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Web-based Multimedia Support for Preservice Primary ESL Teachers in Hong Kong

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This article reports on a Web-based multimedia resource specially developed to support the training of preservice primary ESL teachers in Hong Kong. One of the challenges facing TESL teacher educators is how to assist trainee teachers to put espoused TESL methods and strategies into practice. While lesson observation is one solution, there are practical difficulties in arranging frequent lesson observations on site. As a result, ESL trainee teachers often start their practicum with only a partial understanding of classroom techniques. Although video can increase trainee teachers' exposure to the second language classroom, video recordings of lessons are inconvenient to use. This article describes a project which attempts to address the problem raised above by using Web-based multimedia to demonstrate good TESL practice to trainee teachers, and by using computer-mediated discussion (CMD) to promote reflection on exemplar classroom vignettes.

Key words: teaching English as a second language, multimedia, teacher education, primary school

Introduction

Enabling preservice teachers of ESL (English as a Second Language) to appreciate and embrace good practice is one of the main challenges for TESL teacher educators. While a fundamental objective of any teacher education program in TESL (Teaching English as a Second Language) is to ensure that trainee teachers are able to put espoused teaching methods and techniques into practice, this is often difficult to achieve because of the limited time that can be devoted to practical activities such as micro-teaching and guided field experience. As a result, ESL trainee teachers often commence their practicum with only a shaky command of teaching methods and classroom techniques. This article describes a Web-based multimedia project designed for preservice primary ESL teachers in Hong Kong. This project attempts to address the problem raised above, by using Web-based multimedia to demonstrate good TESL practice to trainee teachers, and by using computer-mediated discussion (CMD) to promote reflection on exemplar classroom vignettes.

This article is in two parts. In the first part, we present the rationale behind the design of the Web-based multimedia project. We will discuss two major issues. The first concerns the use of multimedia as a means of bringing to life the TESL principles and techniques to be considered and acquired by trainee teachers. Research indicates that multimedia materials provide participants with a much clearer vision of course and trainer expectations (see Coniam, 2003a, for a discussion). The second issue concerns the nature of "interactivity" between trainees and the principles they are being guided towards, and how discussion may be fostered and enhanced through a computer-mediated medium. In the second part of this article, we explain the workings of the Web-based multimedia project.

Exemplifying Good Practice to ESL Teachers in Hong Kong

ESL Practice in the Hong Kong Classroom

At local tertiary institutions in Hong Kong (where the subject of this article is situated), ESL teacher education naturally involves advocating good ESL practice, with the discussion of such practice accompanied, wherever possible, by videos which exemplify and support points made. Despite a certain amount of audio-visual support, however, the teaching mode which tends to predominate in many tertiary institutions centres around lectures supported by materials in a formal print medium. (See Stewart & McCormack, 1997; Walker & Warhurst, 2000, for a discussion of teaching at tertiary level.)

One consequence of such lecturing, or explaining, when it comes to teacher education is that while trainee teachers might in principle endorse the pedagogic concepts being proposed, the concepts remain as abstract principles, and are consequently not implemented in their teaching. Many researchers have, as a result, noted a "theoretical dissonance" between a supposed understanding of the curriculum model or syllabus proposed by the local education authorities (or tertiary institutions) and what actually happens in the classroom (Evans, 1996; Lai, 1994; Richards, Tung, & Ng, 1992).

With regard to the Hong Kong ESL situation, Evans (1996) observes that many Hong Kong ESL teachers operate via "traditional examination-oriented teacher-proof course books' produced by local publishers. This results in a methodology which reflects poorly the spirit of the ESL curriculum—despite the efforts and best intentions of the local education authorities and the teacher education institutions. Much of what happens in the Hong Kong ESL classroom can then be viewed in the context of a "traditional, teacher-led examination-driven methodology, with a focus on the explanation of grammar rules, supported by written exercises and drills" (Richards et al., 1992).

Richards et al.'s (1992) survey of Hong Kong ESL teachers' awareness and implementation of communicative language teaching principles (the results of which indicated little awareness and lack of implementation) illustrated why the local ESL syllabus was not being realised in the spirit intended. The "theoretical dissonance" in ESL teaching in Hong Kong can therefore be seen from both the macro level in terms of what constitutes "task-based" or "communicative" approaches to language teaching and learning, and the micro level in terms of what, for example, constitutes "Presenting language items" or "Explaining points of grammar". Teachers will have read about, and discussed, such issues, but may not have experienced them as actual classroom practice.

Use of Multi-media: Pilot Attempts

One way of clarifying concepts for ESL teachers and exemplifying good classroom practice is naturally through the use of multimedia such as videos, with the value of multimedia having been demonstrated by a number of researchers. One good example is Johnson's (1998) multimedia package for ESL teachers. Another example concerns the assessment of ESL teachers' language ability. (A minimum standard of ability in English for ESL teachers, the Language Proficiency Assessment for Teachers of English, or LPATE, was mandated by the Hong Kong Government in 2000).1

In an exploration of Hong Kong secondary ESL teachers' reaction to the published print version of the LPATE syllabus (Hong Kong SAR Government, 2000) regarding a live, i.e., performance, test of a teacher's language in one of their own ESL classes—the Classroom Language Assessment test, Coniam (2001) investigated teachers' reactions to print and multimedia versions of the Classroom Language Assessment test. Considerably more positive reactions were reported to the multimedia version, with participants commenting that it clarified the demands of the test far better than did the print document (Coniam, 2003a) in that the nature of the multimedia program not only allowed them to understand what was expected at a given level of performance, but enabled them to go beyond

the program, and to reflect upon their own experience and proficiency—something that the static print test syllabus document could not achieve on its own. When asked how they felt about facing the test, and how confident they felt about passing it, teachers' reactions were significantly more positive after having been exposed to the multimedia version.

This—to an extent obvious—value of the worth of multimedia as a tool to clarify principles related to the English language teaching led to the development from the multimedia LPATE assessment tool to one that would be used for elucidating—at Hong Kong secondary school level—English language *teaching* rather than *testing* principles (see Coniam, 2006).

To return to teacher education, a previous multimedia program designed by Coniam (2006), which inspired the project described in this article, showed that the facility helps to make transparent to secondary ESL teachers-intraining concepts associated with the teaching of English, in that it exemplifies how these concepts translate into actual classroom ESL situations. Figure 1 (adapted from Gower, Philips, & Walters, 1995; Harmer, 2001) lays out some of the ways of being a good teacher which contribute to some of the skills in an ESL teacher's armoury.

Figure 1 TESL Desiderata

Drilling, practising	Interacting with students	Time management
Explaining points of	Maintaining order	Use of first language or
grammar	Monitoring students	second language
Extended activities	Moving around	Using the board
Eye contact	Presenting new language	Using visuals
Giving instructions	Seating arrangements	-
Pair and group work	Setting up activities	
Handling errors	Teacher talk	

A secondary teacher who has undergone thorough training, and who has taught ESL for some time, will find that many of the above set of desiderata can be interpreted sufficiently well to appreciate their implications for classroom practice and implementation. A new secondary ESL teacher, however, may find that the different facets, advantages or pitfalls inherent in teaching principles such as "Presenting new language", or "Explaining points of grammar", may be far from clear. Many new ESL teachers,

especially in Hong Kong, are consequently unsure as to their pedagogic approach.

Advantages of Multimedia Programs

Audio-visual materials are no strangers to ESL teacher educators. Video, in particular, has had a long history of use in teacher education programs (Bailey, Curtis, & Nunan, 2001; Richards & Lockhart, 1994; Wajnryb, 1992). As a starting point, videotaped lessons are certainly one step to making classroom teaching skills more accessible to trainee teachers. The use of these, however, raises a number of issues. Firstly, an analogue medium such as videos is cumbersome to store and use. Secondly, videos are a much less user-friendly medium than CDROMs or DVDs. Videos lack precision search—an essential feature for time-efficient repeated playback. It is consequently difficult to move back and forth in videos in order to locate / replay crucial segments in order to make comparisons between, for example, aspects of teaching particular microskills. However, with digitised video clips, it is now possible to move from one clip to another at the click of a mouse, and to skip from one point to another on the same clip. Consequently, with CDROMs or DVDs, concepts can be more clearly exemplified. Thirdly, videos deteriorate over time; after a few years they often have to be discarded. The advantages that digital video disks hold over videos are therefore apparent from a number of angles. Now, with advances in information technology, such digitized video clips can be placed on the Web, and accessed by trainee teachers anywhere, and at any time they like.

Interactivity

An important principle advocated by educational technologists regarding the use of technology—both in the classroom and for self-access purposes—is that teachers should not simply watch, but should construct knowledge (Jonassen, 1995, 1996). The constructivist theory which follows from this is that students need to actively "participate" in technology, and, by so doing, will adjust their world view, their knowledge base. This call is echoed in

some of the principles based on discovery learning (see Goforth, 1994; Jacobs, 1992, for a discussion of the use of discovery learning aided by technology). As Jonassen, Peck, & Wilson (1999) argue, with regard to our assumptions about learning, knowledge construction results from activity, with knowledge anchored in the context in which learning takes place. Consequently, argue Jonassen et al. (1999, pp. 2–5), a number of perspectives on a given situation, principle or problem are available for consideration and discussion, with "meaning making" emerging from conversation and interaction.

In the field of ESL, multimedia is beginning to be used extensively. One noteworthy teacher education resource is Johnson's (1998) multimedia package "Teachers Understanding Teaching". This package illustrates admirably how to engage teachers in critically reflecting on and evaluating their own beliefs and classroom practices. The CDROM consists of a series of carefully-selected clips of both classroom teaching and interviews with ESL teachers where they reflect on their teaching and discuss their views. As well as providing activities for participants as they watch, the package also consists of a series of extension activities for teachers to conduct upon themselves and their peers both inside and outside their own classrooms to further the critical reflection that Johnson is attempting to promote. Constructivist outcomes can clearly be discerned in the package.

A further illustration can be found in Coniam (2003b) where a multimedia support project is described. The project comprises a CDROM for teachers in Hong Kong schools where English is the medium of instruction (EMI), and is designed to elucidate good pedagogic principles in the EMI classroom. That program aimed to encourage teachers to reflect on their own teaching, and to relate this more concretely to the EMI print support documents. The setup of the EMI multimedia program was an attempt to promote more than simply passive watching. However, the EMI program consisted of a limited set of choices, suggesting that the term "interpassive" (where a user is engaging silently with the medium—albeit reflectively),

was, on balance, a better categorisation of the multimedia implementation than "interactive"

Reflection Through Computer-mediated Discussion

The above paragraphs have explained the advantages of digitized classroom vignettes over traditional video recordings of whole lessons. Current approaches to ESL teacher education also devote varying degrees of attention to teacher reflection (Bailey, Curtis, & Nunan, 2001; Freeman & Richards, 1996; Richards & Lockhart, 1994). One of the activities for teacher reflection made possible by recent advances in information technology is computer-mediated discussion (CMD). Computer conferencing has been developing rapidly in recent years as an activity for teachers' professional development (Wu & Hiltz, 2004). (For a review of CMD applications in teacher education, see Sze, 2005.)

In this multimedia project, teachers who have watched the same video clips that relate to one aspect of classroom teaching will then engage themselves in a CMD session. CMD has a number of practical advantages for teachers' professional development. First, it is asynchronous. Teachers can take part in a discussion at any time convenient to them. Second, it takes place in a virtual environment. Teachers can take part in a discussion anywhere they like. Third, the content of an online discussion is recorded. Teachers can re-read any previous entry they like. Fourth, unlike a face-to-face discussion which permits only one speaker at a time, there is no limit on the chains of interaction in a computer-mediated discussion. Fifth, less assertive participants who may be disadvantaged in a face-to-face discussion will have no difficulty having their "voices" heard in a computer conference.

Benefits of the Project: A Summary

We believe that the present project is a useful resource for ESL teacher education programs. The digitised video clips help to bridge the gap between theory and practice, by exemplifying through multimedia different TESL classroom techniques. In addition to reading and hearing about these

techniques, trainee teachers will have the opportunity to witness how they are applied in authentic classroom settings. The video clips, which are classified and placed on the Web, enable trainee teachers to interact with the multimedia materials with ease. Furthermore, the computer-mediated discussion function which accompanies the bank of video clips facilitates reflection and sharing of experiences between trainee teachers.

The Web-based Multimedia Project

We now describe the workings of the project. We will explain how the multimedia project was produced, and what trainee teachers will go through when they have logged on to the program.

Program Production

The current project was inspired by a predecessor attempt by Coniam (2006), which was targeted at secondary ESL teachers. The Coniam (2006) project had been created for use within an institution's network. The present project for preservice primary ESL teachers capitalized on experiences gained from that project, and was built on the Internet so that the teachers could access the project materials anywhere and at any time. In the present project, a number of live primary ESL lessons (generally 35 minutes in length) were video-recorded, with the teacher's permission, and the videos digitised into MPEG 1 files (i.e., VCD-quality). The videos were then scrutinised for aspects of ESL classroom techniques that they could exemplify. From the segments identified, extracts were then made from the MPEG files. With the help of student helpers specially trained for the project, each video clip was then transcribed.

A program template was developed, consisting of a series of hyperlinked HTML pages. An implementation in HTML permits links to be easily made between elements. In the current project, these links are positioned principally between the pedagogic principles underpinning TESL principles (Figure 1 above). The program is adapted from that described in Coniam (2006).

Program Operation

When teachers log on to the program, they will see an introductory screen which shows a list of headings that capture aspects of TESL classroom techniques, such as "drilling/practising", "giving instructions", and "teaching grammar", as well as general classroom and lesson management skills, such as "seating", "using visual aids" and "eye contact". Figure 2 shows the full list of headings.

Figure 2 Opening Page: Table of Contents

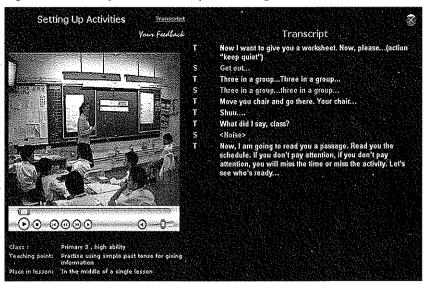
Drilling, Practising	Explaining Language	Teaching Grammar
Clip1 Clip2 Clip3 Clip4 Clip5 Clip6	Clip1 Clip2 Clip3	Clip1 Clip2 Clip3
Extended Activities	Eye Contact	Teaching Pronunicatio
Clip1 Clip2 Clip3	Clip1 Clip2 Clip3	Clip1 Clip2 Clip3
Giving Instructions	Group Work (students on task)	Teaching Speaking
Clip1 Clip2 Clip3 Clip4 Clip5 Clip6	Clip1 Clip2 Clip3	Clip1 Clip2 Clip3
Handling Errors	Interacting with Students	Teaching Listening
Clip1 Clip2 Clip3 Clip4 Clip5 Clip6	Clip1 Clip2 Clip3 Clip4 Clip5	Clip1 Clip2 Clip3
Maintaining Order	Monitoring Students	Teaching Reading
Clip1 Clip2 Clip3	Clip1 Clip2 Clip3 Clip4 Clip5	Clip1 Clip2 Clip3
Moving Around	Presenting New Language	Teaching Writing
<u>Clip1 Clip2</u> Clip3	Clip1 Clip2 Clip3 Clip4 Clip5	Clip1 Clip2 Clip3
Seating	Setting up Activities	Teaching Vocabulary
Clip1 Clip2 Clip3	Clip1 Clip2 Clip3 Clip4 Clip5 Clip6 Clip7	Clip1 Clip2 Clip3 Clip4 Clip
Student Interaction	Students Following Up (writing on board)
Clip1 Clip2 Clip3	Clip1 Clip2 Clip3	
Teacher Talk	Time Management	
Clip1 Clip2 Clip3	Clip1 Clip2 Clip3	

Each microskill (that is, either a TESL or general classroom skill), however, may have a number of illustrative clips (e.g., Drilling/Practising has six clips) from different classrooms and by different teachers. The advantage of having a number of clips is that a microskill may be presented from different perspectives, affording trainee teachers with a range of scenarios and experiences. As far as possible, the different clips present varied approaches to the skill in question. Certain clips show what might be termed good pedagogical practice and some less good. This is not laid out as such, and trainees are encouraged to construct for themselves, in

conjunction with their peers, a framework for what might be more and less desirable in pedagogical terms.

If the teacher now clicks on a link, she is taken to a page which contains a related lesson clip. Figure 3 illustrates a clip where the teacher has clicked on "Presenting New Language: Clip 1".

Figure 3 Transcript and Video Clip for "Giving Instructions"



When the page appears, its video clip plays automatically, with a transcript of the lesson segment appearing to the right-hand side of the page. The purpose of the transcript is to enable the lesson segment which the clip is demonstrating to be more easily followed; at times, without the support of the transcript, this can be difficult because the teacher may be talking quietly or talking to a student. The transcript consequently enables the viewer more easily to work out what is taking place in the lesson.

If the teacher clicks on the "Your Feedback" button (to the middle top of the screen—beneath the Transcript button), she will be taken to an online forum page where, after logging in, she will be able to take part in an asynchronous computer-mediated discussion with other trainee teachers who have viewed the same clip. (Of course, if trainee teachers watch the same

clip together in a face-to-face session, they can be put in a live discussion immediately after the viewing.)

As stated earlier, while the CDROM produced for the Hong Kong secondary ESL teachers (Coniam, 2006) included evaluative comments, the nature of that program rendered teachers essentially as "interpassive" watchers who only observed the video clips and noted the trainer's observations on the clip through the comments. The present design, in contrast, encourages teachers to interact in greater depth with the multimedia.

Discussion and Conclusion

This article has described the development of a Web-based multimedia project for preservice primary ESL teachers in Hong Kong. The project aimed at making TESL principles more accessible, user-friendly and, ultimately, more understandable than is likely with support material presented in print-based or traditional video-based form alone. The project design has not, however, merely involved digitizing video recordings. It also incorporates hypertext, permitting links between concepts to be easily specified. The purpose of the project has therefore been to create an instructional support resource in a multimedia format so that it is accessible and understandable utilising the possibilities which multimedia and information technology offer. This means that while video samples have been used to exemplify elements of language and pedagogy, additional features such as transcripts and CMD provide support for the video clips.

Primary school teachers in training using the multimedia platform have commented that the CMD facility has been a useful, and very important, addition on the different video clips in that they serve as the starting point for many discussions among themselves of the value and applicability of the different approaches and techniques that they have observed. The program has been a fruitful way to explore the issues as they attempt to grasp the demands of teaching ESL in Hong Kong's primary classrooms.

The production of the program has not been a small task. From

conceptualising how the "information" in the print document might be presented to how that technical "detail" might be moulded into a usable instrument has taken a considerable amount of effort, planning, implementation and revision. One time-consuming aspect in the development of the project has been the videotaping of an appropriate sample of teachers, the accompanying time spent in transcribing and evaluating the lessons and, subsequently, the identification of clips which exemplify different concepts associated with the skills that need to be developed for ESL teaching in Hong Kong primary schools.

While this article has described a multimedia implementation targeted at clarifying the principles of ESL teaching, the multimedia program format could readily be adapted to other teaching situations and contexts. In the context of task-based learning, for example, the format could be adapted in order to exemplify strategies and techniques associated with different facets of the task cycle. These could again be linked to video clips and comments which illustrate good practice. As either a classroom-based aid or, as this article has revealed, a discovery-learning tool for ESL teachers in training, multimedia can be a powerful aid in raising awareness and conceptualisation in both teaching and learning.

Note

1. In response to concerns among different sectors of the business and education communities in Hong Kong over perceived falling language standards, the feasibility of establishing an English language proficiency test for ESL teachers—which would define a minimum standard of ability—was investigated in the late 1990s. The first Language Proficiency Assessment for Teachers of English (LPATE) for ESL teachers was administered in early 2001. The test consists of a battery of "formal skills" tests (i.e., reading, writing, listening, speaking), together with a live classroom language assessment test—the Classroom Language Assessment (CLA). The CLA is a performance test conducted on a teacher's own classes (see Coniam & Falvey, 1999, for a discussion).

Referènces

- Bailey, K. M., Curtis, A., & Nunan, D. (2001). Pursuing professional development: The self as source. Boston, MA: Heinle & Heinle.
- Coniam, D., & Falvey, P. (1999). The English language benchmark initiative: A validation study of the classroom language assessment component. *Asian Pacific Journal of Language in Education*, 22, 1–35.
- Coniam, D. (2001). Illustrating the demands of a performance test through an interactive multimedia syllabus. *IALL Journal of Language Learning Technologies*, 332, 23-38.
- Coniam, D. (2003a). Perceptions of a multimedia syllabus—making the demands of a performance test more accessible. SYSTEM, 311, 55-70.
- Coniam, D. (2003b). Multimedia support for principles related to teaching in Englishmedium schools. *Journal of Basic Education*, 122, 175–190.
- Coniam, D. (2006). Enhanced multimedia support for English language teacher education. The Teacher Trainer, 20(2), 11–15.
- Evans, S. (1996). The context of English language education: The case of Hong Kong. RELC Journal of Language Teaching and Research in Southeast Asia, 27, 30-55.
- Freeman, D., & Richards, J. C. (Eds.). (1996). *Teacher learning in language teaching*. Cambridge: Cambridge University Press.
- Goforth, D. (1994). Learner control = decision making + information: A model and meta-analysis. *Journal of Educational Computing Research*, 111, 1–26.
- Gower, R., Philips, D., & Walters, S. (1995). *Teaching practice handbook (new edition)*. London: Macmillan Heinemann.
- Harmer, J. (2001). The practice of English language teaching. Essex: Longman.
- Hong Kong SAR Government. (2000). Language benchmark assessment for teachers—English Language: syllabus specifications, explanatory notes, specimen questions with suggested answers, scales and descriptors. Hong Kong: Government Printer.
- Jacobs, G. (1992). Hypermedia and discovery-based learning: A historical perspective. *British Journal of Educational Technology*, 232, 113-121.
- Johnson, K. E. (1998). Teachers understanding teaching. Boston, MA: Heinle & Heinle.
- Jonassen, D. H. (1995). Computers as cognitive tools: Learning with technology and not from technology. *Journal of Computing in Higher Education*, 6,

- 40-73.
- Jonassen, D. H. (1996). *Computers in the classroom: Mindtools for critical thinking*. New York: Prentice-Hall.
- Jonassen, D. H., Peck, K. L., & Wilson, B. G. (1999). Learning with technology: A constructivist perspective. Upper Saddle River, NJ: Merrill.
- Lai, C. (1994). Communication failure in the classroom: An exploration of cause. RELC Journal of Language Teaching and Research in Southeast Asia, 251, 99–129.
- Richards, J. C., Tung, P., & Ng, P. (1992). The culture of the English language teacher: A Hong Kong example. *RELC Journal of Language Teaching and Research in Southeast Asia*, 231, 81–103.
- Richards, J. C., & Lockhart, C. (1994). Reflective teaching in second language classrooms. Cambridge: Cambridge University Press.
- Stewart, J., & McCormack, C. (1997). Experiencing and supporting change: From lecture to interactive groupwork. *Teaching in Higher Education*, 22, 167–79.
- Sze, P. (2005). Researching the interaction in CMC applications in teacher education: Problems and prospects. *Global Chinese Society for Computers in Education*, 4(1/2), 116–141.
- Wajnryb, R. (1992). Classroom observation tasks. Cambridge: Cambridge University Press.
- Walker, M., & Warhurst, C. (2000). In most classes you sit around very quietly at a table and get lectured at...: Debates, assessment and student learning. *Teaching in Higher Education*, 51, 33–49.
- Wu, D., & Hiltz, S. R. (2004). Predicting learning from asynchronous online discussions. *Journal of Asynchronous Learning Networks*, 82, 139–152.

為香港小學英語教師職前培訓設計之網上多媒体支援 雖太胃、施敏文

摘要

本文描述一項為香港小學英語教師職前培訓設計之網上多媒体支援。英語教學師訓課程的挑戰之一,就是如何協助學員將所學到的教學法知識,在課室中有效地實踐出來;雖然觀課是可行方法之一,但實地觀課,卻並不容易安排,以致職前學員開始教學實習時,仍往往未能充分掌握各種教學技巧。要增加觀課機會,固然可以利用錄影帶觀課,但是錄影帶卻並非方便使用的媒介。本文介紹的多媒体平台,為學員提供大量的網上觀課機會,此平台包含各教學技巧之示範片段,學員並可於觀課後,參與網上討論。

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