Topic Area: Teacher Education and Mega-trends in Information Technology

Teaching English by the Web: Implications for Teacher Training in Hong Kong

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Part 1: Strengths, Weaknesses, Opportunities and Threats

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Abstract

This paper describes some strengths, weaknesses, opportunities and threats of Internet-based English language learning. This is done from the learning, teaching, technical and managerial points of view. A pilot survey was carried out to assess students' and teachers' experiences of learning and teaching English via the Internet in the Centre for Independent Language Learning of the Hong Kong Polytechnic University. Findings include that students believe using the Internet has improved their research skills; sometimes they study in more depth than is necessary; many find that they do not have enough computer knowledge when using the Internet, and that using the Internet has made them more independent learners. Most teachers had communicated with students by e-mail, ICQ or the Internet, but very few had put pages onto the Internet. Given the emphasis placed on IT by the Education Commission of the Hong Kong Government, suggestions are made for teacher training in the use of the Internet for English language learning Hong Kong.

Introduction

The strengths, weaknesses, opportunities and threats of the title of this paper will be examined from the learning, teaching, technical and managerial points of view. The implications for teacher training, especially in the light of The Hong Kong Education Commission's Education Blueprint for the 21st Century, are discussed. Results of a pilot study in the Centre for Independent Language Learning (CILL) of the Hong Kong Polytechnic University (HKPU), in which students and teachers were questionnaired and interviewed about the issues described below are included.

The Pilot Survey

Two separate questionnaires were administered, one to students, the other to teachers. All existing student members of the Centre for Independent Language Learning of the Hong Kong Polytechnic University who came to the Centre over a period of four days were asked to fill in a questionnaire. The sample size was 50. The questionnaire can be seen in Appendix One below, and the results are in Appendix Two. Two students were interviewed.

The questionnaire for teachers was administered to teachers in the Centre over a period of four days. The sample size was 20. This questionnaire can be seen in Appendix Three below, and the results are in Appendix Four. Four teachers were interviewed.

Strengths: Learning

Authentic Communication

As Levy (1987:171) says of e-mail and the Internet, "Students participate in authentic and meaningful communication with a real communicative purpose in mind." Students learning English on the Internet can communicate with native speakers and other language learners by e-mail, chat programs such as ICQ or AOL instant messenger, list-servs and by video-conferencing. Nine years ago Oxford (1990: 79) described how "Language teachers are helping their students at all proficiency levels set up local, regional, national and international networks for the exchange of student-created messages with other students, who may be either native speakers or learners of the target language." Hong Kong Education Commission's 'Education Blueprint for the 21st Century' emphasizes the importance of improving the cross-cultural abilities of Hong Kong students, so teachers will need to be trained in the uses of the above programs, how to run them, and how to facilitate their use by students, for example, how to set up and run a list-serv.

In Question 1 of the survey, students were asked, "Do you think that using e-mail has improved your English?" 68% of students answered "Yes" to this question, showing that students find e-mail useful for language learning. In the interviews however, students raised issues such as the bad grammar in some student-to-student e-mail and that, when communicating with native speakers, content rather than form was important.

Collaborative Language Learning

Students can collaborate with native-speakers or other language learners by e-mail; chat programs such as ICQ or AOL Instant Messenger, list servs, Internet phone or video conferencing. Here the computer is acting as a tool for computer-mediated communication. Research in this area summarized by Nunan (1992: 5) suggests that collaborative learning is more effective than competitive learning. Teachers may need training in how to use these communication technologies, or there is a risk of the teacher being left out of the students' study activities, although the survey of teachers suggests that this is not a problem in the English Language Centre of HKPU, with 95% of teachers using the Internet, e-mail, or ICQ to communicate with students.

In Question 4 of the survey, students were asked, "Have you used the Internet, e-mail or ICQ to discuss your study with your classmates?" 46% of students answered "Yes" to this question, so it seems that collaborative learning is reasonably extensive.

Learner-Centered

Learners can decide what sources to study from, when, where and at what pace to study, and what depth to study to. Learners can study in a way that suits their learning style, as

they can use the computer as a tool for communication, or as a surrogate teacher, an infinitely patient personal tutor (Bush & Terry 1997: 303). Guidelines and guidance may need to be given by teachers in all these aspects, and teachers need to have been trained in what guidance to give.

In Question 5 of the survey, students were asked, "Have you used the Internet, e-mail or ICQ to study at home?" 48% of students answered "Yes" to this question, demonstrating that students utilise the learner-centeredness of being able to decide when and where to study.

The Internet may also be useful for students learning in mixed-level classes. "Instructors can make additional, optional texts or files available to students, including more challenging materials for accelerated students and remedial or review materials for slower students." (Godwin-Jones 1996:71)

Modifiable

Internet pages containing lists of recommended materials, and also pages of material written by teachers, can be modified at any time, with the modifications available to the students immediately. These modifications can be in the light of the teacher finding new information, or in response to students' suggestions. However, the students who were interviewed had not done this.

If the students are publishing project work on the Internet, students and teachers can also quickly modify this work. Such modifications can be in response to feedback from students, other students, teachers, parents, and other members of the global Internet community, for example content experts, or viewers with navigation or site design and content suggestions. Teachers will need to be trained in how to give this feedback, for example giving suggestions about indexing and navigating students' sites, as part of learning to write English is learning to make that writing reader-friendly.

In Question 6 of the survey, students were asked, "Have you put any project work on the Internet?" 32% of students answered "Yes" to this question. However, in Question 3 of the teachers' survey, teachers were asked, "Have you put any student project work on the Internet?" 90% of teachers answered "No" to this question.

Motivating

Students studying with the help of the Internet may find it motivating due to the aspects mentioned above of learner-centeredness, modifiability, and the opportunities for authentic, meaningful communication about the knowledge they acquire and display. Trainee and practising teachers may also find the use of the Internet in their training motivating. For example, using a chat program can be likened to "conversation in slow motion" (Bush & Terry 1997: 166), which allows more time to think and compose. Bush & Terry (1997: 172), cite student comments that in class, when a teacher picks on a student to answer a question, it is very stressful for that student, but that when using the computer there is more time and thus less pressure. Part of teacher training is in controlling the stress level of the learning environment.

Research by Warschauer (1996: 29) showed that use of e-mail for writing positively correlated with motivation in a study of student writers in Hong Kong, Taiwan and the U.S. As knowledge of ways to motivate students is important for teachers, they should be trained in the use of e-mail with writing classes. Warschauer's conclusions to his research (1996: 41) were that a wide range of students have a positive attitude to using computers for writing and communication in the language classroom and that reasons for this include feelings of personal empowerment and the enhancement of learning opportunities. His final point is that "Teachers can enhance student motivation by helping students gain knowledge and skill about using computers, giving them ample opportunity to use electronic communication, and carefully integrating computer activities into the regular structure and goals of the course".

In Question 7 of the survey, students were asked, "Do you think that the Internet, e-mail or ICQ help motivate you to study?" 56% of students answered "Yes" to this question. Further research could be done on the causes of this motivation, as it may be ephemeral, arising purely from the newness of the technology, or it may have other causes. When more is known, serious consideration should be given to training teachers to take advantage of this motivating aspect of Internet use.

Emphasizes Learning Skills

Using the Internet as a tool for communication can emphasize and practise research skills in finding learning resources; critical thinking skills in judging the reliability and usefulness of those resources; organizational skills in analyzing and synthesizing information, and presentation skills in communicating information efficiently and effectively. Teachers need to be trained to teach all these skills in relation to the Internet.

In Question 8 of the survey, students were asked, "Do you think that finding information on the Internet improved your research skills?" 96% of students answered "Yes" to this question. In the interviews students commented that Internet research produced better and more up-to-date information, but that it was time-consuming to check all the links suggested by search engines.

In Question 9 of the survey, students were asked, "Do you think that thinking about information that you find on the Internet improved your critical thinking?" 56% of students answered "Yes" to this question.

In Question 10 of the survey, students were asked, "Do you think that analyzing information from the Internet has improved your organizational skills?" 62% of students answered "Yes" to this question.

In Question 11 of the survey, students were asked, "Do you think that presenting information from the Internet has improved your presentation skills?" 56% of students answered "Yes" to this question.

The positive responses to these four questions about learning skills suggests that many students believe that using the Internet improves their ability to deal with information, as well as to collect it. However, there is need for caution. For example, students may be

equating more convenient searching provided by the Internet with improved research skills, but they may not be doing research as thoroughly as may be possible in a library and they may be using less rigorously-edited sources.

Strengths: Teaching

Many teaching resources are available for free on the Internet. For example, there are tools such as on-line concordancers and dictionaries, as well as language learning sites. It is easy to save and share these resources for re-use. English teachers in schools can also communicate with each other via e-mail and through projects such as the Teachers of English Language Education Centre computer network, called TeleNex (Teachers of English Language Education Nexus) coordinated by Hong Kong University. There is also the possibility of more effective teaching due to a combination of the factors mentioned above.

In Question 10 of the teachers' survey, teachers were asked, "Do you share resources that you have found on the Internet with your colleagues?" 65 % of teachers answered "Yes" to this question, 25% answered "No", and 10% didn't know.

Strengths: Technical

Possibilities for Collaboration

Once a piece of information is put on the Internet it can remain there for a long time. Therefore students and teachers do not have to arrange to be on-line at the same time; i.e. Internet-mediated communication can be asynchronous. The information can also usually be accessed from any Internet-connected computer in the world, so students and classes can collaborate internationally. For an international trading city like Hong Kong, cross-cultural communication abilities are important. According to the Hong Kong Education Commission's Education Blueprint for the 21st Century, one of the aims of tertiary education is to produce graduates who have "the ability to live and work in a diverse society and cross-cultural environment." Teachers, especially university teachers, therefore need to be trained in how to set up and promote such cross-cultural links.

In Question 3 of the survey, students were asked, "Have you communicated with native speakers of English using the Internet, e-mail or ICQ?" 48% of students answered "Yes" to this question, suggesting that there is considerable cross-cultural communication going on.

Multimedia

The Internet can be used for the presentation of multimedia information. Liu (1994:299) cites Craik and Lockhart's Levels of Processing Theory, which describes how multimedia can deepen the level at which information is processed, and so aid retention. This can be part of a teacher's training in educational theory.

Hypertext

Also from a educational theory point of view, Liu (194:301) continues, "The technology of hypermedia makes the input of information more natural and direct, the display of information more active and realistic, the representation of information richer and more detailed, and the construction of information more flexible and efficient." Liu also comments on speculation that the organisation of hyperlinked information mirrors the organisation of information of the human brain, which may aid learning.

Interactivity

Multimedia and hypertext can be made more interactive than just providing choices about what information to see. For example, the Internet could be used as a surrogate teacher of how to present facts and figures in a presentation. Changing the angle of a line on a graph could change an utterance suggested to describe the line. In addition, if the Internet is being used as a tool for communication, the student can interact with other users.

Strengths: Managerial

Computer Assisted Language Learning (CALL) is well supported by educational managers in Hong Kong in investment in hardware. However, in Question 16 of the teachers' survey, teachers were asked, "Does management provide positive incentives for you to teach using the Internet?" 20% of teachers answered "Yes" to this question, 50% answered "No", and 30% didn't know. Managers might, therefore consider reinforcing their support for web-based language teaching.

Weaknesses: Learning

Cognitive Overhead

Liu (1994:296) points out that "as a new way of learning, hypermedia imposes additional cognitive overhead upon a user as he or she tries to keep track of links, makes decisions about how to proceed" and tries to remember interesting pathways that can be explored later. Sharp (1996: 237) cites Fiderio as pointing out that "students may be attracted to tangential topics and be diverted away from subject matter that is relevant", although in the interviews one student commented that this was only a minor problem. Teachers can be trained to show students how to use 'Go' and 'History' lists and how to open a new browser window to deal with this problem.

What Depth to Study To

Students need guidelines about what depth they should study something in. Levy (1997:209) says that "it is essential that students are able to seek and find advice...With no guidelines built in, students will need assistance from teachers." This is because an enormous amount of information is available on the Internet, and a subject can be studied to great depth. For example in guiding students' project work, teachers need to be able to guide students in maintaining a balance between depth, breadth and amount of

information presented, and in time-management skills so that the students' workload is not too high. It could also be argued that it is the students' responsibility to allocate their time efficiently, especially as this is an independent learning skill. However, students could be made aware of the problem by teachers, and referred to sources help for dealing with it.

In Question 13 of the survey, students were asked, "Do you find that using the Internet sometimes you study something in more depth than is necessary?" 72% of students answered "Yes" to this question, indicating that this is a problem that needs to be taken seriously.

Lack of Computer Familiarity

Many students (and teachers) may find that using computers for learning is a forbidding prospect.

In Question 14 of the survey, students were asked, "Do you find that your computer knowledge is not enough when using the Internet?" 74% of students answered "Yes" to this question.

In Question 5 of the teachers' survey, teachers were asked, "Do you find that your computer knowledge is not enough when using the Internet?" 65% of teachers answered "Yes" to this question, 30% answered "No", and 5% didn't know.

This highlights the need for resources to help students and teachers with computer knowledge problems. In Hong Kong schools IT Coordinators can help with this problem by providing on-going teacher training.

Lack of Use by Students

In Question 2 of the survey, students were asked, "Have you used the Internet to learn English?" Only 36% of students answered "Yes" to this question. Two students commented that they did not know how to use the Internet for language learning, and one did not realise that it was possible to do on-line activities such as grammar and reading exercises. The low percentage may reflect that students assumed that the question was about using the computer as a surrogate teacher, rather than as a tool to learn English by practising their communication skills. Teachers trained in the use of the Internet for English language learning would be able to raise the awareness of their students on this distinction, and demonstrate the possibilities in both areas to their students.

Weaknesses: Teaching

No Quality Control Editing System

There is no quality control editing system of materials on the Internet as there is for published books and journals, so students and teachers need to employ more critical thinking about the content of Internet teaching materials. For example, teachers need to complete activities before recommending them to students to ensure that the answers are correct and that feedback is appropriate. This is time-consuming.

In Question 14 of the teachers' survey, teachers were asked, "Do you find that there is a lot of low-quality language teaching material on the Internet?" 35% of teachers answered "Yes" to this question and 65% didn't know.

This may be because teachers are unused to writing detailed self-access feedback, for example on grammar exercises, of the kind that students need for self-access study on the Internet. Many such exercises on the Internet only tell the students whether they were right or wrong, but don't give any explanation as to why an answer is right or wrong.

In Question 13 of the teachers' survey, teachers were asked, "Do you write highly-detailed feedback as part of Internet teaching materials?" 80% of teachers answered "No" to this question, and 20% didn't know. None answered "Yes", even though 15% of teachers had written pages that are on the Internet, although these pages may not be for English language teaching.

Difficulties in Assessment

In Question 15 of the teachers' survey, teachers were asked, "Do you find it hard to assess students' work that is based on Internet research?" 35% of teachers answered "Yes" to this question, 40% answered "No", and 25% didn't know. In the interviews, teachers highlighted plagiarism as the main issue, because it is very easy to copy and paste information from the Internet into an assignment. As assessment is a very important part of the Hong Kong education system, teachers need to be trained how to deal with this problem. Possible approaches range from educating students about plagiarism and citation to penalizing plagiarists. It has also been suggested by Kaufman that the problem of plagiarism is lessened in Problem-based Learning.

Weaknesses: Technical

Finding Information in Cyberspace

Students can get lost in cyberspace, due to navigation problems, spurious search results and distractions into other interesting topics that are not central to the task at hand.

In Question 12 of the survey, students were asked, "Do you find it hard to find useful information on the Internet?" 50% of students answered "Yes" to this question.

In Question 4 of the teachers' survey, teachers were asked, "Do you find it hard to find useful information on the Internet?" 20% of teachers answered "Yes" to this question, 70% answered "No", and 10% didn't know. One teacher commented that she found it necessary to do a general search of the Internet using search terms that would give a large number of responses, and then filter those 'hits' herself. This, she said, was very time-consuming. One possible way to cope with this problem is by teachers writing annotated lists of materials that they recommend.

Learning How to Write Internet Language Learning Materials is Difficult

Learning Internet authoring is time-consuming and requires technical expertise, as HTML is not designed for teaching. For example, it is difficult to do question types other than multiple choice or click a place in a picture without having to do server-side programming or use a more difficult computer language such as Java Script or multimedia authoring programs such as Macromedia Director. This may be reflected in the teachers' answers to questions 3 and 7.

In Question 3 of the teachers' survey, teachers were asked, "Have you put any student project work on the Internet?" 10% of teachers answered "Yes" to this question and 90% answered "No".

In Question 7 of the teachers' survey, teachers were asked, "Have you written pages that are on the Internet?" 15% of teachers answered "Yes" to this question and 85% answered "No".

Weaknesses: Managerial

Lack of Positive Incentives for Teachers to Learn Internet Skills

Although management in Hong Kong often provide the hardware and software necessary for teachers to teach via the Internet there is a perception among teachers that the learning of new skills necessary to teach using these facilities and the extra contribution of time necessary to use them are not well-rewarded.

In Question 16 of the teachers' survey, teachers were asked, "Does management provide positive incentives for you to teach using the Internet?" Only 20% of teachers answered "Yes" to this question, 50% answered "No", and 30% didn't know.

In Question 3 of the teachers' survey, teachers were asked, "Have you put any student project work on the Internet?" 10% of teachers answered "Yes" to this question and 90% answered "No".

In Question 7 of the teachers' survey, teachers were asked, "Have you written pages that are on the Internet?" 15% of teachers answered "Yes" to this question and 85% answered "No".

Opportunities: Learning

More Effective Learning

The Hong Kong Education Commission's *Education Blueprint for the 21st Century*, (1999:9) informs us that "young people must be...able to make the best use of IT.", and that "School education should enable every student to acquire a basic level of competence in knowledge and skills, including biliteracy and trilingualism, ... and IT." Teachers need to be trained to use the Internet and English as an international language to provide tertiary students with the "maximum opportunities of international exposure"

(Education Commission 1999: 45). In addition, they will need to teach the students the "capacity to venture the international area...to communicate internationally" and "to work in cross-cultural environments" (Education Commission 1999: 44) with the "inclusion of international experience in the curriculum" (Education Commission 1999: 47).

Development of Independent Learners

The Education Commission advocates allowing "more student autonomy ... (strengthened) with IT" (Education Commission 1999: 46). In Question 16 of the survey, students were asked, "Do you think that learning English on the Internet has made you into a more independent learner?" 72% of students answered "Yes" to this question. One student commented that at university one should be an independent learner, and that the Internet was an aid in studying independently.

Raises Awareness of the Need for and the Techniques of Life-Long Learning

The Education Commission (1999:15) also says that one of the overall aims of education should be to make sure "each individual is ready for continuous self-learning", and that a student's first degree should be seen "as the foundation for life-long learning". Teachers need to be trained in how to realise this aim in order to fulfil the government's requirements. One of the resources that students can use for life-long learning is the Internet, and they need to be given experience in how to do this by their teachers.

In Question 17 of the survey, students were asked, "Do you think that you will often use the Internet to learn in your life?" 68% of students answered "Yes" to this question.

Opportunities: Teaching

More Effective Teaching

In Question 11 of the teachers' survey, teachers were asked, "Do you think that the Internet can help you teach more effectively?" 70% of teachers answered "Yes" to this question, and 30% answered that they didn't know. In the interviews one teacher commented that the Internet was effective in finding materials to use in class, but that she hadn't used it in class.

Reduction of teacher workload, for example with automated feedback and marking

Bush & Terry (1997: 265) highlight practical applications for technology as additional ways to counter teacher anxiety.

In Question 17 of the teachers' survey, teachers were asked, "Do you find that your teaching workload is reduced by the use of the Internet?" 5% of teachers answered "Yes" to this question, 60% answered "No", and 35% didn't know. One teacher

commented that the Internet could help him find resources, but it didn't reduce his workload. The 5% of teachers who answered positively may be referring to HKPU's online assessment grade recording system, in which the Internet is used to upload student course grades to the central computer system. This system saves teachers' time by removing the need to input students' names, and it automatically derives a final course grade by calculating a weighted average of the grades for individual assignments.

Raises Awareness of the Need for Life-Long Teacher Training

In Question 18 of the teachers' survey, teachers were asked, "Have you received any teacher training on-line?" 15% of teachers answered "Yes" to this question and 85% answered "No".

Opportunities: Technical

There are technical opportunities for multimedia on demand; individualized materials or individualized paths through materials; automated tracking of student progress through set materials by automatically-generated reports, as seen, for example, in the program Question Mark Perception; and on-line teacher training.

Opportunities: Managerial

Using the technical opportunity for automated tracking of student progress, it may be possible to get better data on student performance and thus better data on school performance using the Internet.

On-line Teacher Training Leading to More Highly-Skilled Staff

On-line teacher training already happens. For example, Ariza & Matsuno (1999) describe a partially on-line TESOL course for in-service teachers geographically widely-distributed in Florida, U.S.A. Also, trainee teachers now often have to take IT courses, which may include on-line sections. Leung et al. (1999:8) describe compulsory IT competence tests in the IT orientation program and the self-study Easy Learning Information Technology Education (ELITE) program at HK Institute of Education. They say that, "By setting up benchmark competence levels, student teachers are required to attain these levels before they can work as teachers at schools." Bush & Terry (1997: 281) also point out that eighteen states in America require technology training for teacher certification.

Threats: Learning

Information Overload

The difficulties of finding suitable information on the Net may make it an inefficient source of English learning materials and opportunities compared to other resources. The size of the Internet, and thus the amount of information that must be searched to find useful sites, is growing rapidly. In January 1999 there were 43,230,000 Internet hosts

advertised by the Domain Name Server (Network Wizards 1999), up from 29,670,000 in January 1998, an increase of about 48% in one year.

In Question 12 of the survey, students were asked, "Do you find it hard to find useful information on the Internet?" 50% of students answered "Yes" to this question.

In Question 19 of the survey, students were asked, "Do you think that finding information on the Internet an efficient way to study?" 72% of students answered "Yes" to this question.

Threats: Teaching

Other Priorities

Busy teachers may prioritize other new initiatives; e.g. in Hong Kong Target Oriented Curriculum (TOC) and School Management Initiative, especially if those initiatives are compulsory, as TOC is now for teachers of classes up to Primary Four.

In Question 20 of the teachers' survey, teachers were asked, "Is learning to use the Internet for language teaching a high priority for you?" 45% of teachers answered "Yes" to this question, 45% answered "No", and 10% didn't know.

Threats: Technical

Internet Congestion

Internet congestion may make the Internet too slow to be useful. All of the students and some of the teachers in the interviews mentioned waiting for Internet pages as a problem with Internet-based learning.

However, this problem could be reduced by downloading pages into the cache or the students' computers, although this is time-consuming; or by mirroring useful sites with the author's permission. This may be legal under copyright law as 'fair use' for educational purposes.

Internet congestion may also make the Internet too slow for multimedia to work acceptably, for example it may not be possible to stream acceptably-sized video. So the benefits of multimedia in learning may not be realisable.

Threats: Managerial

Cost

The cost of keeping up-to-date with hardware will be high. Buying a new HK\$10,000 computer every two years results in an expenditure of about HK\$5,000 per year per computer on hardware alone. For teachers or trainee teachers who want to have a computer at home, this is a considerable expense. However, this could be reduced by

educational organisations providing notebook computers that staff could use at work and at home.

The cost to the Government of IT education is also large. The Education and Manpower Bureau of the Hong Kong Government plans to spend HK\$3,214 million in capital cost and \$556 million in annual recurrent cost to implement various proposals" in its Strategy "Information Technology for Learning in a New Era" (EMB 1998). Other educational organizations with more limited budgets may have to consider cutting other programs to pay for this. For example, Oppenheimer (1997: 46) quotes a case of an American school that had to drop its music program to employ an IT coordinator.

Technocentrism

Technocentrism has been defined by Papert (1990) as "the fallacy of referring all questions to the technology." Steve Jobs, one of the founders of Apple Computer, who has given millions of dollars of computers to US schools, says, "What's wrong with education cannot be fixed with technology" (Oppenheimer, 1997:61, citing *Wired* Magazine).

Resource Allocation

Managers may decide after evaluation of Internet-based teaching that resources might be better allocated elsewhere, for example, in Hong Kong, building more schools to cope with an influx of Mainland Chinese children.

Web-Based Teaching May Become a Fad

The attitude of teachers to using the Internet as a teaching tool was investigated in Question 21 of the teachers' survey, in which teachers were asked, "Do you suspect that Internet-based teaching might be a fad?" 35% of teachers answered "Yes" to this question, 55% answered "No", and 10% didn't know. The teachers' comments on this issue in the interviews included: "The whole history of teaching is a series of fads."; "I don't think it's a fad because electronic communications is here to stay."; "It depends on how skillful the teacher is." "CALL (Computer-assisted Language Learning) is here to stay."; "It depends on the technology and how it develops." and "Not for Distance Learning, but it's a fad in the classroom."

Conclusions

The survey generally indicates that students who attend the Centre for Independent Language Learning of Hong Kong Polytechnic University find that e-mail and the Internet are motivating, have improved their research skills, and has made them more independent learners. Therefore there are reasons for teaching trainee and in-service teachers how to use e-mail and the Internet.

However, there are some disadvantages, for example students find that sometimes they study in more depth than is necessary, and that many find that they do not have enough

computer knowledge when using the Internet. Teachers can be trained in techniques for limiting the effects of these problems.

Most teachers in CILL had communicated with students by e-mail, ICQ or the Internet, but very few had put pages onto the Internet. Consideration can be given to further encouragement of in-service staff to develop their IT skills, especially in the area of ELT on the Internet.

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Appendix One: The Student Questionnaire

Survey on the use of the Internet in English Language Learning

Please tick \square an option, and sign the confidentiality statement at the bottom of the page.

1.	Do you think that using e-mail has improved your English?	1.	Yes □ No □
2.	Have you used the Internet to learn English?	2.	Yes □ No □
3.	Have you communicated with native speakers of English using the Internet, e-	3.	Yes □ No □
	mail or ICQ?	4.	Yes □ No □
4.	Have you used the Internet, e-mail or ICQ to discuss your study with your	5.	Yes □ No □
	classmates?	6.	Yes □ No □
5.	Have you used the Internet, e-mail or ICQ to study at home?	7.	Yes □ No □
6.	Have you put any project work on the Internet?	8.	Yes □ No □
7.	Do you think that the Internet, e-mail or ICQ help motivate you to study?	9.	Yes □ No □
8.	Do you think that finding information on the Internet improved your research	10.	Yes □ No □
	skills?		Yes □ No □
9.	Do you think that thinking about information that you find on the Internet		100 - 110 -

improved your critical thinking? 10. Do you think that analyzing information from the Internet has improved your organisational skills?	12. Yes □ No □ 13. Yes □ No □ 14. Yes □ No □
11. Do you think that presenting information from the Internet has improved your presentation skills?12. Do you find it hard to find useful information on the Internet?	15. Yes □ No □ 16. Yes □ No □
13. Do you find that using the Internet sometimes you study something in more depth than is necessary?	17. Yes □ No □ 18. Yes □ No □ 19. Yes □ No □
14. Do you find that your computer knowledge is not enough when using the Internet?	19. 1es 🗖 No 🗖
15. Do you find that you don't understand native speakers on the Internet, e-mail or ICQ?	
16. Do you think that learning English on the Internet has made you into a more independent learner?	
17. Do you think that you will often use the Internet to learn in your life?	
18. Have you written pages that are on the Internet?	
19. Do you think that finding information on the Internet an efficient way to study?	

I give my consent for the staff of the Centre for Independent Language Learning (CILL) of the Hong Kong Polytechnic University to use the information provided by me above for research purposes. I understand that all information provided will remain anonymous.

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Appendix Two: The Results of the Student Questionnaire

Survey on the Use of the Internet in English Language Learning

Please tick \square an option, and sign the confidentiality statement at the bottom of the page. % %

1.	Do you think that using e-mail has improved your English?	1.	Yes 68
2.	Have you used the Internet to learn English?		No 32
3.	Have you communicated with native speakers of English using the Internet, e-mail or ICQ?	2.	Yes 36 No 64
4.	Have you used the Internet, e-mail or ICQ to discuss your study with your classmates?	3.	Yes 42
5.	Have you used the Internet, e-mail or ICQ to study at home?		No 58
6.	Have you put any project work on the Internet?	4.	Yes 46
7.	Do you think that the Internet, e-mail or ICQ help motivate you to study?	_	No 54
8.	Do you think that finding information on the Internet improved your research skills?	5.	Yes 48 No 52
9.	Do you think that thinking about information that you find on the Internet improved your critical thinking?	6.	Yes 32 No 68
10.	. Do you think that analyzing information from the Internet has improved your organisational skills?	7.	Yes 56
11.	Do you think that presenting information from the Internet has improved your presentation skills?	8.	No 44 Yes 96
12.	. Do you find it hard to find useful information on the Internet?	0	No 4
	. Do you find that using the Internet sometimes you study something in more depth than is	9.	Yes 56 No 44

necessary?	10. Yes 62
14. Do you find that your computer knowledge is not enough when using the Internet?	No 38
15. Do you find that you don't understand native speakers on the Internet, e-mail or ICQ?	11. Yes 56
16. Do you think that learning English on the Internet has made you into a more independent	No 44
learner?	12. Yes 50
17. Do you think that you will often use the Internet to learn in your life?	No 50
18. Have you written pages that are on the Internet?	13. Yes 72
19. Do you think that finding information on the Internet an efficient way to study?	No 28
	14. Yes 74
	No 26
	15. Yes 40
	No 60
	16. Yes 72
	No 28
	17. Yes 68
	No 32
	18. Yes 26
	No 74
	19. Yes 72
	No 28

Appendix Three: The Teachers' Questionnaire

Survey on the Use of the Internet in English Language Teaching

Please tick \square an option, and sign the confidentiality statement at the bottom of the page.

1. 2.	Have you used the Internet to teach English? Have you communicated with students using the Internet, e-mail or ICQ?	1.	Yes □ No □ Don't Know □
3.	Have you put any student project work on the Internet?	2.	Yes □ No □ Don't Know □
4. 5.	Do you find it hard to find useful information on the Internet? Do you find that your computer knowledge is not enough when using the Internet?		Yes □ No □ Don't Know □
6.	Do you think that you will often use the Internet to teach in your life?	4.	Yes □ No □ Don't Know □
7. 8.	Have you written pages that are on the Internet? Do you think that finding information on the Internet is an efficient way for students to study?	5.	Yes □ No □ Don't Know □
9.	Do you use the Internet to find resources for teaching?	6.	Yes □ No □ Don't Know □
10.	Do you share resources that you have found on the Internet with your colleagues?	7.	Yes No Don't
	Do you think that the Internet can help you teach more effectively? Do you find that your teaching with the Internet is well-supported by management?		Yes □ No □ Don't Know □
13.	Do you write highly-detailed feedback as part of Internet teaching materials?		Yes □ No □ Don't Know □
14.	Do you find that there is a lot of low-quality language teaching material on the Internet?		Yes □ No □ Don't Know □
15.	Do you find it hard to assess students' work that is based on Internet research?		Yes □ No □ Don't Know □
16.	Does management provide positive incentives for you to teach using the	12.	Yes □ No □ Don't Know □

Internet?	13. Yes □ No □ Don't
17. Do you find that your teaching workload is reduced by the use of the Internet?	Know
18. Have you received any teacher training on-line?	14. Yes □ No □ Don't Know □
19. Do you think that the Internet threatens your role as a knower and chooser of materials?	15. Yes □ No □ Don't Know □
20. Is learning to use the Internet for language teaching a high priority for you?	16. Yes □ No □ Don't Know □
21. Do you suspect that Internet-based teaching might be a fad?	17. Yes □ No □ Don't Know □
	18. Yes □ No □ Don't Know □
	19. Yes □ No □ Don't Know □
	20. Yes □ No □ Don't Know □
	21. Yes □ No □ Don't Know □
I give my consent for the staff of the Centre for Independent Language I. Hong Kong Polytechnic University to use the information provided by a purposes. I understand that all information provided will remain anonymetric provided with the contraction of the co	ne above for research
Signed:	

Appendix Four: The Results of the Teachers' Questionnaire

Survey on the Use of the Internet in English Language Teaching

Please tick \square *an option, and sign the confidentiality statement at the bottom of the page.*

- 1. Have you used the Internet to teach English?
- 2. Have you communicated with students using the Internet, e-mail or ICQ?
- 3. Have you put any student project work on the Internet?
- 4. Do you find it hard to find useful information on the Internet?
- 5. Do you find that your computer knowledge is not enough when using the Internet?
- 6. Do you think that you will often use the Internet to teach in your life?
- 7. Have you written pages that are on the Internet?
- 8. Do you think that finding information on the Internet is an efficient way for students to study?
- 9. Do you use the Internet to find resources for teaching?
- 10. Do you share resources that you have found on the Internet with your colleagues?
- 11. Do you think that the Internet can help you teach more effectively?
- 12. Do you find that your teaching with the Internet is well-supported by management?

- 1. Yes 45 No 55 Don't Know 0
- 2. Yes 95 No 5 Don't Know 0
- 3. Yes 10 No 90 Don't Know 0
- 4. Yes 20 No 70 Don't Know 10
- 5. Yes 65 No 30 Don't Know 5
- 6. Yes 45 No 15 Don't Know 40
- 7. Yes 15 No 85 Don't Know 0
- 8. Yes 60 No 5 Don't Know 35
- 9. Yes 80 No 15 Don't

- 13. Do you write highly-detailed feedback as part of Internet teaching materials?
- 14. Do you find that there is a lot of low-quality language teaching material on the Internet?
- 15. Do you find it hard to assess students' work that is based on Internet research?
- 16. Does management provide positive incentives for you to teach using the Internet?
- 17. Do you find that your teaching workload is reduced by the use of the Internet?
- 18. Have you received any teacher training on-line?
- 19. Do you think that the Internet threatens your role as a knower and chooser of materials?
- 20. Is learning to use the Internet for language teaching a high priority for you?
- 21. Do you suspect that Internet-based teaching might be a fad?

- Know 5
- 10. Yes 65 No 25 Don't Know 10
- 11. Yes 70 No 0 Don't Know 30
- 12. Yes 25 No 50 Don't Know 25
- 13. Yes 0 No 80 Don't Know 20
- 14. Yes 35 No 0 Don't Know 65
- 15. Yes 35 No 40 Don't Know 25
- 16. Yes 20 No 50 Don't Know 30
- 17. Yes 5 No 60 Don't Know 35
- 18. Yes 15 No 85 Don't Know 0
- 19. Yes 0 No 95 Don't Know 5
- 20. Yes 45 No 45 Don't Know 10
- 21. Yes 35 No 55 Don't Know 10