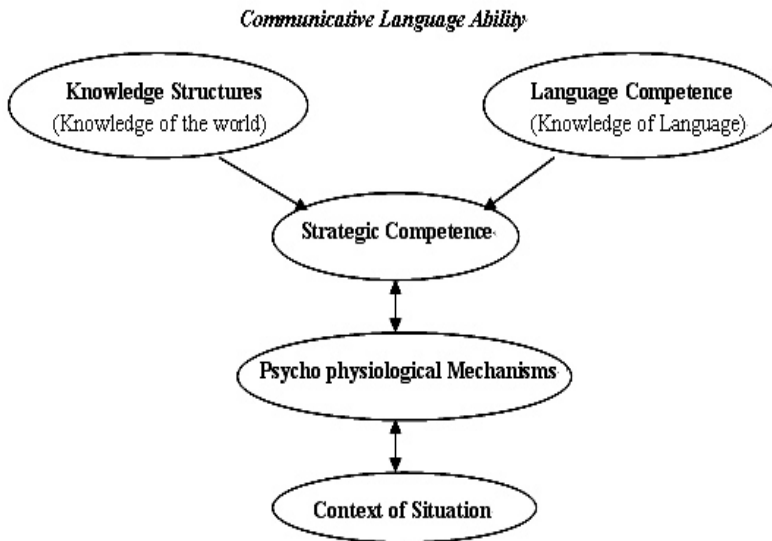

Figure 1: *Components of communicative language ability in communicative language use* (Bachman 1990, p.85)
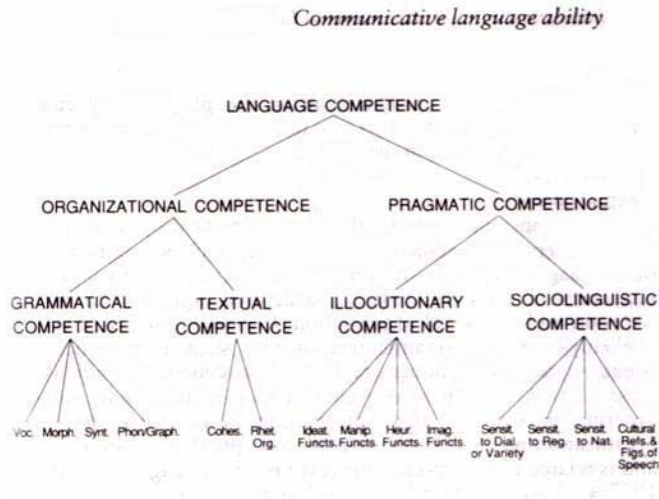
Figure 2: *Components of language competence* (Bachman 1990, p.87)

"Learner-Centred" Education

In the 1970s, the emergence of Communicative Language Teaching (CLT) improved the philosophy of "learner-centred" education. According to Nunan (2004a, p.8), "a learner-centred" classroom is one in which students were actively involved in their own learning processes. This involvement has two dimensions: first, students take charge of their own learning processes, including making decisions, plans and so forth; the other is to maximise the classroom time for students' interactive activities.

THE ENGLISH AUDIO-VIDEO SPEAKING COURSE (EAVSC)

It is necessary to briefly introduce the course in question, including its characteristics, the main teaching methodology adopted, activities designed in the EAVSC and previous research concerning the course.

Characteristics of ICT in the EAVSC

In the EAVSC, there are some unique characteristics compared with the traditional classrooms. The classes were conducted in a digital language lab, which had the Internet access and was interconnected by an ICT facility, a digital learning system (WE-LL6000), which made synchronous oral communications, random grouping and speech recording possible. The teacher was able to supervise and monitor students' performance from a touch screen LCD control panel, participate in their speaking activities. The distinct advantage of this system is that when assigning tasks, the whole class can be divided into groups or pairs either randomly or by set rules. Students could talk either to their partners or to any group members unnecessarily with face-to-face contact, eliminating the possible shyness or embarrassment that often occur in real life context. Since the students' speaking activities can be recorded and collected via the system, the collected audio data then can be used for evaluating students' achievement as well as for further studies. The pre-test and post test of this study were also carried out in the same teaching environment.

Teaching Methodology Adopted in the EAVSC

In the "student-centred" EAVSC, the teaching methodology is based on Bachman's theory of communicative language ability (CLA) and hence adopts the communicative language teaching model. The guiding principle throughout the whole teaching process is to bring students' role as subjects into full play, actively involving themselves in various activities in class. The characteristic of this teaching model lies in that the teacher intended to infiltrate a particular way of learning English into the students' mind instead of merely introducing language knowledge. When the students conduct speaking activities, they also utilise effective communicative strategies to promote the interaction. This concept was theoretically derived from Bachman's CLA framework and practically came into shape during the first author' s own three years' life experiences in America, a time when all the videos in the textbook were shot by herself.

Activities Designed in the EAVSC

The main features of CLA can be summarised into ten aspects according to Canale and Swain (1980, pp.1-47): 1) emphasis on meaning; 2) stress on the role of context; 3) language activities designed with acceptable purposes; 4) meaningful utterances; 5) authenticity of tasks; 6) unpredictable outcome; 7) focus on interaction; 8) integration of four basic language skills; 9) direct testing 10) judgment made on achievement of communicative purpose.

According to Bachman's CLA theory, the task designing must adhere to the principle of being authentic. In general, the activities carried out in EAVSC are authentic or nearly authentic. All the speaking activities, pair-work dialogues, group discussions, debates, video-based role-plays or voiceovers, personal statements, were both task-based and text-related activities.

Pair-work dialogues were usually carried out between desk mates, and students were asked to talk about topics in their daily life. For example, after learning the university life on American campus, they were expected to talk about their own college lives. Pair-work activities were designed in line with the seventh feature of Bachman's CLA theory, "focus on interaction". From the very beginning of each semester, the teacher emphasised the importance of interaction and cooperation between partners by comparing the process of conducting pair-work dialogues to the process of playing badminton or playing table tennis. Only in this way can they finished the "tasks" through cooperation with each other in its true sense, can they actively make this class interactive and learn the importance of cooperation in the long run.

The group discussions were about six minutes, conducted among three to four persons each time. The rationale for arranging such activities was that the teacher intended to train students' strategic competence. Students' psycho-physiological mechanisms were also adequately involved in this link. Before attending each class, the students were asked to choose certain cultural topics or social issues they were interested in, search for enough background information from either the library or the internet, and make good preparation for it in class. When the group discussions began, students in each group were required to take turns chairing their own topics. In this way, each student was guaranteed an equal opportunity to speak English in discussions: it placed a time limit on the active students and motivated the students that were reluctant in speaking. Therefore, an equivalent frequency of in-class speaking in the target language among students has been realised. Moreover, students learned to employ useful communicative strategies to promote the interaction and utilise organisational skills to be a good chairperson through such exercises.

On the basis of group discussion, sometimes the teacher arranges grounds of debates over some well-chosen controversial issues. Debate is an effective means for training students' logical abilities as well as their abilities to see things from two angles. For instance, in the debate over 'Do you think one day e-book will eventually replace traditional books?' or 'Shall western festivals be encouraged in China?', students are expected to first discuss it adequately within a certain

group, and then take opposite standpoints in different rounds of the debate followed. Useful words and expressions can be referred from the textbook. Through debating exercises, it is expected that students can exchange opinions and deepen their cognition of certain topics so that their knowledge of the world can be enriched.

After conducting several grounds of discussions or debates, a "one-minute" personal statement activity was followed. In this section, the students thought the topic through, took down some notes for the first fifteen seconds, and then gave their statements during the next forty-five seconds. Usually, students began with a clean opinion or attitude toward the given topic and then provided two or three reasons to support their statements. The one-minute personal statement activity attempted to develop students' logical thinking ability, generalisation ability, and organisational competence.

Sometimes video-based role-plays or voiceovers are also included on appropriate occasions. Once after enjoying a video clip of the world-famous movie – *Roman Holiday,* the teacher invites volunteers to imitate one dialogue between the princess and the reporter. All the students were attracted by their classmates' excellent performance, and everyone gained a lot of joy during this course.

Previous Research Concerning the EAVSC

Lu et al. (2008) investigated the teacher's roles in the student-centred EAVSC. Correlated data showed that the teacher's role in such an environment tends to be multidimensional, which would include activity designer and organiser, coordinator, source of background information as well as assessor. These roles of the teacher also proved to be effective in improving students' listening and speaking abilities and their language proficiency development.

In another collaborated paper "Interactive Patterns in an EAVSC in CALL Environments", Lu et al. (2009) discussed the application of specific interactive patterns in the student-centred EAVSC in CALL environments. From those data obtained they concluded that such communicative interactive patterns were very effective as S-Ss (oral presentations), S-S (pair work dialogues) and Ss/Ss (discussions within groups of 3-5 students).

Despite the positive results gained from these two quantitative studies, further investigation is still needed to probe the teaching and learning of EAVSC in CALL environments. This paper is a follow-up study of the previous two papers and an exploration of this specific EAVSC from the perspective of a student-centred teaching model.

RESEARCH DESIGN

Research Objectives

Through both qualitative and quantitative analyses of correlated data obtained from the authors' own classes, the research was designed to address the following questions:
1. What kind of role does the ICT facility, in particular, the digital learning system (WE-LL6000) play in the EAVSC?
2. Does this teaching model in the "student-centred" EAVSC in CALL environments achieve feasibility and effectiveness in enhancing students' speaking abilities and their communicative language abilities?

Subjects

All the data were collected from two quantitative longitudinal case studies for the purpose of investigating the feasibility and effectiveness of this "student-centred" teaching model in the

student-centred EAVSC in CALL environments. The whole process lasted for two semesters (Semester 1: Sept. 2008 – Jan. 2009, Semester 2: Feb. 2009 – Jun. 2009). All the contents of the textbook and related in-class activities were covered in one semester. There were 130 students (registered in year 2006, juniors) in total, 66 in the first semester, and 64 in the second. All the subjects were non-English majors, specialising in the fields of Computer Science and Technology, Information and Communication Engineering, and Electronic Engineering. They all took the National College English Test Band Four (CET-4)[2] in P. R. China, and scored above 576 (out of 710) on the test. In each semester, the subjects were divided into two independent classes and both were instructed by the same teacher – the first author.

Teaching Context

The classes were conducted in an ICT-based language lab which was equipped with a digital learning system – WE-LL6000, capable of synchronous oral communications, random grouping, and speech recording. Therefore, audio communication was available both among students and between the teacher and the students. In organising in-class activities, the teacher could divide the whole class into groups or pairs either randomly or by set rules, or conduct whole-class discussions based on the requirements of different tasks. In addition, from the control panel, the teacher was able to supervise and monitor the students' performance and record their oral responses to assigned tasks for evaluation.

Instrumentation

Questionnaire

At the end of each semester, a questionnaire was delivered to the students to survey the teaching and learning effects of a student-centred teaching model in an EAVSC in computer-assisted language learning (CALL) environments and the using of the textbook   *Learning English through Culture: Viewing, Listening, Speaking*. The questionnaire covered the following four aspects: the textbook, the interactive activities in the classroom, the teaching methodologies, and students' comments on the course. The questionnaire is attached in Appendix 1.

Tests

At the beginning of each semester, a pretest was conducted to assess the subjects' spoken English proficiency. The test consists of a one-minute personal statement, a five-minute pair-work dialogues, and three-person group discussions with given topics. After the whole semester's training, a posttest on similar topics was given in the same condition as the pretest to evaluate both the subjects' learning progress and the effectiveness of the teacher's teaching in the ICT environment. All the students' oral productions in the two tests were recorded for the study in this paper and for analysis in further research. A sample of the posttest paper can be seen from Appendix 2.

Data Collection and Analysis

130 copies of the questionnaire were delivered to the students and 123 counted as valid. The recorded sound files from pretest and posttest were rated on the basis of *IELTS Speaking Band Descriptions* by two teachers to minimise any subjective bias. All the students' CET-4 scores were collected for analysing the correlation between the subjects' comprehensive language proficiency and their speaking competence.

All the data were processed by using SPSS 14.0:

> Descriptive statistics (mean, variance, standard deviation, percentage) were used to analyse the students' responses to the questionnaire and the two test scores;

A Pearson Correlation Test was employed to illustrate the correlation between the students' CET-4 scores and their pre-test scores;

A Spearman Correlation Test was applied to evaluate the two teachers' degree of agreement on ratings.

A Paired Samples *t*- test was employed to discover the changes in the students' two test scores.

RESULTS AND FINDINGS

Correlation Analysis between the Two Teachers' Ratings on Pretest

Before making a series of analysis, a Spearman Correlation Test was done to evaluate the inter-rater reliability to exclude any subjective bias and ensure the validity and reliability of the other tests and analysis. It should be noted that one student did not attend the course during the first semester for some unknown reasons, so the total number of students with final scores were 129.

Table 1: Correlation analysis of the inter-rater reliability

		Spearman Correlation Coefficient	Sig. (2-tailed)	N
Pre-test	Teacher A-Teacher B	.651(**)	.000	129
Post-test	Teacher A-Teacher B	.872(**)	.000	129

**: Correlation is significant at the 0.01 level (two-tailed).

As shown in Table 1, the Spearman Correlation Coefficients of the two teachers' ratings for both tests were very high (the significances are both .000). Therefore, it is safe to say that their ratings were highly reliable and the test scores adequately represented the subjects' speaking proficiency.

Correlation Analysis between Subjects' Comprehensive Language Proficiency and Their Speaking Proficiency

The national College English Test Band Four (CET-4) in China aims to evaluate non-English majors' comprehensive language proficiency. Apart from CET-4, there is also CET-6, which is widely used to evaluate the above-average students' language proficiency. It is expected that the students who passed CET-4 should have a basic ability of listening, speaking, reading, writing and translation, and the students who passed CET-6 should have an intermediate mastery of these abilities (Department of Higher Education 2007, pp.18-22). However, it is often the case that many Chinese students score high on CET-4 or CET-6 but with low listening and speaking abilities. Thus before conducting the study, we need to measure the subjects' real English speaking abilities (since all of them scored high on CET-4, between 576 and 650) by computing the correlation coefficient between their CET-scores and their pretest scores.

Table 2: Correlation analysis of the subjects' CET-4 scores and their speaking competence

	Pearson Correlation Coefficient	Sig. (2-tailed)	N
CET-4-Pretest	.188	.052	129

Upon Pearson Correlation Test, it was found that there was no significant correlation between the subjects' CET-4 scores and their pretest scores, which means that the subjects' speaking abilities did not match with their comprehensive language proficiency. Although they were categorised as intermediate learners based on their CET-4 results, they had not grasped a corresponding level of speaking ability to communicate in English. This non-equivalence was largely due to the outdated teaching philosophy and methodology, whose emphasis was on developing students' reading ability, rather than their practical skills, for instance, listening and speaking.

The Interactive Teaching Model in the EAVSC in CALL Environments

The teaching model contains several interrelated factors, including the teaching philosophy, the application of the textbook, the teaching approaches, and the ways of conducting the course and so forth. The EAVSC in the study is featured in the following three aspects:

Organisation of Various In-class Speaking Activities

The key to improving students' English speaking skills is to provide a favourable communicative environment to stimulate their desire for interacting in the target language, and to create multiple opportunities for students to practice (Lu et al 2008). In the traditional teaching approach, however, much emphasis were put on explaining linguistic facts, and few interactive activities were organised, resulting in inadequate training of students' speaking competence.

In the EAVSC, the traditional teaching pattern is replaced by the interactive teaching model: the teacher's introduction to the topic-related background information and cultural knowledge serve as the lead-in while the students' practices of listening and speaking abilities serve as the dominant part in the class. The goals are to develop students' communicative language ability in the target language, to raise their awareness of cultural differences, as well as to train their competence in cross-cultural communication. Therefore, a range of in-class interactive activities are designed for students to communicate in the target language, such as pair-work dialogues, small group discussions, big group discussions or debates, video-based role-plays or voiceovers and personal statements.

Among all the activities, the most popular ones were pair work and group work. According to Bailey (2004, pp.47-66), one of the principles for teaching speaking is that teachers should provide opportunities for students to talk by using pair work or group work, which not only stimulates students' interest, cultivates their critical thinking abilities, but also promotes their integrative language ability. These two types of in-class activities were also proved to be students' favourite activities.

Table 3: *Optimal interactive speaking activities favoured by students*

Question: In your opinion, what are the ideal and most effective speaking activities in an EAVSC?			
Items Results	Jan. 2009 (%)	Jun. 2009 (%)	Total (%)
Pair-work dialogues and small group discussions (3-5 persons).	86.44	90.62	88.62
Big group discussions or debates (above five persons).	5.08	4.69	4.88
Question and answer between the teacher and the students one by one.	5.08	4.69	4.88
Video-based role-plays or voiceovers.	3.39	0.00	1.62

As shown in Table 3, nearly 90% of the students thought that the optimal speaking activities in such a class were pair-work dialogues and small group discussions. This was mainly due to the fact that they were the most frequently adopted activities in class. Usually pair-work dialogues were carried out between desk partners while small group discussions were implemented in randomly-set groups. In the former case, students were familiar with each other so they can communicate with each other on certain authentic topics in a friendly and relaxed atmosphere; in the latter case, however, students can freely express their own opinions as well as listen to different voices on the same issue. In small group discussions, students would feel neither nervous nor embarrassed since the WE-LL6000 system could guarantee smooth communication among students without face-to-face interaction. In these two activities, students were able to produce a large portion of language output in the target language, which met their needs for negotiating for information and ideas.

About 5% of the subjects showed their preferences to the big group discussions or debates. The possible reasons could be: 1) The conditions for carrying out such speaking tasks were more restricted with the topics themselves (for instance, not all topics suitable for discussing are equally apt for debating); 2) In a bigger-sized group, opportunities for everyone to speak were not equal even if each student was required to be active. And those who were reluctant in speaking might not be actively involved in big group discussions or debates and therefore were likely to benefit less in such speaking practice. This could also be the reason for the low percentage in the students' choice in "Question and answer between the teacher and students one by one", and such tasks are also likely to be more teacher-centred.

Only 1.62% of the subjects ranked "Video-based role-plays or voiceovers" as their favourite speaking activity. Since it is a video context-based activity, it requires the students' immediate responses to the ongoing event showing on the screen (e.g. the imitation of "Roman Holiday" video clip activity mentioned previously). Therefore, it can be a great challenge for the students to complete such tasks, for it requires their comprehensive knowledge, overall language ability and various managerial skills. Unless conducted in ICT-based language learning environments, like EAVSC in CALL environment, such activities could not be carried out in traditional classrooms taught according to traditional teaching methodologies.

The management of the course and interactive activities should be based on the employment of ICT facilities. The digital learning system language lab used in this case allows for not only the interaction among students, but also between the teacher and students. These interactions greatly increased students' interests in the target language, and the high efficiency of the

students' interactive performance as well. Meanwhile, by connecting every student in the classroom, the teacher actually built up a communication platform in the ICT-based language lab, which opened an easy communication channel for students so as to keep such class in a nearly authentic language speaking environment. The result is clearly proven from Table 4 that students were in favour of the use of CALL environment, acknowledging its important role in increasing their language production.

Table 4: Effectiveness of the ICT-based language lab in increasing students' language production

Question: Do you think this digital learning system language lab is helpful in increasing your language production?			
Results Items	Jan. 2009 (%)	Jun. 2009 (%)	Total (%)
Very helpful.	23.73	40.62	32.52
Helpful.	40.68	40.63	40.65
Reasonably helpful.	30.51	17.19	23.58
Not so helpful.	5.08	1.56	3.25

Changes in the Teacher's Roles and Students' Roles

Changes in the teaching model will surely bring about changes in the teacher's roles and students' roles. In an EAVSC, the teacher was no longer the leader in class, but a guide and facilitator in students' performance during the whole learning process. Therefore, the teacher's role tended to be multi-dimensional: the designer and organiser of the activities, the coordinator, the resource of cultural knowledge and the assessor of the effectiveness of learning and teaching (Lu et al 2008).

Table 5: Students' understanding of teacher responsibilities in the EAVSC

Question: What do you think about a teacher's job in an EAVSC? (Multi-answers)			
Results Items	Jan. 2009	Jun. 2009	Total
Teach language knowledge and educate students.	13.56	18.75	16.26
Provide students with more cultural information but less language knowledge.	33.90	51.56	43.09
Focus more on organising various speaking activities rather than lecturing.	33.90	29.69	31.71
Focus more on developing the students' communicative language ability.	72.88	67.19	69.92

As shown in Table 5, the figure for the teachers' primary task of imparting knowledge to the students and educating them is only 16%. This indicates that in an ICT-based language lab, the teacher should not only act as the knowledge provider, for the new teaching philosophy and an ICT-driven curriculum demand new roles of the teacher.

Around 30% of the students reckoned that one of the teacher's main responsibilities was to organise interactive activities among students. The reason was that in a foreign language learning community, what students needed most were authentic or nearly authentic speaking environment and sufficient opportunities for communication. Egbert et al. (1999, pp.1-13) have discussed eight conditions for creating optimal language learning environments, opportunities for interaction and negotiation of meaning, interaction with authentic audiences in the target language, students' involvement in authentic tasks, exposure to and encouragement to produce varied and creative language, feedback, meta-cognitive guidance, and an ideal anxiety or stress level.

In the meantime, more than 40% of the students held that apart from organising in-class activities, another important job for the teacher was to introduce topic-related background information and cultural knowledge. The concept of a "student-centred" classroom does not mean that students take full responsibilities of the class. The teacher should make well arrangements, organise whole class activities, and guide the students in most learning procedures. Apart from language skills, Hughes (2005, p.8) reported that:

> *a large number of other things also need to be adjusted for successful communication, such as culture, social interaction, and the politeness norms which exist in the target language.*

As an advanced target language teacher, she/he is also expected to be knowledgeable both in language ability and cultural competence. As an intermediate linkage, the teacher connects the culture of the target language and the learners' mother tongue culture.

Bachman's (1990, p.84) Communicative Language Ability (CLA) framework shows that CLA involves three parts: language competence, strategic competence and a psychological mechanism. In the EAVSC, the primary teaching objective is to enhance students' communicative language ability via the target language. This is also in accordance with nearly 70% students' conceptualisation of the nature of this course and the teachers' contribution to achieve the common goal.

On the other side, in such an EAVSC, students were no longer passive information receivers, but active participants in negotiating with the teacher for background information and in communicating with peers. Therefore, the EAVSC was actually an ICT-based English learning environment, in which students can communicate in the target language.

Table 6: Classroom time employed for students' practice

Question: In the EAVSC, how much time do you think has been spent on your oral practice?			
Results Items	Jan. 2009 (%)	Jun. 2009 (%)	Total (%)
More than 75%.	22.03	23.44	22.76
Between 50% and 75%.	59.32	48.44	53.66
Between 25 and 50%.	15.25	26.56	21.14
Less than 25%.	3.39	1.56	2.44

As shown in Table 6, more than 75% of the subjects acknowledged that more than half of the classroom time was spent on their practice in listening and speaking skills, which means that it was students who took up most of the classroom time. In other words, students were adequately involved in the in-class interactive activities. In addition, without the teacher's interference in the conversations, the students took on diverse speaking roles that are normally filled by the teacher, such as posing questions or offering clarification (Bailey 2004). Therefore, students had become the leader of the communicative activities. These speaking activities, hence, were not only transactional but interactional as well.

During students' interaction process, the teacher had one important job: to monitor what the students were doing and how well they were doing. The teacher took different measures in different situations, such as participating in those activities so as to know the ongoing situation in that pair or group, or providing necessary help in order to promote the discussion. From this perspective, the teacher was not only the designer and organiser of activities, but also an effective classroom manager and coordinator – to arrange the classroom time appropriately, to organise in-class speaking activities effectively, and to maximise students' involvement in communicating in the target language.

Application of the Textbook

The textbook is an outline for learning, a major source of language input and a bank of resources and ideas (Acklam 1994). Meanwhile, it's a medium for teaching, a bridge between teaching and learning. Therefore, to a large extent, the quality of the textbook determines the results of teaching (Liu & Dai 2003). The textbook used in this class was *Learning English through Culture: Viewing, Listening, Speaking* (Lu & Steele 2006), which was written with the philosophy of increasing the learners' cultural input and raising their awareness of cultural differences, providing opportunities for students to practice listening and speaking skills by designing a broad range of speaking activities, and promoting learners' autonomous learning ability. In class, the book assisted the teacher as a major source of cultural and linguistic input. The videos from the attached CD-ROM and the pictures in the book not only helped to avoid boring one-way instruction, but also to stimulate the students' interests in the cultural knowledge and background information. The other major role of the textbook was to help the teacher to design various speaking activities for students in their communicative work. After class, learners can do man-machine based interaction exercises both in listening and speaking activities provided by the CD-ROM of the textbook.

The questionnaire data showed that this textbook had greatly fostered the application and development of the interactive teaching model, which as a result, ensured the effect of learning and teaching. As shown in Table 7, nearly 98.37% of the students were satisfied with the textbook and the CD-ROM, especially with its rich and cultural knowledge and unique cross-cultural perception. As shown in Table 8, more than 95% of the students admitted that the textbook was helpful in improving their listening and speaking competence.

Table 7: Opinions on the textbook and CD-ROM

Question: Are you satisfied with the contents of the textbook and the interactive functions of the CD-ROM?			
Results Items	Jan. 2009 (%)	Jun. 2009 (%)	Total (%)
Very satisfied.	13.56	39.06	26.83
Satisfied.	59.32	50.00	54.47
Reasonably satisfied.	25.42	9.38	17.07
Just so-so.	1.69	1.56	1.63
Not so satisfied.	0.00	0.00	0.00

Table 8: Effectiveness of the textbook

Question: Do you think the textbook (*Learning English through Culture: Viewing, Listening, Speaking*) is helpful in improving your listening and speaking competence?			
Results Items	Jan. 2009 (%)	Jun. 2009 (%)	Total (%)
Very helpful.	8.47	14.06	11.38
Helpful.	21.12	50.00	39.02
Reasonably helpful.	55.93	34.38	44.72
Not so helpful.	3.39	1.56	2.44
Not helpful at all.	5.08	0.00	2.44

Effectiveness of the Teaching Model

Two methods were employed to assess the effectiveness of this teaching model in the class. One was to analyse the subjects' test scores; the other was to get students' feedback.

A Comparison of the Two Sets of Test Scores

Table 9: Descriptive statistics of the two tests

	Pre-test	Posttest	N
Mean	61.685	82.087	
Standard Deviation	9.816	4.502	129
Variance	96.360	20.270	

As shown in Table 9, the mean of the posttest was higher than that of the pretest, while the standard deviation and the variance were lower than those of the pretest. Upon paired-sample *t* test (See Table 10), it was found that the significance (2-tailed) of the difference was .000, which showed that after a semester's training, the subjects' oral English proficiency had been greatly improved.

Table 10: *Paired-sample t test of the two test scores*

	Paired Differences					*t*	df	Sig. (2-tailed)
	Mean	Sd.	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pretest-Posttest	20.402	9.432	.837	18.745	22.058	24.377	128	.000

Feedback from the Questionnaire

This improvement was also acknowledged in subjects' feedback from the questionnaire. The majority of the subjects were satisfied with the class. As shown in Table 11, nearly 80% of the students showed that they were quite satisfied with the EAVSC. As for the effects of the training in the class, 98.37% of the subjects admitted that this class was helpful in improving their listening and speaking skills (See Table 12). More than 97% of the subjects acknowledged that the communicative activities and oral presentations designed by the teacher were helpful in enhancing their listening and speaking competence (See Table 13).

Table 11: *Students' feedback on the* EAVSC

Question: Are you satisfied with the EAVSC?			
Results Items	Jan. 2009 (%)	Jun. 2009 (%)	Total (%)
Very satisfied.	30.51	48.44	39.84
Satisfied.	55.93	42.19	48.78
Reasonably satisfied.	10.17	9.37	9.76
Just so-so.	1.69	0.00	0.81
Not so satisfied.	1.69	0.00	0.81

Table 12: *Effectiveness of the* EAVSC

Question: Do you think the training in the EAVSC was helpful in improving your listening and speaking competence?

Results Options	Jan. 2009 (%)	Jun. 2009 (%)	Total (%)
Very helpful.	8.47	25.00	17.07
Helpful.	45.76	42.19	43.90
Reasonably helpful.	42.37	32.81	37.40
Not so helpful.	3.39	0.00	1.63

Table 13: *Effectiveness of the communicative activities*

Question: Do you think doing communicative activities and oral presentations are helpful in improving your listening and speaking competence?

Results Items	Jan. 2009 (%)	Jun. 2009 (%)	Total (%)
Very helpful.	16.95	21.88	19.51
Helpful.	54.24	53.12	53.66
Reasonably helpful.	23.73	25.00	24.39
Not so helpful.	5.08	0.00	2.44

In the students' progress, practice played an important role, but the teacher's help was also an indispensable factor. 95.12% of the students declared that the teacher was helpful in their learning process (See Table 14).

Table 14: *Effectiveness of the teacher's help*

Question: Do you think that the teacher is helpful in improving your speaking ability?

Results Items	Jan. 2009 (%)	Jun 2007 (%)	Total (%)
Very helpful.	16.95	20.31	18.70
Helpful.	45.76	62.50	54.47
Reasonably helpful.	28.81	15.63	21.95
Not so helpful.	8.47	1.56	4.88

CONCLUSIONS

The objectives of the EAVSC are to develop students' competence in understanding all kinds of language input in real-life communicative situations (such as movies, conversations, news and so forth) and to improve their spoken language ability, so as to enhance their practical skills and communicative language ability. The study leads to several conclusions as follows:

The role of ICT facility: The ICT tool adopted in the course – the WE-LL6000 system in CALL environments, supported the whole teaching process and the conduction of the two tests. It functioned as an intermediate medium between the teacher and the students, and made the interaction between every member in the classroom smooth and flexible. Moreover, it helped collect students' recorded data both for analysis in this study and for use in later research.

The teaching methodology: Students' illocutionary competence and sociolinguistic competence can only be acquired through interacting in real language communicative situations. Therefore, the class should contain various opportunities for students to communicate in the target language. In addition, the designing and execution of the speaking activities both in teaching process and the two tests adhere to the principle of being authentic or nearly authentic, an important principle of Bachman's CLA theory.

Changes in the roles of the teacher and students: In an ICT-based teaching model, the teacher's role tends to be multi-dimensional. The teacher should not only create a nearly authentic environment and organise a range of interactive activities for students to communicate in the target language, but also enrich the students' "knowledge of the world" (Bachman 1990), and promote their pragmatic competence by raising their awareness of cultural differences. The students, on the other side, are no longer passive information receivers, but active participants in authentic or nearly authentic communicative situations.

Application of the textbook: It's a major factor in creating situations. Therefore, the course design should also contain a textbook appropriate for students at different language proficiency levels, with various speaking activities, and a pool of cultural knowledge.

Feedback on the EAVSC from students: From those positive statistical values of the students' feedback on the EAVSC, we can see that this teaching model achieves both feasibility and effectiveness in creating opportunities for students' to speak in the target language, in improving their listening and speaking abilities and in enhancing their communicative language abilities. This teaching model proves to be successful in the EAVSC in CALL environments at the authors' university.

To sum up, this teaching model counts not only a good exploration of teaching speaking in the specific context at the authors' university, but also serves as a good reference for English teachers in China as well as for researchers and scholars whose teaching background are similar to that of the authors'. Despite its positive contributions, the study also has the following limitations:

Testing content: Only in-class performance was evaluated, a follow-up survey should be conducted to assess students' oral performance after class.

Factors not taken into account: Some aspects were not covered in the study, such as, learners' individual characteristics - their learning styles and motivations, learning strategies, and their psychological factors. Therefore, the authors suggested conducting further studies from the above perspectives.

Results and findings: The subjects were all from the first author's EAVSC at the same university. Therefore, the results only represent a specific teaching and learning context in

question: a course carried out in an EAVSC in CALL environments, taught by Bachman' s CLA theory and the textbook is mainly written by the first author. Further generalisations to a larger sample or to other teaching and learning situations are encouraged to be conducted in the future.

ENDNOTES

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[2] CET is the abbreviated form of "College English Test". The national College English Test Band Four (CET-4) in China aims to evaluate non-English majors' comprehensive language proficiency. Apart from CET-4, there is also CET-6, which is widely used to evaluate above-average students' language proficiency. More than half of the students in this study, except for the Japanese majors, had passed CET-6 before taking the course. SET is the abbreviated form of "Spoken English Test", which is a portion of CET.

REFERENCES

Acklam, R. 1994, "The role of the coursebook", *Practical English Teaching*, vol. 15, no. 3, pp. 12-14.

Bachman, L.F. 1990, *Fundamental Considerations in Language Testing*, Oxford University Press, Oxford.

Bailey, K.M. 2004, "Speaking", In D. Nunan, (ed.), *Practical English Language Teaching*, Higher Education Press, Beijing.

Brent, G.W. 1995, "Metaphors for instruction: Why we talk about learning environments", Educational Technology. vol. 35, no.5, pp. 25-30.

Canale, M. & Swine, M. (1980). Theoretical bases of communicative approaches to second language teaching and testing. Applied Linguistics, vol. 1, no.1, pp.1-47.

Chris, D. 1995, "The evolution of constructivist learning environments: Immersion in distributed virtual worlds", Educational Technology. vol. 35, no.5, pp.46-52

Department of Higher Education 2007, *College English Curriculum Requirements*, Foreign Language Teaching and Research Press, Beijing.

Egbert, J., Chao, C. & Hanson-Smith, E. 1999, "Computer-enhanced language learning environments: An overview", In J. Egbert & E. Hanson-Smith, (eds.), CALL environments: Research, practice, and critical issues. Alexandria, VA: TESOL, pp. 1-13.

Hughes, R. 2005, *Teaching and Researching Speaking*, Beijing, Foreign Language Teaching and Research Press.

Liu, Runqing & Dai, Manchun 2003, *Current situation in Chinese college English teaching reforms and research on further developing strategies*, Foreign Language Teaching and Research Press, Beijing.

Lu, Zhihong, Huang, Xiaohui & Sun, Juan 2008, "The teacher's roles in a student-centred audio-video speaking class", *International Journal of Pedagogies and Learning*, vol. 4, no. 4, pp. 78-95.

Lu, Zhihong, Li Ping & Du Peifeng 2009, "Interactive patterns in an EAVSC in CALL environments", *International Journal of Pedagogies and Learning*, vol.5, no. 2, pp. 49-65.

Lu, Zhihong & Ma, Yanying 2005, "From teacher-centred teaching to student-centred teaching – The development of English teaching over 20 years", *A Review of Collected Works on Academic Evolution and Innovation of BUPT*, pp. 467-480, Beijing University of Posts and Telecommunications Press, Beijing.

Lu, Zhihong & Steele, L. 2006. *Learning English through Culture: Viewing, Listening, Speaking,* Foreign Language Teaching and Research Press, Beijing.

Nunan, D. 1988, *The Learner-Centred Curriculum*, Cambridge University Press, Cambridge.

Nunan, D. 2004a, "Methodology", In D. Nunan, *Practical English Language Teaching*, Higher Education Press, Beijing.

Nunan, D. 2004b, *Practical English Language Teaching*, Higher Education Press, Beijing.

Zhao Kunlun (ed.) 2007, "The application of student-centred interactive teaching in English video, listening & speaking class", Computer-assisted Foreign Language Education, vol. 114, no.2, pp. 54-58.

Appendix 1

Questionnaire (adapted from Lu, Huang & Sun 2008)
This questionnaire is designed for a general survey on the teaching and learning effects of a student-centred teaching model in an English audio-video speaking class (EAVSC) in computer-assisted language learning (CALL) environments and the using of the textbook   *Learning English Through Culture: Viewing, Listening, Speaking*. Please complete the questionnaire below. Your answers are of great value in improving our teaching and research. We would greatly appreciate your cooperation.

Personal Information:
School: Major:
Gender: A. Female   B. Male
   1. As far as you are concerned, which of the following language skills is the most important and practical one?
      A. Listening and speaking.   B. Reading.
      C. Translating.   D. Writing.
   2. Which of the following language skills is your weakest one?
      A. Listening and speaking.   B. Reading.
      C. Translating.   D. Writing
   3. Apart from learning English in classrooms, your average time for previewing or reviewing the textbook – *Learning English Through Culture: Viewing, Listening, Speaking* is around _____.
      A. 3 hours.   B. 2 hours.
      C. 1 hour.   D. Almost none, relying on class time only
   4. Do you think the textbook (*Learning English through Culture: Viewing, Listening, Speaking*) is helpful in improving your listening and speaking competence?
      A. Very helpful.   B. Helpful.
      C. Reasonably helpful.   D. Not so helpful.
      E. No help at all.
   5. Are you satisfied with the contents of the textbook and the interactive functions of the CD-ROM?
      A. Very satisfied.   B. Satisfied.
      C. Reasonably satisfied.   D. Just so-so.
      E. Not so satisfied.
   6. What is your overall view of other audio-video speaking textbooks and courseware you have used?
      A. Very satisfied.   B. Satisfied.
      C. Reasonably satisfied.   D. Just so-so.
      E. Not so satisfied.
   7. In your opinion, the textbook used in this class is_____ .
      A. easy   B. average
      C. slightly difficult   D. difficult
      E. very difficult
   8. In each unit of the textbook, which section is the one you spend most of your time on after class?
      A. Three videos in the Watching part.
      B. Short passages in the Listening part.
      C. Speaking activities in the Speaking part.
      D. Time for Fun.
   9. In each unit of the textbook, which section(s) do you have more interests in? (Multi-answers)
      A. Three videos in the Watching part.
      B. Short passages in the Listening part.

C. Speaking activities in the Speaking part.

D. Time for Fun.

10. Which sections do you think are more helpful in your English acquisition? (Multi-answers)

A. Three videos in the Watching part.

B. Short passages in the Listening part.

C. Speaking activities in the Speaking part.

D. Time for Fun.

11. Compared with other textbooks of the same kind, what features does *Learning English Through Culture: Viewing, Listening, Speaking* have? (Multi-answers)

A. It's more practical and operational.

B. It possesses rich cultural and language knowledge, and unique cultural perception.

C. It has authentic language and close-to- life contents.

D. It has no distinctive features.

12. Do you think the training in the EAVSC was helpful in improving your listening and speaking competence?

A. Very helpful.   B. Helpful.

C. Reasonably helpful.   D. Not so helpful.

13. If D or E is chosen in Question 12, what might be the reasons?

A. I'm not familiar with the equipment and the software, which causes a lot of inconvenience.

B. There is no face-to-face communication, which hinders my expression of ideas.

C. It's inconvenient for the teacher to join students' activities, which prevents the teacher from giving proper instruction.

D. Activity partners are changed too often.

14. Do you think that the teacher is helpful in improving your speaking ability?

A. Very helpful.   B. Helpful.

C. Reasonably helpful.   D. Not so helpful.

15. If D or E is chosen in Question 14, what might be the reasons? (Multi-answers)

A. The teacher has rich cultural and background knowledge.

B. The teacher is good at classroom organization.

C. The teacher speaks English very well.

D. The teacher is good at making full use of the textbook.

16. In your opinion, what might be the ideal way of conducting the EAVSC?

A. The classroom time should be split 50-to-50 for the teacher's instruction and introduction and for students' practice.

B. The classroom time should be spent as little as possible on the teacher's instruction and introduction, to give as many opportunities as possible for students to practice.

C. It would be better for the teacher to spend little time on instruction, and to spend more time in organizing speaking activities among students.

D. Whether the teacher should spend more time or less time on instruction should depend on the content of each lesson. Ways of conducting the class could vary from lesson to lesson.

17. What do you think about a teacher's job in an EAVSC? (Multi-answers)?

A. Teach language knowledge and educate students.

B. Provide students with more cultural information but less language knowledge.

C. Focus more on organizing various speaking activities rather than lecturing.

D. Focus more on developing the students' communicative language ability.

18. In order to improve your listening and speaking abilities, is it important for the teacher to urge you to preview and review the lessons?

A. Very important.   B. Important.

C. Reasonably important   D. Not so important.

19. Do you like the teacher's involvement in your speaking activities?

A. I like it very much.   B. I like it.

C. It's acceptable.   D. I'm not very fond of it.

E. I don't like it.

20. If A or B is chosen in Question 18, what might be the reasons? (Multi-answers)
    A. The teacher could correct my pronunciation.
    B. The teacher could point out my language errors promptly.
    C. The teacher could provide new information at any time.
    D. The teacher could urge me to communicate in English.
21. In the EAVSC, how much time do you think has been spent on your oral practice?
    A. More than 75%.   B. Between 50% and 75%.
    C. Between 25% and 50%.   D. Less than 25%.
22. In your opinion, what are the ideal and most effective speaking activities in an EAVSC?
    A. Pair-work dialogues and small group discussions (3-5 persons).
    B. Big group discussion or debate (above five persons).
    C. Question and answer between the teacher and the students one by one.
    D. Video-based role-play or voiceover.
23. Do the activities organised by the teacher agree with your favourite ones?
    A. Always.   B. Often.
    C. Sometimes.   D. Seldom.
    E. Never.
24. What's your attitude towards the speaking activities?
    A. Each time, I am well prepared for it.
    B. Most of the time, I will prepare for it.
    C. Sometimes, I will prepare for it.
    D. I never prepare for it.
25. Do you think doing communicative activities and oral presentations are helpful in improving your listening and speaking competence?
    A. Very helpful.   B. Helpful.
    C. Reasonably helpful.   D. Not so helpful.
26. Do you agree on having one or two students doing oral presentations for each class?
    A. Strongly agree.   B. Agree.
    C. Neither agree nor disagree.   D. Disagree.
27. Do you think this digital learning system language lab is helpful in increasing your language production?
    A. Very helpful.   B. Helpful.
    C. Reasonably helpful.   D. Not so helpful.
28. In group discussion or pair-work dialogue, I prefer_____.
    A. to talk with fixed partners
    B. to do speaking activities with different people
    C. a mixture of the above two
29. In group discussions, which of the following is more effective in developing students' communicative ability?
    A. Discuss the topics one by one without role-assuming.
    B. Each selects one topic to organise the discussion.
    C. The above two produces similar effects.
30. In group discussions, the teaching strategies (e.g. small group discussion – regrouping and discussing – re-organizing and re-discussing) that the teacher utilised is helpful in improving your listening and speaking abilities?
    A. Very helpful.   B. Helpful.
    C. Reasonably helpful.   D. Not so helpful.
    E. No help at all.
31. Are you satisfied with the EAVSC?
    A. Very satisfied.   B. Satisfied.
    C. Reasonably satisfied.   D. Just so-so.
    E. Not so satisfied.
32. It would be appreciated if you could give your comments and suggestions on this course.

Appendix 2

Final Test for EAVSC

Part I (30 points) Pair-work:

Work in pairs and make a 5-minute dialogue from the following topics.
1) College life: What have you learned during this semester?
2) Holiday arrangement: Talk about your arrangement for the coming winter vacation.

Part II (50 points) Group discussion:

Work in group of three. Each one chooses any topic that you are interested in from the Speaking Activities of the text book and discuss it with your group members. Bear in mind that each one has only two minutes to chair his/her discussion.
Samples:
1) Do you think one day electronic books will replace printed books? Why or why not
2) Do you believe the saying that "music is a universal language"? Why or why not?
3) What's your favourite outdoor activity? Why do you like it?
……

Part III (20points) Personal statement:

Make a one-minute speech on the topic given below. You will be given 15 seconds for preparation and 45 seconds for presentation.

Describe a person who has influenced you in an important way. Explain why this person has had an effect on your life. Include details and examples in your explanation.