Where is the technology-induced pedagogy?  
Snapshots from two multimedia EFL classrooms

Ying Xue Zhong and Hui Zhong Shen

Ying Xue Zhong holds a Bachelor of Arts from the South China Normal University and a Master of Education in TESOL from the University of Sydney. She has been using computers in her class since 1996. Her area of interest is in how to use information technology effectively in language teaching and learning in an EFL context. Hui Zhong Shen is a lecturer in education at the University of Sydney. He studied and taught English at Fudan University and obtained his Ph.D. in Education at La Trobe University. His main interests are second and foreign languages teaching methodologies, teacher education and material development. Dr Shen has been involved in a number of state and national multimedia projects and has extensive experience working with foreign language teachers. Address for correspondence: Dr Hui Zhong Shen, Faculty of Education (A35), The University of Sydney, NSW 2006 Australia. Email: h.shen@edfac.usyd.edu.au

Abstract
This research examines two multimedia secondary EFL classrooms to identify what changes, pedagogical or otherwise, have taken place in technologically integrated classroom practice. The research analyses data generated from a range of sources: classroom observations, videotapes and teacher’s lesson plans. It is argued that substantial pedagogical innovations will not come unless there is a perceived change in the understanding of the process of teaching and learning and philosophy of language. The research concludes that the traditional Chinese notion of teaching and the role of the teacher in the classroom need to be redefined to allow for a learner-centred multimedia language classroom to emerge.

New trends in Chinese ELT
A new educational reform, which emphasises the integration of new technologies into the curriculum, is surging in China with an increased momentum. EFL professionals are either constantly searching themselves for, or being timetabled into various computer literacy courses, to develop and upgrade technology-based skills. It is not uncommon for some forward-thinking institutions to establish a skill database that contains information about staff skills in using various computer software. On the other hand, the ability to use PowerPoint, Authorware or Flash to preen their courseware, and give showcase “Multimedia EFL Lessons” has been admired as an enviable skill.
It appears that there is a general consensus, or at least, an expectation that a kind of technology-induced pedagogy, known as “Multimedia EFL Teaching”, is emerging in China. There is no doubt that the advent of computer and its related technology have inspired some rethinking of, and innovative approaches to, traditional models of language teaching and learning (Davidson and Tomic, 1994). At the more extreme end, there is an argument that goes as far as to claim that new technologies may offer a panacea for EFL teaching problems, such as lack of motivating and meaningful learning environment, authentic language input, and opportunities for real-life communication—characteristics that are typical of communicative language teaching (Larsen-Freeman, 1986, 1991; Richards and Rogers, 1986; Nunan, 1989, 1991; Savignon, 1983; Richards, 1990, 1999).

While the emergence of technologically integrated EFL classrooms may bring with it innovative ideas and practices, our research shows that this is not the case in reality in the Chinese EFL classroom. There are a number of difficulties that need to be overcome before substantial changes take place. These difficulties, derived more from the established traditional Chinese educational system, are observable in (1) philosophies of language and language teaching and learning; (2) curriculum orientation and the perceived role of the teacher and the student in the learning environment; and (3) instructional designs for classroom practices. The questions remain: What pedagogical models do teachers use in the multimedia classroom? How does the multimedia classroom differ from the pre-multimedia classroom in terms of classroom interaction? What is the role of the teacher and the student in a technology-enhanced learning environment?

A good way to get a better understanding of the challenges presented to EFL teachers by the introduction of new technologies into classrooms is to take a close look at two Chinese multimedia classrooms at school level. Our discussion will start with a delineation of two multimedia EFL classrooms in different schools. The first classroom is in a selective school of the capital city in a province and the second is a well-resourced private school in a small city. The sketches will provide insights into the Chinese EFL classrooms and capture the way English teachers integrate new technologies into classroom language teaching. The observation will focus on the three aspects of language pedagogy: approach, design and procedure (Richards and Rogers, 1986; Nunan, 1988).

Snapshots of the multimedia EFL classroom

The procedure of the two multimedia EFL lessons observed can be divided into five episodes: revision, presentation, reading, practice and consolidation/homework. It follows a traditional model of presentation; practice and production (PPP) adopted in China in the new English Textbook in the early 1990s. This is quite reminiscent of the earlier Soviet teaching programs adapted for Chinese schools since the 1950s, which advised teachers “to review old materials, orient new materials, explain new materials, consolidate new materials and set new assignments” (Ross, 1993, 115). The figure below illustrates the structure of the two lessons based on our observations.
Class one
This was a junior 2 class (Year 9) in a selective public school which is famous for its advanced school networks and its forwarding-thinking curriculum innovations. The demonstration lesson was delivered in a multimedia theatre equipped with one computer, one big screen TV, a white board in front of the classroom, and a Synchronised Response Keyboard (SRK) attached to students' desks. Before the commencement of the class, Miss Zhang (Pseudonyms are being used for institutions and people involved in the research to protect privacy), a young English teacher loaded her PowerPoint courseware into the school computer. It took her one week to complete the courseware including finding the pictures from CD-ROM encyclopedia and Internet, scanning photos, inserting pictures, typing text, adding animation and combining them together into a PowerPoint slide show.

The lesson comprises of five phases: revision, presentation, reading, practice and consolidation/homework.

Revision (4 minutes): After the routine teacher-student greeting, Miss Zhang uses the PowerPoint slide show to present some pictures of inventions on the white board. Students are asked to tell the meaning of the word “invention”. Then, she invites three students to the front to describe their favourite invention orally. This oral presentation is based on the written homework she assigned in the previous lesson.

Presentation (2 minutes): Miss Zhang clicks her PowerPoint to show the class three important inventions of Thomas Edison and introduces the story about Edison briefly.

Reading (17 minutes): This is the core of the whole lesson. In the pre-reading stage, students get to know the new vocabulary by scanning the text. After that, Miss Zhang asks students some questions, to which they are expected to find the answers when...
watching the video. Next is the in-depth reading stage and students are asked to read
the story again, more slowly and answer the questions in their workbooks. This is
followed up by a whole class check on the answers that students have worked out
individually against the key prepared by the teacher.

Practice (10 minutes): In this phase of the lesson, the whole class focuses on language
form by working through some discrete language items under teacher’s instruction.
The main language points and exercises have been typed on the PowerPoint slide
show beforehand. The language work primarily consists of gap filling, completing the
sentences, and other drilling exercises.

Consolidation (5 minutes): A list of True and False statements is presented on the slide
show. Students are asked to respond to the statements as a whole group. After that,
students are asked to translate a quotation (from English into Chinese) from Edison
and discuss it in small groups of three and then share their discussion with the whole
class.

Homework (2 minutes): In this last part of the lesson, Miss Zhang introduces some web
sites about Thomas Edison and assigns students some questions that they can answer
after they visit the web sites. The second homework is retelling the story using the
questions in the Workbook as a guide.

Class two
The second classroom is in a well-resourced private school. The school is keen on the
integration of technology into teaching and learning. There is one computer-assisted
instruction experiment class in each grade. Students in the experiment class sit in a
computer-equipped classroom to have all their lessons except Physical Education. Each
student works on his own computer in the class. All the computers have a touch screen.
Teacher’s desk is also equipped with one computer connecting to a data projector, an
LCD player in the front and a laser remote controller, which can be used as an electronic
pointer. Students in this senior one (Year 11) class are having an English lesson on
American Country Music. The English teacher Mr Zhuang organises his lesson into five
phases and uses Authorware (a rich-media authoring program) to deliver his teaching
material.

Revision (4 minutes): Before the bell rings, students read after the audio tape the
vocabulary they have learned in the previous lesson. (It is a Chinese way to get stu-
dents’ attention and save time.) Then, Mr Zhuang teams the students into pairs and
asks them to come to the front to retell the dialogue they have learned in the last lesson
and act out the dialogue.

Presentation (3 minutes): The first is a whole class activity. Students are asked to pay
attention to the courseware about the development of American Country Music, which
has been designed by Mr Zhuang using Authorware. Students are obviously fascinated
by the photos, songs and video clips presented through the courseware.

© British Educational Communications and Technology Agency, 2002.
Reading (20 minutes): After the multimedia introduction, Mr Zhuang asks students to read the story in the textbook and answer two questions: 1) Do the subjects of American Country Music always remain the same? 2) What is the one subject that is always the same? This is followed up by a quick check of the answers and a second reading in which students are asked to divide the whole text into several parts and find the main ideas for different paragraphs. After another check of the answers, students start to fill in several diagrams dealing with the information on the development of country music. Finally, Mr Zhuang shows his answers on the LCD player, and makes sure everybody get the right answer.

Practice (6 minutes): In this part, Mr Zhuang first reads line by line the text in order to get through all the important language points in the text. After that, he asks students to finish the interactive exercises (paraphrasing the sentences) in the Authorware courseware. Students work on their own computer. As soon as they get the answer right they can get on to the next question. Students seldom talk to each other. Mr Zhuang moves from student to student, correcting student’s mistakes, making sure they are all doing the exercises.

Consolidation (6 minutes): A quiz is used in the consolidation stage. Class is divided into four competing groups. The quiz showing on the LCD is a combination of questions to test students’ knowledge of word usage, language points, sentence structures and comprehension of the text they have learnt in class. This is followed up by students reading the passage aloud in chorus and summarising together the passage with the help of the teacher’s guidelines projected on the LCD.

Homework (1 minute): Students have to finish the exercises in their workbooks and prepare for the retelling of the whole text during the next lesson.

Moving beyond the sensory data
The snapshots of the two showcase classrooms have captured some of the overt features of Chinese EFL Multimedia classroom teaching. New technologies are being used as accessories, and classroom procedures, which are predominantly teacher-driven, tend to follow a linear sequence. There is a conscious focus on language form rather than interaction and the use of the language. The instructional routine of revision, presentation, reading, practice and consolidation/homework, often quite predictable, is typical of the combined approach of grammar translation and audio-lingual methods. In such a classroom, receptive skills like listening and reading do not need to be taught. Students will “pick it up by osmosis”, or acquire it after “haphazard listening [and reading] to texts followed by comprehension questions”, as Mendelsohn (1998) observed in his overview of different approaches to language teaching.

It is fair to say that the integration of computer into the language class has not yet brought about pedagogical changes that are much needed in classroom practices. Little difference has been observed between the technologically integrated language classroom and the traditional classroom.
In his discussion of the impact of globalisation and knowledge economy on education, McGinn (1997) argues that education seems to have undergone little changes in most countries at classroom level, beyond superficial integration of computers. The validity of this argument needs to be further examined. However, English language teaching remains largely intact in the two Chinese classrooms we observed; though progress has been noted over a period of a decade and a half.

The writing of the textbooks: *Communicative English for Chinese Learners* (Li et al., 1984) and the introduction of a functional syllabus by the State Education Development Commission (SEDC) in 1992 as well as new textbooks for Communicative Language Teaching (CLT) in schools by Longman and SEDC (1992–1997) are just some of the examples.

There is still distance to travel before EFL professionals in China can move beyond a traditional approach regardless of the aims of the new syllabus, which are “to enable students to develop basic knowledge of English and competence to use English for communication purposes through the training of the four macro skills” (SEDC, 1992, 1). It appears that the difficulty is more of a conceptual nature than technological, which can be shown through a qualitative analysis of the two lessons as summarised in Table 1.

<table>
<thead>
<tr>
<th>Classroom observation</th>
<th>Teaching and learning</th>
<th>Role of computer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Class 1: Students give short prepared speeches on their favourite invention. Class 2: Students retell the dialogue they have learned in the previous lesson and act out a similar one.</td>
<td>Memorisation, imitation and drilling are highly emphasised in learning.</td>
<td>Nil</td>
</tr>
<tr>
<td>2. Class 1: Teacher presents the story of Thomas Edison with pictures and tape. Class 2: Teacher presents American Country Music through Authorware courseware.</td>
<td>Teaching is a process of transmitting knowledge from teacher to students.</td>
<td>Electronic board</td>
</tr>
<tr>
<td>3. Class 1: Class is scanning the text: “A Great Inventor” to answer guided questions. Class 2: Class is scanning the text: “American Country Music” to answer two guided questions.</td>
<td>The purpose of learning a foreign language is to be able to read literature.</td>
<td>Nil</td>
</tr>
<tr>
<td>4. Class 1: Class views the pictures shown by PowerPoint and at the same time listens to the audio to answer questions. Class 2: Class continues to scan the text: “American Country Music” to answer guided questions.</td>
<td>It is important to focus on details of the text.</td>
<td>Electronic board</td>
</tr>
</tbody>
</table>
In Table 1 the instructional procedure of the two lessons has been displayed in the first column with the philosophy of teaching and learning being identified in the second column. Column 3 records the use of computers in classroom application. The procedure reaffirms the instructional pattern summarised in Figure 1. It is a model characterised by a linear sequence with the teacher in total control of all the learning tasks.

© British Educational Communications and Technology Agency, 2002.
The two multi-media English lessons appear to focus largely on low-level language-oriented tasks. Such tasks give students little opportunity to operate beyond the levels of knowledge and comprehension to develop other higher order thinking skills such as application, analysis, synthesis and evaluation as categorised by Bloom (1956) in his taxonomy of critical thought. This is detrimental to the overall development of their linguistic and cognitive competence, as students are deprived of the opportunity to transfer and further develop the skills and strategies they have developed through first language acquisition in the process of learning the target language.

At the design level, it is noted that tasks designed are all teacher-centred with minimum interaction between students. The data shows that in a 40-minute lesson, teaching takes up about 30 minutes, which is used for checking reading, explaining the grammar rules or language points, assigning translating, paraphrasing tasks and other decontextualised written exercises. It appears that a technologized traditional classroom is emerging.

A technologized traditional classroom
The way of instruction in the Chinese EFL class is yet to be informed or revolutionised by a changed concept of teaching. The integration of technology has only transformed the physical appearance of the English classroom. At the deeper level, teaching or classroom practice follows the same procedure as it did for decades or even centuries in China. Language tasks are so organised that smooth delivery of what has been prepared is ensured. The teacher still has a central role to play, to remain in control of the class, and to deliver more effectively a “prepacked information kit” through an electronic blackboard and digital exercise books.

Technology, which has not affected the ecology of the classroom or the established patterns of behaviour of both teachers and students, serves obviously as an add-on or a magic wand for the teacher-magician to present teaching materials in electronic garb as is shown in Figure 2.

The process of teaching and learning has remained unchanged within the traditional model in the computerised environment. The teacher is still the primary source of knowledge. Within such an instructional framework, the role of the teacher has been clearly defined and reinforced. It is perhaps just that role embedded in the traditional culture and educational system that needs to be redefined. An alternative argument suggests that pedagogical changes would only take place with a changed perception of the process of learning and teaching.

A cultural assumption
Computer-assisted learning has long been considered as the industrial revolution in education (Hertz, 1987). But why does EFL instruction in China remain unchanged, even within a multimedia computer lab? Perhaps there is a need to explore other factors, which are not overtly noticeable, but more interpretable through a study of culture. Research on cultural studies has documented fully the influence of culture on people’s
attitudes to knowledge, perception of roles in teaching and learning process, and therefore on styles of teaching and learning, which characterise the educational process (Ballard and Clanchy, 1984 and Biggs, 1997). Popkewitz’s (1987) notion of cultural codes or “regimes of truth” sets the framework for the perception and interpretation of events and information. This argument has been shared by a number of other writers who believe that these identified cultural codes are normative in nature (Grudykunst, 1994; Scollon and Scollon, 1995; Gadman, 1997; Ellsworth, 1997 and Ryan, 1998).

The argument that radical change in belief systems accompanied by rapid economic growth would bring with it a changed cultural orientation may hold some truth. However, it will take an extended period of time for this change to take place, and for a new “collective unconsciousness” to emerge. This is exactly what Cleverley (1991, xii) observed: “while modern schooling has been accompanied by far reaching attitudinal change, the Chinese people have not slightly discarded the patterns of thinking and action from their historical past...”.

The teacher-student relationship that has been identified in classroom observation is very indicative of the deep-rooted notion of Confucian hierarchical order. Confucianism has acted as a unifying force in Chinese history since the Han dynasty, 206 BC–AD 220 and was, perhaps still is, considered to be the state doctrine since 100 BC. As a result, the ideas of Confucius, particularly the notion of the hierarchical order have played a demonstrably significant role in the Chinese society. The impact of the Confucian and Taoist legacy on education is particularly pervasive in these related concepts like perception of knowledge, teacher as the sage and methods of teaching.

© British Educational Communications and Technology Agency, 2002.
The Chinese culture holds a more conservative view on knowledge which is valued as something proven as correct and successful in the past, and mainly from two authoritative sources—the teacher and the textbook (Ballard and Clanchy, 1984 and Jin and Cortazzi, 1998). It is commonly accepted that such knowledge is not open to challenge and extension by students arguing with their instructors (Ginsberg, 1992). Often, the teacher is a symbolic representation of knowledge that has been formalised through repeated classroom rituals.

The teacher is accepted as the sage. The authoritarian role of the teacher has been noted by a number of writers (Ginsberg, 1992; Hui, 1997 and Wen, 2000). In ancient times the scholar had of necessity a teacher. “A teacher is the one who passes on correct principles, teaches skills and explains uncertainties” (Han, 2000, 768–824). “It is believed that the teacher in the Chinese society is held in high regard. The five most respected beings in Chinese thought are Heaven, Earth, sovereign, parent, and teacher. For the past few thousand years the teacher was in an exalted position in traditional China” (Wen, 2000).

It is common practice that “the teacher decides which knowledge is to be taught, and the students accept and learn that knowledge. The lecturer is the authority, the repository of knowledge, leading the student forward into this knowledge, a respected elder transmitting to a subordinate junior” (Ginsberg, 1992, 6). In the words of Hui (1997) “teachers are too authoritative to be challenged so far as knowledge is concerned”. Even if teachers accidentally make mistakes, students are not supposed to challenge them. This is consistent with what has been revealed by the data, which shows a master-apprentice relationship. The student is highly dependent upon the teacher, who is seen as paternalistic, knowledgeable, and the centre of all learning activities.

As far as teaching methodology is concerned, the way a task is approached is to a large extent influenced and even determined by the established perception of knowledge and the role of the teacher and the student in the classroom. The method that has been observed is obviously derived from a transmission model that focuses on information processing. For centuries teaching is viewed as a process of “transmitting knowledge” rather than as a process of “developing learners’ skills” and helping them “gain learning autonomy” (Zhou, 1992; Huang, 1992; Rao, 1999 and Jin and Cortazzi, 1998). This linear, teacher-centred model fits in well with the instructional design and procedure we have examined.

The general goal of foreign language teaching is to assist students to develop a knowledge of the language system and various macro skills, and more importantly, to pass different kinds of exams. Although the new Pilot Chinese National English Syllabus for Schools (SEDC, 2000) focuses on communicative competence and experiential learning, classroom instruction shows a mismatch between what is advocated and what is practiced. The objectives of the first lesson were to “get the students to grasp the main meaning of the story and make the students master some language items” (Lesson...
The objectives of the second lesson were similar, “[to] develop the [students’] reading ability, like scanning, skimming, [and] focus on the main idea of the passage” (Lesson plan 2).

The computer has not changed any of the elements in the Chinese EFL classroom; everything remains the same in a steady square. No wonder Seymour Papert (1993) observed that time travellers from the 19th century could step into a contemporary classroom and know at a glance where they were. Walking into the Chinese multimedia EFL classroom would enable you to have the same revelation as we have experienced.

When classroom tasks have been prioritised to prepare students to pass exams, task variety suffers immediately. The limited range of task types observed (describing, identifying, memorising, retelling), are all pegged at the low-level of cognitive development, and tend to focus predominantly on drills and reproduction of linguistic items. It has been anticipated that a technologized classroom would bring pedagogical changes to the EFL classroom to produce optimal learning outcomes, particularly in listening and speaking. Yet the results at this stage are far from satisfactory. Perhaps a new model need to be proposed: a model that has been informed by a more constructive view on theory of learning, process of learning and teaching, and learner autonomy.

Implications and suggestions
This may seem to have posed a challenge to the existing educational thinking. However there is an urgent need to meet this challenge and to change the current situation of teaching and learning in the Chinese EFL classroom in the global context. It is our belief that substantial pedagogical innovations will not come unless there is a perceived change in our philosophy of language and the process of teaching and learning.

The aim of learning a foreign language should not be narrowly limited to learning the macro skills. It should entail an understanding of its being a process of developing both communicative strategies and thinking skills. W T Harris argued a century ago that the arrested development of the higher mental faculty was caused in many cases by the school. He writes: “The habit of teaching with too much thoroughness and too-long continued drill […] often leaves the pupil fixed in lower stages of growth and unable to exercise the higher functions of thought” (Harris, 1898, 7; cited in Mann, 1979, 349). What has been observed in the Chinese EFL classrooms seems to mirror what Harris described.

At the pedagogical level, a task-based communicative approach should be adopted to encourage interaction and use of English for real purposes. There should be a balanced provision of language “problems” and “puzzles” (Wallace, 2000), which will allow learners to work on both open and closed tasks. This change in language tasks should happen at a conscious level, and the inclusion of more task types should allow learners to practice and develop different language and thinking skills.

In the process of planning and designing, curriculum writers should be encouraged to create learning tasks that would allow classroom practitioners to identify and enact
a number of different roles, “categorising” or “temporal” (Widdowson, 1987). Such “temporal” roles as “facilitator”, “manager” or “co-learner” should be effectively embodied in language tasks and demonstrated through classroom interaction so that the learning process can be better facilitated.

It is also worth mentioning that a more open-ended process approach that focuses on the learner is not meant to supersede the existing teacher-fronted structural approach. The emphasis is on integration that aims to move EFL teaching in China to a higher level to meet the needs of both the Syllabus and learners in an ever increasingly changing world.

Conclusion
It has been argued that the emergence of new technologies in the Chinese EFL classroom starts to impact on instructional practices. However, effective integration of computers into English language teaching will not happen unless conscious efforts have been made at various levels to genuinely view the process of learning and teaching as of a more reciprocal nature.

Obviously, there is a need to go beyond a cultural model that places too much emphasis on the teacher as a knowledge transmitter. It is suggested that a communicative approach to language teaching should be employed to complement a more traditional approach that tends to focus on language forms. Classroom instruction needs to include more tasks that help facilitate a more interactive process and allow the learner to develop more learner autonomy.

This requires that pedagogical innovations start at the design level to involve curriculum writers, practitioners, teachers and students in the process of awareness raising, programming and classroom implementation. Once there is a perceived change at the conceptual level, integration of new technologies into the English class will begin to take on a new form, and allow a more interactive classroom to emerge. Such integration will in turn promise the technology-induced pedagogy that is congruent with a learner-centred approach we are committed to promote. However, that we are still addressing the difficulty of pedagogical ineffectiveness in school teaching commented by Harris over a century ago, indicates that this issue is perhaps more complex than most of researchers or classroom practitioners have been ready to believe. This research based on observations of two Chinese EFL multimedia classrooms is only a very small endeavour to identify the difficulty. More classroom research at large scale is needed to generate data that would warrant valid generalisations.

References
Bloom B et al. (1956) Taxonomy of educational objectives: the classification of educational goals David McKay, New York.

© British Educational Communications and Technology Agency, 2002.

