Factors influencing EFL novice teachers’ adoption of technologies in classroom practice

Huong Thi Bao Dinh
Hanoi University, Vietnam
<huongdtb@hanu.edu.vn>
s3342103@student.rmit.edu.au


Abstract

A primary research conducted with 12 Vietnamese teachers of English using questionnaires and semi-structured interviews has revealed that big investment into technological infrastructure and the top-down approach of implementing technological change in English teaching are not a guarantee for the adoption of technology by English teachers in their classroom practice. Even when the teachers are receptive to using technologies and not afraid of losing face when they are not as technically competent as their students, without prompt technological professional development and timely technical support for teachers, the teachers cannot fully adopt technologies in their classroom teaching.

Introduction

The application of Information and Communication Technology (ICT) components such as audio and video players, computers with CD-ROMs, websites and the Internet has been proved very effective in English language teaching (Barr, 2004; Johanson, 1999; Pennington, 1996 & Warschauer, 2004).

In Vietnam, the government has recently formulated supporting policies to integrate technologies into education. One large-scale project is the Higher Education Project (HEP) starting in 1997 to equip Vietnamese universities with computers with the Local Area Network (LAN) and the Internet (HEP report). In foreign language education, a National Implementation Plan of Foreign Languages (English Language) Education for Vietnamese students worth 16,000 billion VND (approximately 1 billion USD) was proposed in 2006, one of whose objectives is to “improve learning environments with investment into learning facilities such as classrooms, multimedia labs and resource centers with books, video players or computers.” (Nguyen, 2006, para. 9).

The Thai Ha (pseudonym) University has become a participating university in the HEP project and has been equipped with 108 computers with the LAN network and Internet for language teaching (University Profile, 2006). Additionally, the university has invested
over a billion VND (one hundred thousand USD) in purchasing some language software packages such as *English Discovery* and *English Discovery Online* for teaching English.

However, these favourable political and technical conditions cannot guarantee the implementation of technology-enhanced lessons by the English teachers. Previous research has pointed out a number of factors influencing English teachers’ use of technologies in their practice. The most important factor is teachers’ belief in the benefits and ease of use of technologies. Lam (2000) claims that teachers decide to use technologies if they personally think that technologies are beneficial to and easy to be used for foreign language instruction. Leh (1995) states that, because they are not familiar with technologies and they do not find the ease of use of technologies, many foreign language instructors are afraid of using technologies in their teaching. McMeniman and Evans (1998, cited in Egbert, Paulus & Nakamichi, 2002) conclude that unless teachers are shown the positive effects of the new technology-enhanced teaching on the quality of the learning outcomes, language teachers do not incorporate technologies into teaching. Peck, Cuban and Kirkpatrick (2002) discover that because English teachers are not convinced that technology will fulfill their educational goals, they are reluctant to implement technology-enhanced lessons.

Additionally, teachers’ self-efficacy is identified as another affecting factor. When teachers are not confident, they are afraid that their competence is diminished because they would “look like an idiot” (Lam, 2000, p. 405). The fear of losing face in front of students makes teachers avoid instructional technologies in their teaching (George & Camarata, 1996). McGrail (2005) also concludes that English teachers tended to refuse technologies in their teaching because they did not feel comfortable using technologies.

Another factor is technological professional development provided to teachers. Leh (1995) revealed that although it was only in two weeks, the workshop at the Arizona State University helped foreign language instructors feel more comfortable about the computer and develop positive attitudes towards using it. Gray (1996) maintains that after a training course, the pre-service language teachers had more knowledge on computer applications, and the majority of them intended to use computers in classroom instruction. Lam (2000) concludes that the lack of professional development opportunities results in teachers’ negative attitudes toward instructional technology such as video. A teacher without enough training thought that “video did not really serve much of a purpose, [it only] confused the students and demotivated them” (p. 406).

As can be seen, previous research has pointed out some factors affecting teachers’ adoption of ICT in their classroom. However, the sample size of the majority of previous studies was rather small, so the conclusions they reached may not be generalised into other settings, including a Vietnamese university setting like my research context without further research. Furthermore, most previous research settings were in countries where English is taught as a second language. My research setting is different as it is in an EFL context, where language learners rarely have a chance to practise English with native speakers, thus teachers are their primary source of English language exchange. Additionally, most of the studies were conducted in developed countries such as the US, Canada or the UK where technologies such as computers are available. My research focus is technology used in Vietnam, a developing country, where sometimes “computers are an object of curiosity” (Lam, 2000, p. 413), so the affecting factors may be different.
This study was therefore conducted to fill in the research gap, and it was aimed to 1) identify factors affecting novice EFL teachers’ adoption of ICT in classroom teaching from their own perspectives, and 2) seek ways to support the teachers in their use of ICT for EFL teaching. Accordingly, the study was guided by the following questions:

**Overall question:** In the view of the novice teachers:

What are the factors that affect novice teachers’ adoption of Information and Communication Technology (ICT) in their English classroom teaching?

**Detailed questions:**

1. What are the novice teachers’ pedagogical issues with English teaching using ICT?
2. What professional development in relation to technology have the teachers been provided?
3. What experience have the teachers had and what technical support have they been given in using ICT in English classroom teaching?

**Method and research tools**

This research was conducted as a qualitative study, using a questionnaire and a semi-structured individual interview. The questionnaire items are the combination of both close-ended and open-ended components. The questions were designed for teachers’ opinions about their beliefs in the benefits and ease of use of technologies in classroom teaching, teachers’ self-efficacy, provided technological professional development and technical support. However, “respondents’ attitudes, beliefs, opinions…often seem to be unstable” (Foody, 1993, p. 7), so interviews were used to mainly triangulate the data collected from the questionnaire, which could help ensure the credibility of this research.

**Research participants**

I carried out my research with permanent novice teachers of English in the English Department of Thai Ha University. Novice teachers could be understood as new graduates, who have been teaching for less than six years and have not had a chance to obtain further qualifications. They thus need in-service professional development.

There were fifteen intended participants. Their email addresses were located through the mailing list of the English department. Before I conducted the research in August, 2006, they were sent emails inviting their participation into the study. 12 of them agreed to take part in the study. After two weeks, I met them in person to disseminate questionnaires. I conducted interviews with four participants. Details of questionnaires and interviews can be found in the Appendix.

**Findings**

Analysis of the data revealed three main categories: pedagogical factors, professional factors and technical factors.

**Pedagogical factors**
Adoption of ICT by novice teachers as both administration-driven and learning-driven

The information obtained from the questionnaires and interviews consistently suggests that the adoption of ICT by novice EFL teachers was driven by both the administrators and students’ learning. The findings reflect a “top-down approach” [where] “administrative mandate introduces the technology and administrative perceptions, decisions and strategies drive [the success of] adoption and diffusion” (Carr, 1999, p. 39), as well as the existence of conflicts between the administrators and the novice teachers.

On the one hand, the teachers’ adoption of ICT was governed by the administrators through a prescribed syllabus, through the selection of which teachers to teach with ICT, and through the determination of which language skills teachers could teach with ICT components.

Firstly, it was a must for the teachers to adopt ICT in their classroom teaching as required by the department’s administrators. The majority of novice teachers (eight questionnaire respondents) reported their use of ICT when they were “assigned by the department”. Specifically, the use of such technologies as cassette players and tapes was a mandate for the teachers in the syllabus.

… From the syllabus, I believe we cannot survive without the cassette players and the tape … (Mary).

… It is the task that the English department asked all teachers to do. It is compulsory … (Daisy).

Secondly, the department’s administrators selected specific teachers to teach with such packages as English Discovery and English Discovery Online. As reported, only Ben and Daisy were selected to teach students in the computer labs with these packages, while Mary and Eryn were not included in the list.

Finally, the administrators imposed which language skills to be taught with each software package.

… Although I know that the courseware English Discovery offers them reading and writing skills as well, the English Department decided that they [students] will focus on listening and speaking…(Daisy).

On the other hand, the teachers used ICT to teach because they saw students’ learning as the driving force. Eight questionnaire respondents reported that they used ICT when they “felt the need to”. The teachers expressed the benefits that technologies offered their students’ learning when adopting technologies in their practice, saying that ICT made the lessons “more vivid, more interesting”, so the students were more willing to study, and would “remember the lessons longer” (Daisy). Accordingly, the teachers claimed “… I think I need to do it. Students need some extra activities besides paper-based activities…” (Daisy).

Although some novice teachers were not required by the administrators to teach English with technologies, they adopted sophisticated technology such as computers and laptops in their own teaching because they wanted their students to have more learning motivations.
… I bring the laptop to the class when I think that my students need to see a film just to motivate them… (Eryn).

This seems to indicate the existence of some conflicts between the administrators and the novice teachers. For some reasons (I am not sure which reasons because I did not conduct any interview with the administrators), some novice teachers (Eryn) were excluded from the list of those who could teach English with technologies. However, they were the ones who tried to adopt technologies with their own resources.

**Perceived teaching pedagogy with ICT**

Findings for this subcategory mainly emerged from the interview. Information given by the participants shows that in teaching English with ICT, the novice teachers perceived a number of principles such as learning experience provision to students and the learner-centred approach. First, the novice teachers perceived that it was important to provide students with learning experiences with technology. They claimed that the focus of teaching research essay writing was not only to teach the skills of writing an essay, but to develop their students' “researching skills for the information on the Internet” (Ben). Accordingly, they tried to create opportunities for students to do “peer editing or making a draft” of their research essays and exchanging ideas with their classmates and teachers through emails (Ben and Eryn).

Secondly, the consideration of students as the centre of the instructional process is reflected in teachers’ views that ICT could be used as a way of bringing more excitement to students, and that teachers were both students’ collaborators and facilitators in teaching English with technology.

When it comes to using ICT equipment in classes, the novice teachers perceived that simply the use of laptops in their classes would bring more excitement for their students in the learning process.

… Sometimes students come from the rural or remote areas and they see technologies as something new, they want to see the laptop, they want to see the so called technology…. (Ben)

Moreover, the novice teachers regarded themselves as their students’ collaborators when technologies were used in the classroom instruction.

… Knowledge shared, knowledge doubled… Teachers and students are helping each other and improving their relationship to a higher level of cooperation (Daisy).

Therefore, the teachers actively sought assistance from their students with technical matters. In case they did not know something, “students would be willing to help” (Eryn), for example in setting up technical equipment for the lesson.

Once I had a video lesson, I was in a completely new room, I did not know how to plug the video player …one of the students said to me “Don’t worry. I will help you”. I was amazed to see him plug everything perfectly and then everything ran well… (Daisy).
In return, the students also viewed the teachers as their real collaborators, thus they actively assisted both the teachers and other classmates in technology use. This also suggests that the students started developing their autonomy in constructing their own knowledge.

One student, a technical guru, designed the website, and asked me to put the exercises, upload the learning materials [onto that website], and then all other students could download that kind of materials [to study]… (Ben)

Obviously, the novice teachers were not only students’ collaborators but also their facilitators when technology was used in their classes.

We think that without teachers’ supervision or control or guidance, students cannot do it [using technologies] themselves, or it will not be as effective. (Mary).

**ICT applications adopted by the novice teachers in classes**

The most commonly reported application of ICT in classes by the novice teachers was the use of video players in speaking lessons to develop presentation skills for students (six questionnaire responses). Specifically, the teachers used “video players to show students how to give a proper presentation” (questionnaire responses).

Additionally, the novice teachers used Over Head Projectors (OHPs) to illustrate difficult teaching points in their writing classes:

…. When I teach in the writing class with Cause and Effect essays, I use OHPs and we post the format [of the essay]… and the theory can be done very quickly [which] makes a good impression on the students. (Mary).

Furthermore, the novice teachers seemed to be unaware of or to overlook useful computer applications in English teaching such as: teaching reading and writing through the LAN and Internet, or developing four skills for students and providing them with learning experiences.

Of the 12 respondents in the questionnaires, only five listed computer applications such as “I use my laptop in Listening class using software support to make the sound better”, “I use computers in listening and discussion” and “I use laptop in presentation and teaching interpretation” while four did not give any responses at all. The remaining three gave irrelevant answers such as “I use my own laptop”.

**Professional factors**

*Teachers’ beliefs in ICT effectiveness*

It seems that the majority of teachers believed that the use of ICT was effective for their classroom language instruction (11 out of 12 respondents). They further detailed this point by choosing such responses as “ICT can attract students’ attention” (ten respondents); “ICT can provide students with authentic tasks” (nine answers); and “ICT can provide various modes of presentation” (seven participants).

The novice teachers appear to see the effectiveness of ICT in language teaching based on their own learning experience they had had at high school.
I think ICT plays a leading role in both teaching and learning a foreign language. I think that without it, we only learn to swim with a book. When I was at high school, we did not have ICT ..., so the first day I entered the uni, I could not speak a word…. So I encourage my students to watch cable TV and DVD with subtitles …or to listen to the news on radio on BBC, CNN or VOA (Daisy).

Moreover, the teachers saw the effectiveness of ICT as stemming from its responsiveness to their students’ learning needs. They believed ICT could provide students with authentic language in an authentic learning environment.

I think they [students] prefer the ICT to teachers, I mean the human. Because they do not live in the English speaking environment, the tape is something that can provide us with authentic English and … when we watch video, we can see with our own eyes how people use English in the English speaking environment (Mary).

**Teachers’ beliefs in the ease of use of ICT**

There was no consistency in the novice teachers’ views of how easy it was to teach English with ICT. Nonetheless, all responses were especially informative.

The level of ease or difficulty seemed to depend on the type of technologies adopted and their availability at the university. Audio cassette player was the easiest means of ICT to be adopted thanks to their availability and mobility for classroom use. Responses in support of this point include: audio cassette players are “easy to teach”, “easy to use, available”, “always available and essential tool in teaching”, “easy to use in most situations ...” and “very easy to use, mobile and flexible”.

The most difficult ICT applications to be adopted by the novice teachers were the Internet and websites mostly because of the poor information technology infrastructure. Participants reported the difficulties they had in adopting the Internet and websites in their teaching, which were caused by “slow Internet speed”, “no wifi”, “network failure”, unreliable network at the university, and the fact that “… Internet is only available in some function rooms or buildings”.

**Teachers’ confidence in using ICT**

The majority of novice teachers (nine participants) claimed that they were confident enough to use ICT in their classroom practice. Although they saw the truth that their students, being a younger generation, had better access to new technologies and were more technically competent than the teachers (Daisy), the novice teachers reported that they were never afraid of losing face before their students (Ben, Mary, Eryn).

Firstly, the teachers claimed that their technical capacity could be improved over time. “In the first lesson, if I am not competent enough, I think I can improve in the next ones” (Eryn). Even those who did express concerns with their technical competence did not try to avoid the use of technology in their classroom. They, in contrast, felt the need to study whichever technologies they had to use in their classroom teaching (Mary, Daisy).
Moreover, they considered their students’ better technical competence an impetus for them to learn more about technologies. “I should learn more to be as good as my students so that I will not get backward in the whole process” (Daisy).

Accordingly, the novice teachers still chose to adopt technologies, and were very open to their students about their technical competence. “Honesty is the best policy. If I don’t know something, I tell my students that I know very little” (Ben). “I am not the-know-all. If you [students] know something, please share with me and with others” (Daisy).

**Formal technological professional development provided to novice teacher**

Formal technological professional development was provided to novice teachers by the university in two main ways: regular training courses and short courses when some software packages were about to be integrated into the curriculum. All 12 participants reported their attendance into these types of courses. However, it seems that these training courses did not have a major impact on teachers’ use of ICT in their classroom because they focused on providing teachers with more theoretical aspects of ICT than the teaching pedagogy and how to apply technologies in EFL classroom practice.

In terms of regular training courses, the novice teachers reported attending three workshops jointly organised by the university and the University of Hawaii on teaching English with technologies. These workshops only aimed at “updating teachers with new ICT trends in teaching”, so the novice teachers did not gain enough knowledge about how to apply technologies into English teaching (Ben). Additionally, the teacher educators of these workshops just provided novice teachers with “books and new ideas in teaching with ICT” and modelling this themselves by using Powerpoint in delivering lectures (Daisy), rather than giving the teachers chances to practise teaching with technologies.

The short courses were mostly run by the programmers from the software providers, thus teachers were provided with the functions of the package, rather than the teaching pedagogies with technology. Furthermore, not all the related technical problems were addressed in those workshops. Accordingly, even the teacher-in-chief of the learning project had so many questions that he “continued to ask and ask” (Mary). The novice teachers also “discussed round and round” (Mary) about the problems associated with the package without coming up with any possible solutions. They, therefore, had to “live with the technical problems…” (Mary). In case they could not overcome the problems, they would have to choose “to go without technologies” (Eryn).

Because of the issues with professional training courses, the teachers seemed to turn to other types of informal professional development with technology.

**Informal professional development novice teachers actively sought**

The majority of novice teachers (11 participants) reported that they learned how to use technologies mostly by consulting colleagues who were technically competent, and learned how to apply technology into classroom teaching by exchanging ideas with their peer colleagues.
Teachers have group discussion about the problems, … and how to get over them… We often have the mailing list, for example when we work with video; we talk about the problems (Mary).

The participants also reported that they sought technical assistance from their own friends.

Most of the time, 80% [of the time] I go to my friends … (Daisy).

[I sought technical support] from friends around, acquaintances from social contact, for example, from people who work with IT a lot from Hanoi University of Technology … (Mary)

Technical factors

Equipment availability for teachers

Data for this subcategory was obtained from the questionnaire. Figure 1 and Figure 2 detail the findings.

Figure 1: Equipment availability for teachers

Figure 1 shows that novice teachers could get access to audio players whenever they needed them. Video players and OHPs could be accessible when teachers needed them, booked them or when they were allocated by the department. Computers and projectors could not be used by the teachers when they needed the technologies. The majority of teachers had to book both equipment well in advance or wait for the department to allocate the devices for their classes.

Figure 2: Computer use by teachers during classroom teaching
Figure 2 presents the findings on computer use by teachers in their practice. 50% of the respondents used their own laptop in their teaching, 17% of them did not use computers at all while only 33% used computers available at the university.

There seems to be a link between the availability of equipment and teachers’ use of computers. Because of the unavailability of equipment for teachers, most novice teachers turned to their own equipment or decided not to go with technology.

**Technical support for teachers during classroom lessons**

Technical support for teachers during their classroom teaching did not seem adequate because technicians were available in certain buildings and in the computer lab only. Therefore, the majority of novice teachers (11 respondents) reported that they had experienced technical problems in their lessons. While audio and video players were the most frequently used by teachers, they had to fix the problems associated with the equipment themselves. When teachers could not fix the problems, they had to improvise the lessons and totally relied on their creativity and quick-mindedness.

The DVD recorder did not work, so I changed into another activity like acting in a play with the same subject… (Ben).

Another way the teachers chose to go when having technical problems that technicians were not available was to seek help from their colleagues.

… We [teachers] help ourselves… during the lesson. (Mary)

The untimely technical support for the teachers resulted in teachers’ anticipations of problems and possible solutions and back-up learning materials for their students.

… I think of technical problems before I go to the classroom. (Ben)

… Not only me… I think other teachers have to prepare something supplementary just in case (Daisy).

**Discussion**
It appears that during their adoption of ICT in classroom teaching, the novice teachers were very receptive, which was reflected in:

1) their positive beliefs in the values that technologies brought to their students,
2) the absence of any fear of losing face when they were not technically competent as their students,
3) their considerations of students as ‘collaborators”, which go in line with constructivism, the most appropriate language teaching pedagogy with technologies, and
4) their activeness in seeking informal professional development for and by themselves.

However, the inappropriate professional development, the limited access to technical equipment and untimely technical support provided by the university and the department appear to be hindering the teachers’ use of technologies in classes. This fact can explain why the novice teachers had their “small dreams” that they could borrow a laptop from the department, and could have someone to stand by their side during their class hours (Daisy, Ben and Mary).

Furthermore, although the focus of this study was not on the university’s politics, the information given by the novice teachers implies the critical role of the senior administrators at the university and at the department. The administrators had a decisive role in nearly every aspect of teachers’ adoption of ICT. The administrators decided the syllabus with fixed technological components in each lesson, they chose which teachers to teach with ICT and who not, they restricted which language skills to teach with ICT, and they allocated technical equipment for the novice teachers to use in classes.

The findings above imply that the “high power distance, the extent to which the less powerful members of institutions expect and accept that power is distributed unequally” (Hofstede &Hofstede, 2005, p. 46) in the Vietnamese culture was reflected in the unequal relationship between the university’s administrators and the novice teachers in terms of power and technology allocation.

Finally, the findings indicate that technology diffusion at the university was conducted following the top-down approach. However, this top-down approach was not accompanied by comprehensive support. Specifically, the teachers in this study could only be facilitated to use such traditional ICT applications in their English teaching as audio and video players. With regard to computer adoption, the teachers had some knowledge about computers, they formed a favourable attitude towards computers in English teaching, and they started adopting computers in classroom teaching. However, as they did not actually have enough technical and professional development support to use major applications of computers such as teaching English using the LAN, the websites and the Internet, it could not be determined whether they would reject or affirm the consistent use of computer applications in their teaching. Consequently, there is no guarantee that they will decide to use computers in their future teaching.

**Conclusion**

This study has established that support for teachers to use technologies in their practice is essential. This support can first be provided through formal training courses to provide teachers with hands-on experience on technological applications in classroom practice.
The teachers should be equipped with teaching pedagogies with technology and develop basic technical competencies. Thus, they could develop general teaching principles to work with technology and have more positive beliefs and attitudes in adopting technologies in their teaching. Technologies should also be infused into these training programs, and by creating as many opportunities as possible for teachers to practice teaching English with technologies, teachers’ positive attitudes toward technology use can be further enhanced. Next, more technical personnel are required, and some short seminars to train novice teachers to fix simple and most common technical problems should be organised. Besides, an online discussion forum for teachers, administrators and technical personnel to interact and exchange ideas on different aspects of instructional technologies are suggested. It is hoped that with this forum, the administrators could have “open meta discourses” (Toll, 2001) with the teachers, so that any conflicts of interests among the administrators, the teachers, the technical personnel and other parties involved can be resolved.

Huong Thi Bao Dinh is the lecturer of English at the English Department, Hanoi University. She holds a Master of Education (Information and Communication Technology in Education) from Monash University, Australia in 2007. She is currently a PhD candidate in the School of Education, RMIT University, Melbourne, Australia.

Her areas of professional interest include technologies in English language teaching, technological professional development and technology-related policies.

References


Appendix 1: A Sample of the questionnaire

Please answer the questions by putting a tick into the appropriate box (es) and/or writing your explanation.

“I” refers to yourself as a novice teacher of English at English Department, Hanoi University of Foreign Studies.

“ICT” refers to any communication or information technology such as audio, video, computers, CD ROMs, Internet, World wide webs, etc. that a teacher of English uses in her/his teaching.

Please tick the appropriate box(es): (You can tick more than one box, as long as it is relevant)
1. I think ICT is effective in EFL teaching
   1. Yes □
      *(If Yes, proceed to question 2)*
   2. No □
      *(If No, proceed to question 3)*

2. ICT is effective in EFL teaching because:
   1. it provides various modes of presentation □
   2. it attracts students attention □
   3. it provides authentic language □
   4. I can design more flexible lessons □
   5. Other (please specify) __________________________________________

3. ICT is ineffective in EFL teaching because:
   1. it distracts my students attention on my explanation □
   2. it requires a lot of time to set up □
   3. technical breakdown destroys the interest of students □
   4. Other (please specify) __________________________________________

4. I feel confident using ICT in my classroom teaching
   1. Yes □
   2. No □
   Please give reasons for your answer __________________________________________

5. In my classroom teaching, I use
   1. audio players □
   2. video recorders □
   3. computers □
   4. CD ROMs □
   5. educational software □
   6. Websites □
   7. Internet/LAN communication □
   8. none of the above □

6. I use ICT in my teaching when
   1. I feel the need to □
   2. I am assigned by the department □
   3. Other (please specify) __________________________________________

7. I use ICT mostly in teaching
1. listening
2. speaking
3. reading
4. writing
5. Other (please specify)

8. I use ICT
   1. to provide authentic materials to my students
   2. to provide exposure to cultural concepts to my students
   3. to train my students to self-develop their skills such as searching for information for their speaking presentation
   4. Other (please specify)

9. I think integrating ICT in classroom teaching is easy
   1. Yes
   2. No

10. What type of ICT do you find the easiest to integrate in your classroom teaching? Why?

11. What type of ICT do you find the most difficult to adopt in your teaching? Why?

12. I can get access to an audio/video cassette player
   1. when I need it
   2. when I book it
   3. after my department allocates it for me
   4. Other (please specify)

13. I can get access to an OHP
   1. when I need it
   2. when I book it
   3. after my department allocates it for me
   4. Other (please specify)

14. I can get access to a computer
   1. when I need it
   2. when I book it
   3. after my department allocates it for me
4. Other (please specify)

15. I can get access to a projector
   1. when I need it
   2. when I book it
   3. after my department allocates it for me
   4. not at all
   5. Other (please specify)

16. I have experienced technical difficulties during my lesson
   1. Yes
   2. No

17. When I have a technical problem during the lesson, I call the technician
   1. Yes
   2. No
   Please give reason for your choice

18. When I have a technical problem during the lesson, I try to fix the problem myself
   1. Yes
   2. No
   Please give reason for your choice

19. Technically speaking, I have some difficulties in using ICT in my classroom teaching because:
   a. I don’t know how to function the machine
   b. I lack confidence to use the machine
   c. I don’t have timely technical support
   d. Other (please specify)

20. Pedagogically speaking, I have some difficulties in using ICT because:
   a. I don’t know how to integrate ICT in teaching
   b. I don’t see the difference between conventional teaching and teaching with ICT
   c. I don’t know the teaching methods
   d. Other (please specify)

21. I get to know how to use ICT by
   a. attending technical coursework outside of the university
b. attending technical coursework offered by the university

c. consulting my personal circle of friends who know ICT

d. consulting the technical personnel at the university

e. Other (please specify)

22. I get to know the pedagogy of teaching English with ICT by

a. attending coursework outside of the university

b. attending coursework offered by the university

c. attending short workshops, seminars provided by the university

d. attending short workshops, seminar outside of the university

e. exchanging ideas with peer colleagues

f. searching information on the Internet

g. Other (please specify)

23. I get the training on how to use certain type of ICT by the university

h. very often

i. rarely

j. on and off

k. when there are new packages/facilities

l. Other (please specify)

24. I would need further support from the university in

a. More regular professional training (*suggest frequency*)

b. More access to facilities during the lessons (*suggest frequency*)

c. More access to facilities to prepare lessons (*suggest frequency*)

d. Other (please specify)

Appendix 2: Interview questions

1. Do you use technologies in your English teaching? Why?
2. In what ways do you use ICT in your teaching?
3. Do you think it is easy to teach English with ICT? Why / Why not?
4. How does using ICT influence the way you teach English in your classroom?
5. What role do you think ICT play in your English language teaching?
6. Have you experienced any difficulties in using technologies in your teaching? For example: technological breakdowns, etc. What are the possible reasons for this?
7. How do you get to know how to use ICT in your teaching?
8. Is there any support for you to use ICT in your teaching that the university and the department provide to you? What type of support is it?