Technology and Language Education in China: 
An Intercultural Dialogue

Jo Anne Kleifgen  
Department of International 
and Transcultural Studies 
Teachers College, Columbia University 

Wang Haixiao  
Department of Applied 
Foreign Language Studies 
Nanjing University 

Our summer teaching at an intensive institute for College English teachers in Changchun, Jilin brought to the fore some important challenges facing College English teaching as we approach the Third Millennium. Political and technological changes have led to increased contact with people and ideas from cultures other than our own. As migrating groups begin new lives in other nations, fresh and more complex expressions of cultural identity (Bhachu, 1985; Bauman, 1996) are being formed along with attendant new communicative practices (Carbaugh, 1990; Garcia & Othequy, 1989; Scollon & Wong-Scollon, 1995).

We asked ourselves how language educators in China should respond to these demographic and technological changes. Certainly, these students have to be prepared to interact in a more diverse world, so what aspects of English should they learn? What teaching approaches are appropriate, assuming that these, too, are reflective of the culture

---

1This is a revised version of a paper presented at the Fourth Symposium on College English, Fudan University, November, 1995.

2College English is a compulsory course for all students enrolled in colleges and universities in China. According to the national College English Syllabus published in 1985, students are expected to gain strong competence in reading, fair competence in listening and some basic competence in writing and speaking. Students should have entry-level command of at least 1600 English words and a fairly good knowledge of grammar. They enroll in the course for four semesters, each offering 72 hours of class work, and by the end of the course, students are expected to have a command of 4000 words and to pass a national test.
they originate from? And finally, what is the place of new technologies for language teaching? That is, how can they best support the teaching and learning of English?

That summer, we began what would become a long dialogical journey when we sat down to coordinate our courses—one of us was focusing on theory and the other on methods. There we encountered our first intercultural snag. To begin with, we came from our respective sides of the Pacific with different views about teaching English. The American professor arrived with an extensive collection of theoretical readings on communicative competence and student-centered learning, ideas that would propose restructuring classroom interaction and encourage greater emphasis on speaking skills. These ideas have currency in the west, but would they be appropriate for the Chinese educational system? The Chinese professor was prepared to introduce methods of language teaching that would adapt readily to existing course materials and the goals of the national curriculum with its strong emphasis on reading in English. These methods have been used for many years, but have they outlived their value given the country's increased contact with the rest of the world?

Our differences mirrored the current debates taking place among experienced Chinese language educators. Some argue that a strictly western view of communicative language teaching clashes in many ways with eastern social constraints. They also contend that it is impractical to focus centrally on a communicative approach since most instructors are nonnative speakers, classes have an average size of 40 students, thus making it difficult to assess students' productive skills, and most graduates will have little occasion for direct communication with speakers of English. In their view, learning English is constrained further by what is available in texts and other resource materials. Teachers and learners of English in Chinese universities have operated within the strict parameters of the national curriculum and an attendant limitation in the choice of text books. In sum, they argue, there is no immediate need for developing speaking and
writing and there are few resources to do so. Others maintain that Chinese teachers who focus almost exclusively on the receptive skills of English—reading and listening—are teaching only half the language. They say that language learning for adults is more successful when learners are exposed to a mixture of the receptive (listening, reading) and productive (speaking, writing) aspects of the language. They maintain that, given all the ramifications of a rapidly shrinking globe, students in China do need greater emphasis on the productive skills of speaking and writing. In effect, in our teaching collaboration and later discussions we were going to have to work through ideological differences (teaching and learning styles, classroom practices) and material differences (class size, English teaching curriculum, teaching tools, contact with English speakers).

Our continued dialogue has led us to the theme we wish to address in this paper, which is centered around the massive changes that have taken place in information and communication technologies. We have witnessed a similar impetus in China over the past five years. In the fall of 1993, we were both working with College English teachers who had been sponsored by the United Board for Christian Higher Education in Asia to spend a year at Nanjing University for study and professional advancement. We experienced the enthusiasm of these teachers for using new technologies. At the time, stand-alone computers were beginning to be available in offices and for a few interested faculty in the Foreign Languages Department. We arranged for greater access to these computers so that the cohort of College English teachers could write their academic papers in English using word processing programs. These teachers began to explore the benefits of using computers to foster their own students' writing skills in English. The American author's 1993 visits to universities in other cities and provinces--Beijing, Xi'an, Suzhou, Shanghai, and Guangzhou, among others--filled out the picture of growing but

---

3For an excellent exposé on integrating spoken and written discourse in language education, see McCarthy and Carter, 1994.
still limited access to computers for foreign language instructors; with rare exceptions, computer labs were housed in the Computer Science departments of these universities.\(^4\) Moreover, personal computers in offices and labs were generally not linked in a Local Area Network (LAN). Access to the Wide Area Networks (WANs) such as the Internet was severely limited, and neither China nor the U.S. had yet been introduced to Web browsers, programs which now provide easy access to the World Wide Web, a network within Internet with hypermedia functions.

This technological picture has changed dramatically in China since 1993. One sees more computers on faculty desktops, greater linkages in labs and around the campus through LANs, and growing connections through WANs. For example, College English faculty at Nanjing University now contact colleagues around China and the world through electronic mail (e-mail) on the Internet. We ourselves corresponded by e-mail in order to plan for the 1995 summer institute at Northeast Normal University and collaborated in the preparation of this paper via the Internet. It is safe, we think, to predict that these tools will become increasingly available to faculty and students alike, beginning with the key universities and later expanding to others. The predictions are based on steps being taken toward the establishment of a national computer network and the increased access to computer facilities. Within China's latest Five-year Plan, the country has embarked on the "2-1-1 Project," aimed at promoting 100 universities to competitive regional or world levels by the early 21st century. An important part of this

\(^4\)Earlier uses of computers for language learning in the U.S. were similarly limited because labs were generally located in mathematics and science departments. The first such systems were developed through initiatives such as the University of Illinois PLATO network, where, beginning in the 1970s, students could study foreign languages in an 80-terminal Language Learning Laboratory. Lessons focused primarily on grammar and vocabulary development by means of drill and practice routines. A rudimentary audio device at each computer enabled students to listen to and repeat model sentences in the target language.
project is the linking of universities in a nation-wide network, which is in turn connected to the national network as well as to international networks. As for the availability of hardware to students, most major universities have been placing greater emphasis on teaching computer literacy. A certain proficiency of computer use and a good command of a foreign language are two basic skills required of university graduates. For this purpose, universities across China—especially key universities—have been purchasing a sizable number of computers and opening up spaces to house them. Moreover, increasing numbers of networked multi-media computer labs have been set up within departments of humanities and social sciences (e.g. the School of Foreign Studies and the Department of Intensive Undergraduate Instruction of Nanjing University and the History Department of Northeast Normal University).

We wish to show in this report that the influx of digital technologies reshapes the discussion about what aspects of English students need and the kinds of resources available to them. In terms of students' needs, the use of these systems will be ubiquitous in their future workplace settings, where communicating with people from different speech communities around the world is now a requirement. In terms of diminishing the material constraints, increased access to multimedia materials and electronic communication provides authentic language situations and extensive written resources. We also want to claim that the use of these technologies potentially can begin to bridge some of the cultural gaps in language pedagogy. For the remainder of this paper, we explore some implications that the influx of technology has for a language teaching curriculum in China. We examine the computer as a tool for teaching and learning English and as a tool for College teachers' own professional development and conclude with recommendations about a leadership role for College English Teaching in China. As a result of our suggestions, we anticipate a wider dialogue about methods and appropriate uses within the Chinese sociocultural parameters.
A Tool for Teaching and Learning

New developments in hardware and software such as more powerful computers, multimedia capabilities, and high-speed networks broaden the educational landscape for teachers and learners. Let us examine the possibilities for using these tools for College English, by considering in turn the use of stand-alone computers, LANs, and WANs.

The Stand-Alone Computer. We begin with the individual computer as a container for language learning materials. Whereas networks are not yet universally available, computer workstations are within the reach of many students. Teachers in almost every university can teach students important skills with language instructional software on CD ROMs, database software, and word processing software. In this paper we focus on the latter, because of the need for strong writing skills in English for professional and international communication (cf., Bencher & Braine, 1995). Writing, a daunting task even for native speakers, is probably the most difficult of the four language skills to teach and to learn. Research has shown that word processing software can allow students to improve their writing with greater ease; writers are willing to take more risks with their developing texts because they know that revision, especially local-level revision of vocabulary, grammar and mechanics, is easier using a word processor (Catano, 1985; Kroll, 1990; Sudol, 1985). Writing software cannot make learners better writers of English. What they can do is amplify or constrain what learners can do to become better writers. In sum, the development of student writing using word processing software paves the way to wider electronic communication.

________________________

5 An issue requiring extensive discussion is what happens to the planning process that Chinese writers are known to handle quite well. It is said that planning diminishes (or occurs simultaneously with composing) when one writes at the computer (Haas, 1996). Teachers should give further consideration of this cost-benefit ratio for writers.
The LAN. We noted that some universities have already developed local network systems. In these settings, we envision experimental English classes in computer laboratories, during which students can be taught writing on networked word processing systems such as the Dedalaus Interactive Writing Environment, in which students can compose texts, share them with other students and the instructor, and respond to texts developed by their peers (cf., Bump, 1990). In addition to the texts which students themselves produce, other materials can be provided on the LAN by the English teacher such as the language data bank developed for College English textbooks, CD-ROM collections, and other materials drawn from the Web. LANs can bring new life to traditional exercise materials, as well. For example, a traditional cloze exercise can be networked with a time constraint, so that individual students can compete against the clock or participate in a competition with others.

New hypermedia environments offer opportunities for teachers to design group projects. Certainly the idea of groups and cooperation is inherent to learning how to communicate in a second language. On the other side of the globe, in a public elementary school in New York City, we see an example of group work with hypermedia even among younger students, who form learning teams to design situational dialogues for their Spanish language class. After a good deal of planning and rehearsing, they film themselves acting out the dialogue and convert the filmed interaction to computerized video-clips to be used along with computerized exercises, translations, and glossaries in hypercard stacks. We see similar hypermedia uses for college students; in developing projects, teams are constructing an educational artifact, and in the process are practicing the language.

6For a detailed example of how these classes can be designed, see Wang and Kleifgen (1997).
7The concept of learning in a social setting has theoretical grounding in the work of Leont'ev (1981) and others who argue that knowledge is distributed among group members and across the material artifacts they are working with.
In terms of classroom activities, LANs can occasion changes in the traditional classroom participation structure. Teachers can choose various techniques to encourage students to practice all four skills in the lab. For example, working in pairs at each computer, students may examine and discuss electronic texts together, after which they report their discussions to the entire class orally. Or, they may respond to the text in writing or compose original texts together, posting them on the local network for all to read and respond to. Used in this way, the system helps to reshape classroom practice because teachers and textbooks are no longer the only models of the target language, students take on a more active role in language learning, and they not only get practice in receptive skills that are the focal points of traditional classroom teaching, but also engage in speaking and writing activities that are difficult to organize in heavily populated classrooms.

The WAN. The activities just described, though exciting, are still physically limited to individuals and groups within the institution. The question of choices about what should be in a language curriculum is limited to the resources available locally. Wide-area networking, especially through the World Wide Web, can give people access to an enormous bank of resources. For example, the students learning Spanish in New York present their completed projects to students around the world through the Web. Due to the widespread dissemination of their work, students become more highly motivated to practice and refine their dialogues. Students in a public high school English class in New York have learned to design personal Web pages so that they can share their essays and poems to the world. They invite readers to offer suggestions for refining their pieces.

Likewise, for students at Chinese universities with access to the Web, language learning no longer has to be constrained by the resources housed within individual universities or language departments. They can read and respond to English texts
available on the Web and can produce texts of their own. Additionally, they can receive
data and research reports related to their fields of study, thus enhancing their English in
specific content areas. As the Web grows, it will provide access to more professional and
academic information, thus becoming a comprehensive resource for the language
learning curriculum.

Besides having greater access to information, learners can use the Web to contact
other users. Contemporary cultural contact can take place without physical relocation
through communication technologies, in particular, through computer-mediated
communication (Cummins & Sayers, 1995; Ferrara, Brunner, & Whittemore, 1991;
Herring, 1996). Students of English around the world are discovering that with
electronic communication they can communicate with native speakers of English; with
the click of a mouse they can be in countries where English is spoken natively:
Australia, Canada, Great Britain, South Africa, the United States. Rather than limiting
language practice to simulation software, users of the Web interact with actual speakers
of the target language in authentic communicative situations. Because English is the
*lingua franca* of the Web, students of English can locate sites on the Web dedicated to
discussions in English about numbers of issues. For the moment, this interaction
generally speaking is written and is asynchronous. There is, however, a growing use of
real-time exchange of written messages in numerous Web "chat rooms" and recent
developments in technology have enabled people to have telephone conversations on the
net. With the emergence of interactive video communication such as Cornell University's
SeeMe software (CU-SeeMe), people around the world are beginning to communicate
"face-to-face" in synchronic spoken interaction. We can foresee this emerging
technology used by teachers and students in Chinese Universities in creative ways as a
supplement to their regular class sessions. Towards the end of this report, we propose
additional College English courses to prepare students to use these technologies in their various professions.

**What About Individualized Learning?** Implicit in the examples given is the notion that students can gain access to materials available locally and internationally for individual study. This is another model for student learning, which we submit for consideration. When presented with a number of choices at a computer workstation, a learner can select an individualized path to the study of language. For example, Dr. Patrizia Magni, a recent graduate of Teachers College, designed a multimedia program for learners of Italian. Using this software at a work station, an individual may choose to view a dialogue taken from a Fellini film one day, learn about grammar points embedded in the dialogue on another day, practice pronunciation of the dialogue on still another day, or combine all three activities. The individual may also wish to compose a short story based on the film scenes or make a new video dialogue that is inspired by the film. If the workstation is used in conjunction with a course in Italian, the teacher's role is to guide and motivate the individual to extend what was learned in class by developing a personally edifying project.8 Because there is a history of individual initiative in Chinese learning of English through listening to the BBC or VOA, perhaps college English programs can offer this type of activity for enrichment.9

**A Tool for Professional Development**

**Teacher Development.** College English teachers themselves can use the Web for professional development. Through communication with native speakers of English at Web sites in other parts of the world, they polish their own communicative skills.

---

8Magni's multimedia software has also been found to be very effective when learners of Italian explore the material at the work station in pairs (Magni, 1995).
9Software such as simulations and games can also be made available for individual student use.
Teachers also can share their expertise with other teachers by joining 'LISTSERVS',
which are discussion groups with special interests. English teachers in these groups
share ideas and teaching materials, and debate pedagogical issues. For example, TESL-L
is for teachers of English, particularly those who work with adult learners; EST-L is for
teachers of English for science and technology; FLTEACH is for secondary and
university teachers of foreign languages; SLART-L is a forum for discussion among
teachers and researchers in the area of second or foreign language learning. The list of
LISTSERVS grows and changes constantly.

Research. Opportunities for research by college English teachers are also available
on the Web. One of the greatest problems for teachers in China is the limited number of
intellectual resources. Library books are not always up-to-date and scholarly journals are
generally expensive and scarce. But on the Web, information can be retrieved from
digitized texts and journal articles which are being prepared in various university libraries
around the world. Digital libraries are growing on the Web every month. Most of these
are provided by universities and public libraries (one example is Columbia University's
Digital Library Collections: http://www.cc.columbia.edu/cu/libraries/digital/texts/). Also
under development are electronic professional journals known as E-JOURNALS, such as
*Teaching English as a Second or Foreign Language: An Electronic Journal* (TESLEJ_L).
These sources of information make it possible for teachers in Chinese universities to
receive and share data, methods of teaching and analysis, and research reports.

Besides gathering data and carrying out library research electronically, English
teachers in China can do collaborative research with colleagues in other parts of the
country or the world via the Internet. We again give the example of this paper, which we
began to outline when we were teaching at Northeast Normal University in Changchun
one summer. Our research and collaborative writing continued through asynchronous
Internet communication between New York and Nanjing. Today, technology is available
which would have allowed us to work on a paper at the same time (provided one of us had been willing to keep very late hours). We can only speculate how these tools will change and affect collaborative research and writing in the near future.
Taking a Leadership Role

College English teachers are in a unique position of leadership in preparing China for the Third Millennium. The Internet is the gateway to world business and trade. It is also the place where cutting-edge information and innovation is first reported. As was already noted, English is, for the moment at least, the *Lingua Franca* of the Internet. The success of China's future engineers, scientists, entrepreneurs, and artists depends largely on their ability to use the Internet effectively to gather data, read the latest publications in their respective fields, and interact with colleagues around the world. Their exposure to intercultural variation in communicative styles can help them to know and appreciate other world views. College English teachers can train students in these disciplines to develop their Professional Discourse skills: reading, writing, and interacting effectively on line. This requires an innovative curriculum in English for Specific Purposes (ESP) and we suggest that such a curriculum should include at least the following components:

**Courses in Computer-Mediated-Communication** Computer-mediated-communication (CMC) is a new sociolinguistic situation; research in this area is just beginning (cf., Herring, 1996). We are finding that students benefit from an introduction to a thorough understanding of "Netiquette," rules for appropriate language use on-line. Students learn that rules for interacting with individuals electronically are different from rules for turn-taking and politeness in face-to-face interaction. Research shows that users often mistakenly assume that recipients know the context of their message. Here is an example from Korenman and Wyatt (1996), where a recipient asks the sender for clarification:

I have probably said a variety of things about MacKinnon in different contexts, and for the life of me I can't figure out which one you're referring to....(p. 237)
The same authors report data showing that messages meant for individuals are often sent mistakenly to electronic groups or fora. Such messages can be annoying to group members for whom they are not intended; the messages can also reveal sensitive information or assessments meant only for the individual. In this new medium, the possibilities for communicative breakdowns (and cross-cultural misunderstandings) are tremendous. A business or economics graduate can lose credibility with international colleagues by communicating in inappropriate ways. Although professors in business schools or other disciplines may have a command of English, it is the College English teacher's expertise in the area of linguistic pragmatics (Levinson, 1983; Mey, 1993) and register variation (Biber, 1988; Halliday, 1986; Murray, 1988a, 1988b), which are needed to guide these non-English majors in writing and interpreting computer-mediated-communication.

**Courses in Professional Literacy.** For success in their future professions, students must learn how to read and write using the terminology and rhetorical structures peculiar to their disciplines. This requires courses in contrastive rhetoric (including a careful treatment of topic development and understanding). College English teachers should become equipped to teach technical writing--business correspondence, resumes, proposals, progress reports, policy statements, and so on. They can give students experience in joint proposal writing and collaborative projects. These courses would use the Web as the "text book." Project-based assignments will include searching the Web for information: reading and interpreting research and company reports, gathering and analyzing data, consulting with the experts in the field, and publishing in English.

But to be successful in this role, College English teachers must show leadership in garnering the support of their universities, the corporate world, and other private funding sources. Funding could be provided to develop the curriculum, prepare qualified teachers, purchase language software. The College English teaching community must
convince more university administrators that computers and computer labs have a natural home in social science and humanities departments; that natural home is especially true where English, the language of international communication, business and trade, is taught.

We hope that it has become apparent to readers that we do not take the technicist view that machines alone can change the College English milieu. Nor do we claim that the time-tested teaching approaches of one culture should be eliminated in favor of those that have currency in another. Such an outlook fails to recognize and respect the other. We argue that these new technologies will occasion more exposure to varieties of written English and more communicative interaction with speakers of various Englishes around the world. We urge that China's teachers of College English receive professional preparation to shape these resources to fit their students' needs. We have argued that college graduates can gain intercultural understanding as well as professional advancement through electronic communication. Likewise, based on our own personal experience in developing this report, we argue that professional discourse between English teachers from various cultural backgrounds can strengthen everyone's practice, for "real judgments of worth suppose...that we have been transformed by the study of the other so that we are not simply judging by our original familiar standards" (Taylor, 1994, p. 70).
References


