

How to Promote the Efficiency of Teacher-Student Interaction by E-Learning for English Teaching

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HOW TO PROMOTE THE EFFICIENCY OF TEACHER-STUDENT
INTERACTION BY E-LEARNING FOR ENGLISH TEACHING IN CHINA

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Abstract

This paper focuses on Chinese-English language education. Like other subjects, Chinese-English educators and learners are quite used to the traditional teacher-student interaction delivery system, by means of lectures, which is called the “stuffing” method. Many Chinese-English educators, and a large number of students complain that, while it is the traditional basis for the English teaching, it is boring and inefficient. With the assistance of computer-based e-learning techniques, the teacher-student interaction can function more efficiently than ever. This paper calls attention to the fact that there are many obstacles that hinder the promotion of teacher-student interaction efficiency in Chinese-English education. One major problem is that the Chinese government and the Ministry of Education have to provide more indispensable resources and equipment to less developed areas, and to high schools and colleges. The Chinese-English educational system has to train English educators to master the application of computer creatively, and at the same time, let English educators become the guides that facilitate students to master the computer based skills. This is essential because the educator plays the leading role in student-computer, student-teacher, and teacher-computer interaction so that this learning process may be combined and function together more effectively in English teaching.

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CHAPTER 1

INTRODUCTION

In China, many people have been studying English for over 50 years. According to the teaching experience from abroad, though the focus of ESL class has shifted from teachers to students, in most places in China teachers are still the center of English classroom learning. A change in focus for the student is emphasized in the literature in which teacher-student interaction is a part of Collaborative Learning (CL) which focuses on the mutual interaction between teachers and students. The primary proposition of CL advocates that, with the intensified and effective teacher-student interaction, the interests of students can stimulate activities so that the concentration of students can be promoted ,and, as a result, teachers can be much more confident and involved, and classroom teaching and learning can be more effective.

The traditional teaching methods cannot meet the need for modernized Chinese college education, especially college English teaching. From the media and website, the electronic techniques make education much fun and easier, and make it available for anybody to receive an English learning experience at any time and any place. E-learning is an important recent development and it is based on the modernized electronic techniques. With the help or assistance of E-learning, could the efficiency of teacher-student interaction for English teaching be promoted? How does

E-learning affect the interaction between teachers and students, and is the approach more efficient?

Statement of the Problem

The problem, addressed as a question, is as follows: How to promote the efficiency of the teacher-student interaction by E-learning for English teaching?

Delimitations of the Research

The research will be conducted in and through the Karrmann Library at the University of Wisconsin-Platteville, over eighty-eight (88) day period. Primary searches will be conducted via the Internet through EBSCO with the Academic Search Elite and the Wilson Index as the primary sources. Key search terms include “peer review”, and “writing skills.”

Method

A brief review of literature on the studies of E-learning and teacher-student interaction will be conducted. The findings will be summarized and recommendations made.

Definition of Terms

Collaborative learning: is an umbrella term for a variety of approaches in education

that involve joint intellectual efforts by students or students and teachers. Collaborative learning refers to methodologies and environments in which learners engage in a common task in which each individual depends on and is accountable to each other. Groups of students work together in searching for understanding, meaning or solutions, or in creating an artifact of their learning such as a product. The approach is closely related to cooperative learning. Collaborative learning activities can include collaborative writing, group projects, and other activities.

http://en.wikipedia.org/wiki/Collaborative_learning

E-learning: Electronic learning (or **e-Learning** or **eLearning**) is a type of Technology supported education/learning (TSL) where the medium of instruction is computer technology. In some instances, no in-person interaction takes place. *E-learning* is used interchangeably in a wide variety of contexts. In companies, it refers to the strategies that use the company network to deliver training courses to employees. In the USA, it is defined as a planned teaching/learning experience that uses a wide spectrum of technologies, mainly the Internet, or computer-based, to reach learners. Lately, in most Universities, learning is used to define a specific mode to attend a course or program of study where the students rarely, if ever, attend face-to-face for on-campus access to educational facilities because they study online.

<http://en.wikipedia.org/wiki/E-Learning>

ESL: is the abbreviation of English as a second language

Literature Review

Teacher-Student Interaction

At present, in order to make effective learning for students, many educators and experts devote much more time to develop further studies on Collaborative Learning. As the part of CL, the teacher-student interaction is the traditional way of teaching which has been used worldwide, even before the existence of Collaborative Learning. According to “*Using Online Icebreakers to Promote Student-Teacher Interaction*”, the interaction between teachers and students is defined like this: It is the reciprocal dialogue and influence between the learner and the instructor.

Laurillard (1997) claims that teacher-student interaction is a key component in academic learning. In her book “*Conversational Framework*,” she mentions the phrase “interactive activities”, which contributes a lot to the teaching. It refers to a cycle called “task/action/feedback” which “students experience in their own world as they operate on ideas presented by the instructors.” Like Laurillard’s idea, Bostock, Hulme, and Davys (2006) have a similar idea “Teacher-student interactions in real time with a face-to-face group gives the teacher immediate feedback on student performance or opinion, and gives students immediate feedback on their own performance.” And Ms Chandrama Acharya (2001) points out: “The student-teacher interaction is often a double-way process. When the teacher helps students to participate more actively in

class, students may be more motivated to learn. When they are more interested in the subject matter, they will require more additional information, be more forthcoming in sharing their own personal experiences in relation to the topic, and will volunteer to take part in activities. Their attentiveness and willingness to learn will in turn motivate the teacher to teach.”

From the article “*Elements in Effective Classroom Instruction from Teaching Observation Checklist*”, it is said that even in a huge class, maybe over 100 students, through calling students by names as early as possible in the semester, and making eye contact one can pull hesitant students more quickly into the learning process. Likewise, seeking student ideas, suggestions, and discussion reminds students that they have a role in their own learning. In addition, it’s also important, when possible, to involve all students in class discussion and activities so that the primary beneficiaries are not just the vocal few. So “creating a solid teacher-student interaction is an important way for faculty to assure effective learning takes place.”

According to the article “*The Effects of Active Participation on Student Learning*” by Pratton and Hales (1986), in the 1960s, many researchers began to concentrate on the specific behaviors of teachers and students, relate teacher-student interactions to student learning, and study teaching in its natural setting. Silvernail 1979. In reporting on Flander's study of teacher-student interactions, it concluded that pupil learning is influenced by the teacher through verbal behavior. Brophy & Evertson (1981) found that successful teachers presented demonstrations, followed immediately by student practice and corrective feedback. Westcott (1978) said that

teacher modeling, combined with prompting, influenced student achievement. Scott (1969) found that effective teachers used longer teaching episodes, had goals that were clearly understood, and used a more positive feeling tone with students. McDonald (1976) found a positive relation between the amount of direct instruction and pupil performance, and that a lack of careful monitoring of student performance, may result in a large number of uncorrected errors. Evertson (1978) found that successful teachers emphasized class discussion, lectures, and drills, and that they dominated patterns of interaction.

Now recent reviews also stress that the teacher-student interaction is one of the keys in the effective teaching and learning system. Like Waldrup and Fisher(2002) mentioned in "*Student-Teacher Interactions and Better Science Teachers*", The classroom teaching and learning system plays a very important part in science education worldwide. How to make classroom teaching and learning more effective is the aim. One particular development in classroom environment research occurred in the Netherlands where the focus was on the interactions that occurred between teachers and students. Wubbels, Creton and Holvast (1988) investigated teacher behavior in classrooms from a systems perspective, adapting a theory on communication processes developed by Watzlawick, Beavin and Jackson (1967). Within the systems perspective on communication, it is assumed that the behavior of participants influence each other mutually. The behavior of the teacher is influenced by the behavior of the students and in turn influences student behavior. Circular communication processes develop, which not only consist of behavior, but determine

behavior as well.

Like other subjects, learning English is the same. Well-structured teacher-student interaction in class makes the English learning more effective. According to Jonathan Snell's report-"*Improving Teacher-Student Interaction in the EFL Classroom*", we take Japan for instance. In Japan, teachers, especially native English speaking ones, often become frustrated with a lack of initial success in obtaining an interactive dialogue with the class. This often leads them to mistake a lack of familiarity with a lack of interest, and to teach within the students' culturally conditioned classroom expectations, instead of introducing the expectations commonly found in classrooms in English speaking countries. While intending to be more accommodating to students, they are failing to give students a useful sociolinguistic skill, which students would likely want and derive benefit. Some may think that encouraging the use of this student-teacher interaction, common in native English speaking countries, is culturally arrogant. But if it is introduced in a sensitive and reasonable manner, it actually contributes to a more fulfilling English class. After all, most students don't study English just for linguistic competence. They will also want to develop sociolinguistic competence for communicating in different situations in English speaking countries, and this includes the classroom.

No matter what kind of CL teaching and learning is, the teacher-student interaction plays a very important part. How to make it work much more effectively is the point which needs to be solved.

E—Learning

According to some Chinese English Linguistics, e-learning involves defined audio, video, text, and multimedia to facilitate efficient interactive teaching (Liang, 2001). Students benefit most from e-learning when they consume course materials at their personal best learning pace and have the opportunity to revisit course materials, such as presentations, more than one time. E-learning is a form of teaching activity that can serve the learner at any time in any place (Zou, 2003). Interactive teaching is the basis for individual learning and individual learning is the goal of interactive teaching (Shen, 2003). E-learning has both an instructor viewpoint and a student viewpoint to be more specific. E-learning is an activity which integrates web and Internet technology as an organic factor constructing a student-centered explorative learning method (Zhang, 2003). The student viewpoint is the use of web and how Internet technologies to consume course materials at the pace that fits his/her capabilities.

E-learning is used interchangeably in a wide variety of contexts. It is naturally suited to *distance learning* and flexible learning, but can also be used in conjunction with face-to-face teaching in which case the term *Blended learning* is commonly used. E-Learning pioneer Bernard Luskin argues that the "E" must be understood to have broad meaning if e-Learning is to be effective. Luskin says that the "e" should be interpreted to mean exciting, energetic, enthusiastic, emotional, extended, excellent, and educational in addition to "electronic" that is a traditional national interpretation. This broader interpretation allows for 21st century applications and brings learning and media psychology into the equation. In *higher education* especially, the

increasing tendency is to create a *Virtual Learning Environment* (VLE) ,which is sometimes combined with a Management Information System (MIS) to create a *Managed Learning Environment* in which all aspects of a course are handled through a consistent user interface standard throughout the institution. It can also refer to educational web sites such as those offering learning scenarios, worksheets and interactive exercises for children. The term is also used extensively in the business sector where it generally refers to cost-effective online training.

The use of the Internet and the World Wide Web for tertiary education is increasing according to Chin *et al.* (2000). Convenience and flexibility of web-based delivery have attracted many students who are unable to attend traditional classrooms. However, attention needs to be paid to the online processes, which requires successful facilitation (Chin *et al.* 2000).

Here is a growing demand for education institutions to digitize their content and activities. Technology should also be applied for developing class schedules and supporting the teacher. The digital revolution is in progress and teachers will need to be encouraged to make effective use of digital resources (Sherson, 1999).

Jackson (2001) subdivided electronic learning into technology-delivered e-Learning and technology-enhanced e-Learning. Technology-delivered e-Learning is where the learners are never in physical proximity to the instructor and may be delivered via a blend of asynchronous and synchronous technologies. Technology-*Enhanced* e-Learning is where the learner audience has the opportunity to meet face-to-face with the instructor. It is a supplement to traditional on campus learning,

and replaces materials previously delivered to students as “Shrink wrap” courses. Typically, it includes online syllabi, bibliographies (often hyper linked), and faculty backgrounds and instructor-led sessions are live, face-to-face in traditional classrooms. The typical technology-enhanced e-Learning asynchronous technologies are implemented through either a web editor or an asynchronous course management system (Jackson, 2001).

From “Wikipedia”, it mentions that online learning is a part of e-learning. In the USA, it is defined as a planned teaching/learning experience that uses a wide spectrum of technologies, mainly Internet or computer-based, to reach learners at a distance. Lately, in most Universities, e-learning is used to define a specific mode to attend a course or program of study where the students rarely, if ever, attend face-to-face for on-campus access to educational facilities because they study on-line. By 2006, nearly 3.5 million students were participating in on-line learning at institutions of higher education in the United States. Many institutions, now offer on-line classes. By contrast, only about half of private, non-profit schools offer them. The Sloan report, based on a poll of academic leaders, says that students generally appear to be at least as satisfied with their on-line classes as they are with traditional ones. Private Institutions may become more involved with on-line presentations as the cost of instituting such a system decreases. Properly trained staff must also be hired to work with students on-line. These staff members must be able to not only understand the content area, but should also be highly trained in the use of the computer and Internet. Online education is rapidly increasing, and online doctoral programs have

even developed at leading research universities.

Since the e-learning is very popular worldwide. Mr Paulsen (2003), in his work "*E-learning - The State of the Art*", gives us some tips:

- 1) They can conveniently utilize an overwhelming amount of online resources.
- 2) They can facilitate collaborative learning independent of time and space.
- 3) They can provide time to prepare and reflect on comments and contributions.
- 4) They can facilitate on-demand access to learning activities that continue for an extended time period.
- 5) They can provide unique opportunities to utilize discourse transcripts for analytical and reflective assignments.
- 6) They can conveniently utilize computer-aided instruction.
- 7) They can offer multimedia elements in presentations and demonstrations. However for interaction among people, they still primarily rely on written communication with the inherent keyboard limitations.

How to Promote the Efficiency of Teacher-Student Interaction by E-learning for English Teaching

With the demanding need of high education and post graduation, teachers and students are not satisfied with traditional teacher-student teaching way. They want direct and rich-information classroom learning badly. E-learning techniques can offer this kind of teaching.

Serdiukov (2001) suggested a Teacher-Computer-Student model, which contains some components of technology-enhanced e-Learning. The

Teacher-Computer-Student model has some advantages because it allows for Student-Computer, Student-Teacher and Teacher-Computer interaction. Technology qualitatively changes the relationship between people and knowledge according to Eisenstadt (1995).

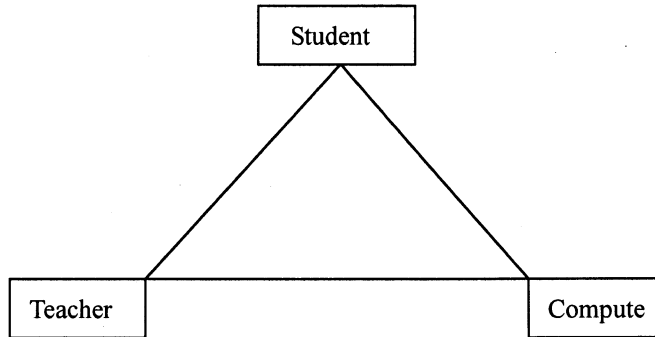


Figure: Teacher-Computer-Student Model of Learning
(Source: Serdiukov, 2001)

Gilmore and Halcomb (2005) argue that, as internet and innovative internet applications are utilized increasingly, “education is an area which is undergoing major restructuring due to increased Internet usage and applications.” Every year, more and more colleges and universities make the project on web-based classes (Ewing-Taylor, 1999). Gilmore and Halcomb also point out that the brand new technology alters the teacher-student interaction. In their work “*Technology in Classroom: Investigating the Effect on the Student-Teacher Interaction*” They continue: “Instruction through computers can give students more control over their learning environments and access to a wider range of materials to use in the learning process; however, for computer-assisted learning to be effective, the instructors need to put careful thought into their lesson plans. The level of student understanding must be taken into

consideration.” "Instructional software makes the human teacher more important, rather than less" (Ransdall, 2002). In order to fully understand how computers contribute to learning, there has to be an investigation into how the use of a computer controls the behavior of both students and teachers (Karasavvidis et. al., 2003).

Like Bostock, Hulme, and Davys (2006) have described “Student/teacher interactivity Teacher-student interactions in real time with a face-to-face group gives the teacher immediate feedback on student performance or opinion, and gives students immediate feedback on their own performance.” Also they claim that “It (student-teacher interaction) requires a mediating technology, generically termed a personal response system (PRS) or ‘keypad’. Without a PRS we must rely on shows of hands and volunteering, but both have limitations, especially for weak students.” Why is it like this? Bostock, Hulme, and Davys (2006) explain like this: the Multimedia Enhance presentations utilize “additional media to bring impact and realism to the information transmission.” So “it might take the form of integrated digital multimedia presentations, but not necessarily, for example, demonstrations, images, sounds, video, and debates between tutors. Students see and hear more realistic or more applied situations, in more memorable forms.”

In addition, take one concrete example—E-mail. As one of the specific techniques stemming from E-learning or web-based techniques, how could it make the teacher-student interaction more effective?

Wilken proves that in *Computer Mediated Interaction in a Distance Education Course*, “Computer mediated communication tools facilitate student and professor

interaction on several levels. I frequently use electronic-mail (e-mail) to interact with individual students and I use list-serves to contact the class. E-mail is routinely used to provide feedback to individual students regarding assignments and answers to specific questions. Each student's final evaluation and grade summary was transmitted electronically to the student. Electronic mail and the threaded message board are particularly useful as ways to exchange information at any time of the day or night. The students and I can send or respond to messages at our convenience."

About the article "*Student/teacher interaction via email: the social context of Internet discourse*", Joel Bloch argues that one important context where L2 students may be able to exploit the advantages of email is in their relationship with their teacher. Students may feel the need to create a social relationship with their teacher, perhaps because they feel it will help their grades or because they want to have a closer relationship for personal reasons. Although Moran and Hawisher (1998) argue that the intimacy of such relationships in the virtual world may in some instances be an illusion, they also find that the illusion itself may give certain students a freedom they do not feel they have in the classroom. Email, like other forms of communication in Cyberspace, can break down the limitations in time and space that exist in traditional classrooms. Hawisher and Moran (1993) argue that by dissolving these boundaries of time and space in a classroom, email can dissolve the traditional barriers between teachers and students.

With all the above, the E-learning techniques are combined with teaching and learning tightly, even the English teaching is like this. But how can we promote the

efficiency of teacher-student interaction for English teaching by e-learning in China?

No matter what kind of majors and teaching methods, appropriate equipment is indispensable. Unfortunately, e-learning in China develops not that fast, because of the inactivity of the Ministry of Education. Schell, He, Ling, and Zhang (2007) state the following: Three problems exist. One is the lack of design of collaborative learning mechanism, because most designers can not fully understand the mutual function in e-learning. The second one is that in some less-developed areas, low penetration of PCs and slow networking speeds can barely meet the need of people's e-learning experience. Third, is the shortage of e-learning courseware, which is expensive. Most presentations and lectures are text reading, not directly from e-learning resources. Like this, e-learning is just like a useless vase for English teaching, both teachers and students can't be aware of the full potential of E-learning. The necessary latest e-learning equipment could give a brand new digitized basis to the interaction between English teachers and students. The Chinese government and the Ministry of Education have to invest in necessary pieces of equipment for English education.

In China, only solving the equipment problem, is that enough? Absolutely not! Problems do exist within the interaction between teachers and students. The traditional teaching method for Chinese education is the "Stuffing". Most teachers and students, no matter in senior high or college, are quite used to it and comfortable with it. At present, huge numbers of teachers and students are complain that the interaction in class is so boring and tedious. Unfortunately, English teaching is no exception!

Now here with the e-learning based technology, how could it be changed?

For teachers, Barker (2002) requires three points under the e-learning environment. First, it is the ability to create teaching and learning materials for e-learning use, thus requiring pedagogical skills. Just like the conventional before-class preparation, English teachers need to use e-learning skills to make or create teaching materials via all kinds of computer-based resources, such as CDs, DVDs, online libraries, movies, songs, etc. Second is the ability to use diverse software tools to conduct tutoring tasks of effectively, and this requires technical skills, such as the skills to communicate by emails, preparing notes with a word processor, and initiating and mediating asynchronous course forums. With this, an English teacher can communicate with students on their questions and problems all the time smoothly. Third, teachers ought to develop the ability to organize their own activities as well as those of the students who are following the particular courses. For example, English teachers can establish web-disks to maintain collected modal compositions for students, or to inform students of the activities through planned schedules.

Teachers have to devote great efforts to e-learning based interaction; the same is true for students, “they also have to make a huge devotion to the interaction, of course sometimes with the help of teachers. Under the e-learning based environment, Jones *et al.* (2000) suggested that proficiency in computer-based multimedia is an important skill for students who use the Internet on a fairly regular basis. Rossiter (1999) agreed with this and also argued that technological literacy is being added to the list of

generic capabilities, as an attribute needed by all students who effectively want to participate in further studies. Technology literacy is one of the foundation blocks of technology-enhanced e-Learning. When students have inadequate technology skills, the educator has to either refer students to generic skills courses or attempt to teach the required technology skills themselves. The lack of technological skills among students' hampers the learning opportunities offered by teachers and acts as a barrier to effective learning for students.

Like this, both teacher and students must somehow master some computer techniques. Nasseh makes further clarification: "The technological skills for utilization and operation of computer applications and tools are very essential for teachers and students who participate in computer-based distance education."

Besides, Laurillard (1993) argues that interaction between teacher and learner and feedback from the teacher is a core element of learning, which suggests that successful communication is interactive, adaptive and reflective. Boser *et al.* (1998) pointed out that technology education must prepare students to understand, control and use technology. The challenge for educators is that students who enter tertiary education institutions have huge technology skills and knowledge. Accessibility to technology can promote the effectiveness of the web-based delivery in tertiary education (Boser *et al.*, 1998). Students tend to focus on the web-based delivery as an aid to collect information rather than using the system in a more interactive way. However, although students appear to be demanding more technology in tertiary education, they are not demanding technology as a substitute for face-to-face teaching.

Students still require lots support from their lecturers (O'Keefe & McGrath, 2000).

According to the teacher-computer-student model suggested by Serdiukov, the computer-based technologies are key linkage to make the new model of interaction effective; and the teacher is the leading role to make Student-Computer, Student-Teacher and Teacher-Computer interaction combine and function together.

English teaching is very different, which pays more attention to communication than other subjects. For Chinese English teaching, interaction between teachers and students is still the key element. With e-learning based technology, the interaction functions much more efficiently. The way is very clear: just like other subjects, necessary pieces of equipment are especially needed, such as computers, networks, softwares invented just for English teaching, etc, no matter in senior high or colleges. Compared to foreign learners, Chinese English learners are quite used to the passive type as Chinese English educators, we have to be much more active than ever before. Because current English teachers not only have to teacher English, but have to master e-learning based teaching skills and teach the students how to use computers, networks, and websites and so on to study English effectively. And Chinese-English learners ought to change themselves into a self-directing learning style, and to take initiatives to learn useful e-learning skills to study English much more actively.

Conclusion

The study discovers that, even with the development of E-learning techniques, an effective way for Chinese English learning is the teacher-student interaction. In order to make the interaction function more efficiently under the environment of e-learning,

Chinese-English education has to solve problems like the shortage of necessary English teaching equipment in less developed areas, education for English teachers on e-learning skills, and help to change Chinese-English learners into self-directing learning and to learn skills on computer based learning. Among the three problems, the English teacher is the key to make student-computer, student-teacher and teacher-computer interaction combine and function together more effectively in English teaching.

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