TEACHERS’ ATTITUDES AND TECHNOLOGY USE IN INDONESIAN EFL CLASSROOMS

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Abstract: The use of technology in education deals with two major aspects: mode and content. Nowadays, second-language teachers have the options to use technology, either web-based or non web-based, to help learners learn the target language (content) successfully. This paper aims at reporting research findings on the types of technology that the teachers use in their classrooms, how they apply them, and why they decide to use them. It also explores the teachers’ attitudes towards the use of technology and the extent to which certain types of technology have affected language learning achievement of their students.

Key words: teachers’ attitudes, technology, EFL, classroom

The teaching of a language, like the teaching of many other fields of study, deals with two major aspects: what to teach (content) and how to teach (techniques). The types of content (materials) for language teaching are determined by factors such as the purpose of the language program and the need of the language learners (Dubin & Olshtain, 1986). The techniques of teaching English
performed by the teacher depend on the language teaching approaches adopted in the classrooms. Although the two aspects of language teaching can be accomplished by the availability of a teacher alone, the use of language teaching media is likely to make teaching more successful and more interesting.

The various types of technology have shaped the way teachers teach language. In this article the term ‘technology’ is used to refer to electromechanical systems used for language teaching (delivery modes). For example, language laboratory is one of the types of technology that has been used to provide language learners with various models of native speakers’ utterances. As Brown (2001) noted, since it was firstly used in language classrooms in the 1950s and 1960s, language laboratory has been supportive of language learners. The technology in today’s field of language teaching is often associated with the use of the Information and Communication Technology (ICT). One which is popular is the use of the Internet. This is evident in the volume edited by Warschauer (1995) that discusses various internet features for language teaching purposes and cross-cultural communication.

The use of ICT makes language teaching more exciting, yet it requires readiness on the part of the teacher. The use of Internet, for example, is no longer limited to the need to access, store, and distribute materials for enhancing learning. But, as Pathak (2007) suggests, the Internet should be used for “managing course and managing learning, facilitating online group work, creating opportunities for project-based learning” (p. 9). Chun and Plass (2000) stated that advanced technology should combine multimedia applications (e.g., text, sound, images, and video) and network-based multimedia facilities (e.g., email, discussion, peer review and feedback, and hypertexts) in order to provide network multimedia applications that can facilitate highly visual environments (e.g., by videoconferencing).

Recent works employing web-based technology to learn second languages are evident in some edited volumes (e.g., Kabilan & Vethamani, 2007; Warschauer & Kern, 2000) and journal articles (Jang, 2008; Li & Walsh, 2010). For example, Chun and Plass (2000) reported the development of a project called netLearn which was applied to students learning German at the University of California, Santa Barbara (UCSB). As they stated, netLearn which combines multimedia and networked applications, was found successful in helping students develop their second language skills and aspects of language competences based on the principles of second language acquisition. Meskill and Ranglova (2000) used the Internet technology (email) as a means to devel-
op students’ sociocollaborative language learning within the general plan of introducing technology-based curriculum. They showed that the execution of development of the revised curriculum, the use of technology underscored and enhanced the learner-centeredness of these students’ instructional experiences and contributed a great deal to their motivation.

Jang (2008) examined the effect of integrating technology with teaching strategies on observation and writing into a teacher education course in Taiwan. The study compared pre-service teachers receiving the teaching method on “application of technology and theories” with those who received “traditional teaching”. The findings indicated that teachers who use ICT could utilize the various technologies and instructional theories; whereas traditional teachers demonstrated less integration of ICT and instructional theories. The study indicates that applying ICT and the integration of teaching strategies in the teacher education courses had important influence on the pre-service teachers’ ability to utilize technology for their teaching purpose. A study conducted by Li and Walsh (2010) looked at how EFL teachers in China used CALL (Computer Assisted Language Learning) and factors affecting the use of CALL. The study found that most of the teachers in schools with a satisfactory learning setting equipped with computers had adequate technical computer skills. However, the computer use was mainly for PowerPoint presentations. The findings suggested that additional trainings were needed through professional development activities to help teachers to better understand CALL pedagogy and to integrate ICT in their teaching.

Some studies are also interested in looking at teachers’ attitudes towards the use of ICT in EFL classrooms (Hismanoglu, 2012; Albirini, 2006). Hismanoglu (2012) conducted a study on pre-service teachers’ perception toward ICT implementation in teaching English as a foreign language of the distance higher education system in Turkey. He found out that the teachers participating in the research had negative attitudes toward ICT integration in “the nature, level and delivery” of the training (p.185). The teachers felt less competent in using ICT due to lack of knowledge and experience of ICT dissemination. The study suggested that pre-service training should enable teachers to become competent in and receptive to ICT in order to increase the pre-service teachers’ self-efficacy and decrease their anxiety in using their ICT skills. On the other hand, Albirini’s study (2006) found that EFL teachers of high school had positive attitudes toward the implementation of technology in Syrian education. Those attitudes were shaped by their vision of the technology, their experiences
with it and the cultural conditions which surround them. However, the study also found that there was a mismatch between ICT, existing curricula and the class-time frame. The study recommended that placing the ICT tools such as computers in schools is not enough for improving education; therefore the policy makers and teachers should hand-in-hand share their responsibilities. The policy makers should provide additional planning time for teachers to experiment with ICT-based approaches.

It has been described above that a number of studies have been done to prove the effectiveness of ICT in educational settings. This study is done to direct our attention to the shift of EFL teaching through technology and reveal the teachers’ attitudes toward the use of ICT which also becomes the fashionable topic in the last decade (Albirini, 2006; Hismonaglu, 2012). For this purpose, the research questions are put forward as follows:

- What types of technology are used by the language teachers in their classrooms?
- How are the various types of technology used?
- Why do the language teachers use the types of technology?
- What are the language teachers’ attitudes towards technology?
- How do language teachers see the benefits of technology?

METHOD

This study employed a descriptive quantitative design. It involved 37 teachers teaching English as a foreign language in different levels of Education based in Malang, a city in East Java Province of Indonesia. The respondents of the study were 23 junior high school teachers, 3 senior high school teachers and 11 university lecturers. The more complete data of the teachers are shown in Table 1.

<table>
<thead>
<tr>
<th>Questionnaire items</th>
<th>1-10 years of experience</th>
<th>10-20 years of experience</th>
<th>Over 20 years of experience</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>1 Jr. High School teachers</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 1. Description of the Respondents
A questionnaire was sent to teachers who have used different types of technology (see the Appendix). These teachers were asked to write their responses on the questionnaire anonymously. To get the answer for the first question, the respondents were asked to respond to the question dealing with the use of two types of technology: non web-based and web-based technology. With regard to the non web-based technology, the responses show that the types of technology mostly used are audiotapes. These include tape-players or tape-recorders to play cassettes (11 cases) and CD-ROMS to play audio CD (2 cases). With regard to the web-based technology, many of the respondents stated that they have used websites (10 cases).

To get the answer for the second question, the teachers were asked to mention a particular type of technology and how they have used the type of technology. The analysis results on the teacher responses are divided into two categories of technology: the non web-based and the web-based technology. Another aspect explored using the questionnaire is how teachers see the use of technology in second language classroom. The teachers were asked to mention an example of any types of technology that they have used in their classroom and to state their opinions about the use of technology.

The questionnaire also asked them to give their opinions on the use of technology in language classrooms. The questionnaire was used to examine the teachers’ attitudes towards five different attitudinal questions requiring them to judge the favorability of five questionnaire items according to five options developed according to the Likert Scale. Another aspect explored using the questionnaire is how teachers see the use of technology in second language classroom in relation to their students’ learning improvement. The data elicited from the questionnaires were descriptively analyzed and presented in terms of frequencies (f) and percentages (%).
FINDINGS AND DISCUSSION

The results of data analysis are presented and discussed in this section to answer the research questions. It deals with what types of technology are used, how these types of technology are used, reasons for using technology, teachers’ attitudes toward the use of technology, and its relation to language learning improvement.

What Types of Technology are Used in the Classroom

Out of the total number of respondents (37), a smaller number of them stated that they have used email (4 respondents) and either weblogs or virtual forums (2 respondents). The types of the technology used by the teachers based on the frequency of cases can be seen in Table 2.

Table 2. Types of Technology Used by the Teachers

<table>
<thead>
<tr>
<th>Types of Technology</th>
<th>Non Web-based</th>
<th>f</th>
<th>Web-based</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Tape recorder</td>
<td>11</td>
<td></td>
<td>Email</td>
<td>4</td>
</tr>
<tr>
<td>2 Compact Disk</td>
<td>2</td>
<td></td>
<td>Websites</td>
<td>10</td>
</tr>
<tr>
<td>3 Video/Television</td>
<td>5</td>
<td></td>
<td>Weblog</td>
<td>1</td>
</tr>
<tr>
<td>4 Notebook/Computer</td>
<td>14</td>
<td></td>
<td>Virtual forum</td>
<td>1</td>
</tr>
<tr>
<td>5 Radio</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 MP3</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Digital camera</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Multimedia</td>
<td>11</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

The results of the study show that many teachers have used technology. Thus, the application of computer software and the use of laptops for power-point presentation are no longer special as teachers use them for daily teaching and learning activities. In line with the study conducted by Li and Walsh (2010), teachers need to be provided with more useful application of technology. For example, in using power-point presentation, they should be trained in using various features such as images, sounds, and movies so that their power-point presentation will not be similar to whiteboard presentation (i.e., using black marks on white-board). Additionally, a number of web-based
types of technology (e.g., websites and email) have been used to enrich students with various sources of information as extra classroom activities. This is an antithesis of what happened over a decade ago. As Kern and Warschauer (2000) stated, many teachers remain skeptical of the technology value (e.g., computer use in general). The result of a survey they had reviewed showed that 59% of foreign language programs and 65% of English as a Second Language (ESL) programs used no form of computer technology in their courses, placing language teaching at the bottom of the list of academic areas surveyed.

**How the Types of Technology are Used**

In general, the non web-based technology is used as a means to present materials. The tape recorders and CD players are used to present listening materials which can be followed by some exercises or a question and answer session led by the teachers. One of the teachers described the process of teaching by stating that “the students listen to the dialogue or communication from the tape and then they answer some questions” (Respondent 31). The teachers stated that they used VCD or TV to play films or movies and then gave the students some exercises. One of the teachers mentioned about the use of audiovisual aids as follows, “The students watch VCD. After that the teacher gives some questions / instructions to them” (Respondent 19). Besides these audio or visual types of technology, some of teachers have used the computer, be it a desktop or laptop, to present materials. One of the teachers stated that he/she used the computer, “when the teacher or / and students need to display slide presentation” (Respondent 3).

The web-based technology is usually used to search information (website), to send an assignment that has been done by the student (email), and in a small case, to have additional information written by the teacher (blog). A teacher stated that website was used “to search and find the material for the assignment” (Respondent 1). Another teacher described the use of email as follows: “After discussing a model of a text the students are assigned to write their own topic and send/collect their work via email” (Respondent 12). With regard to the use of blog or virtual forum, a teacher noted, “student can get extra information from the website and blog written by the teacher and student can find ‘file sharing’ about Frequently Asked Questions (FAQs) in the web forum” (Respondent 6).
In short, teachers use technology as a means of presenting teaching materials. The non web-based types of technology, varying from tape recorders to laptops, are used to present materials as input for students to do some exercises or to follow a question and answer session following the presentation. The web-based types of technology such as websites and email are used as additional activities that the students do outside the classroom, such as searching information and sending assignments, respectively.

Regardless of the frequent use of technology as shown in this study, the technology was used to support language teaching. In other words, technology has not been used to facilitate learning in order to make students more independent. In fact, students are supposed to be capable to read authentic texts and write their responses inside and outside the classroom. This is just what the main purpose of the “learner-centered” activity; it is intended “to assist learners use the target language for communicative purposes outside the classroom” (Nunan, 1991: 105). With the use of technology, which is triggered by language learning tasks assigned by the teacher, students can relate between classroom learning and outside language use and be stimulated to use the target language. In addition, the use of the web-based technology is still in the category of “using the Internet” (Pathak, 2007: 8). The Internet has not been used to “create opportunities for project-based learning” (Pathak, 2007: 9), to facilitate online group work, or to manage learning. Similarly, as Chun and Plass (2000) argue, the use of the Internet should not be limited to “network application,” but also “network multimedia application” where text, sound, images and video are interplayed with the Internet in order to enhance student independent learning.

Why the Language Teachers Use Technology

The results of the analysis show that, in the teachers’ opinions, various types of technology ease the teaching process, provide models of target language, arouse students’ interest in learning, and increase students’ skills for future demands.

According to some of the teachers, technology can ease the teaching and save energy. This is because the teacher does not fully dominate the classroom. Others said that technology could vary their teaching and thus eliminate the boring situation, making the classroom alive. Moreover, technology enables the students to learn language faster. In short, technology can make language learn-
ing easier and more successfully managed. This is evident in one of the teachers’ responses which states, “By using technology, language learning will be more practical, efficient, and effective …” (Respondent 12).

The teachers think that technology can provide the students with models of authentic target language. This is because some types of technology, such as audio/video-tapes or compact disks, can record voices of native speakers. The Internet also provides access to authentic materials varying from expressions used in computer-mediated communication such as email and virtual forums to recorded or live events. One of the teachers stated that technology enables the students to “get real and authentic examples of the language expressions” (Respondent 1).

Some respondents confessed that with the use of technology students became more enthusiastic to give more attention in learning. They also think that learning in the language classroom becomes more enjoyable. Accordingly, it can promote students’ interest and motivation particularly in learning foreign language. One of the teachers said, “the students are happier with the assignment as they are more confident with their ability in English” (Respondent 4). Another teacher added that using technology “can make teaching and learning process more interesting and the students will have more attention to the subject that I teach” (Respondent 16).

Some respondents believe that the application of technology is needed for preparing the students to face the challenge of their future. Thus, besides teaching the language, teachers also give opportunities for the students to get familiar with technology. One of the teachers stated the use of technology “makes them familiar for technology (sic)” (Respondent 17). Another teacher claimed that “the applications of technology are needed to face the future demand” (Respondent 3). In some ways, the teachers also consider that the use of technology is practical and easy, but the development beyond the classroom settings depends on each individual’s efforts. This is evident in one of the teachers’ statement, saying that further development outside the class, “is up to / depends on each student’s self-endeavor” (Respondent 8).

Most of the teachers use technology for practical teaching purposes and to make their instruction more successful. In addition, technology is an important tool to present models of expressions and interactions which are commonly performed by native speakers of the target language being learned. Thus, technology provides important cultural information that cannot be gained from the instruction by the classroom teacher alone. However, we need to be
informed that, as Chun and Plass (2000: 165) remarked, the increasing use of web-based technology should be made relevant to principles of second language (L2) acquisition.

Accordingly, before using advanced technology, teachers need to know the characteristics of their students and their learning styles. According to Chun and Plass (2000: 167), “we need to understand some basic principles of how individual learners process and retain information in different modes and how they integrate this information into the different aspects of their L2 competence.” Some students might prefer to study in face-to-face fashion than through the online use of the Internet materials. Thus, for this type of students we need to prepare them first in the classroom by giving them some preliminary activities before the students are asked to use the ICT. For example, in Cahyani’s (2011) research, she assigned her students to write a company profile. She prepared the students to have a series of activities before the students submitted the result of final project in Facebook, one of the Internet features which is popular nowadays. The activities included specifying the company details, planning the structure or organization, writing the company brochure, writing the product and service, and writing company business strategies. After the students finished preparing these writing products, they were allowed to upload the company profile with all the pictures and the writing in the captions.

Thus, technology has been used by teachers because of its practicality, convenience, and potential to create an interesting teaching and learning process. Interestingly, technology is also believed as an important tool to prepare students to face future challenges when they have finished their education.

What are the Language Teachers’ Attitudes towards Technology

The teachers’ attitudes toward the use of technological facilities can be seen in Table 3.

<table>
<thead>
<tr>
<th>Table 3. Teachers’ Attitudes toward the Use of Technology (N = 37)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Questionnaire Items</strong></td>
</tr>
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<td>f</td>
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...
The data on Table 3 shows that, in general, teachers strongly agree (4.65) that second language classrooms should have various types of technology. Moreover, they also strongly agree (4.51) that language teachers should employ various types of technology in their classrooms. In addition, they agree (4.22) that students learn better if they use technology in their classrooms. Teachers agree (4.30) that teaching English language skills will be effective if technology is used and they agree (4.16) that the teaching of English language components will be effective with the use of technology.
To summarize, the teachers have positive attitudes towards the use of technology in the language classrooms. The strong attitudes are indicated by their conviction that language classrooms should have various types of technology and that the teachers themselves should use them to develop students’ language skills. This is because students, as the teachers believe, will be able to learn second language better by using technology.

It is interesting to note that while not all of the teachers in this study have used various types of technology, all of them are in favor of using technology in their classrooms. This implies that if the classrooms where the language teachers teach have technology, they will happily use it for language instruction. This is also supported by the responses showing that technology is believed to be effective to improve second language learning.

Some language teachers have not been able to utilize technology effectively in their teaching. Perhaps this is due to lack of exposure and training on how to use it in language classes and how to deliver their teaching in that new environment using appropriate language pedagogy. Some teachers are uncertain whether to use online teaching such as e-mail, chat, blog, or webquest in their teaching activities. Thus, infrequent use of technology among language teachers which is evident from the responses to the questionnaire which have been left empty may be caused by reasons of availability and lack of training rather than disagreement on the advantages of technology or simply ignorance.

For teachers who have not been skillful in using technological facilities, they need to keep up with the development by attending special courses or development programs focusing on ICT. This is because, in fact, nowadays students are also getting more familiar with the use of technology. They are going to do most of their writing and much of their reading on an electronic screen because they live now in a world of electronic text (Schultz, 2000). One of the types of web-based technology, the Internet for example, is much more than a teaching tool. It is becoming one of the primary media of literacy and communication practices. The Internet is paramount as it is a way to help our language classroom come “ALIVE”. This is because, as Warschauer, Shetzer, and Meloni (2002: 7) suggest, the Internet can bring Authenticity (opportunities to teach languages in authentic, meaningful contexts), Literacy (the ability to read, write, communicate, research, and publish), Interaction (a means for language acquisition and fluency), Vitality (a means to arouse students’ interest due to the multimodal and real-life characteristics of the Internet), and Empowerment
(improvement of the personal power of teachers and students) in language classrooms.

How Language Teachers See the Benefits of Technology

Many of the teachers believe that the use of technology will boost students’ language learning. One of the teachers stated, “The students will be interested to learn if I used technological facility and it has increased their achievement” (Respondent 10). Another teacher has found that the use of audiotapes helped the students learn better, but this teacher also stated that the use of various types of technology will be even more effective. In the teacher’s words, “Audiotapes do help students but I believe that the tendency of better achievement will be more likely if more types of technology are utilized” (Respondent 6). Another teacher stated, “Technology can improve the language learning achievement of the students” (Respondent 23). Regardless of the fact that many of the teachers are in favor of using technology to enhance students’ language learning, a teacher was skeptical of the effectiveness of technology. As he/she stated, “I don’t know for sure. It needs scientific investigation to prove. Comparing two different groups for their achievement needs statistical analysis to claim” (Respondent 5).

In a nutshell, not all teachers agree that technology will be effective in improving students’ language learning. This is understandable because advanced instructional technology which is used without great content may be entertaining but not fully leading to learning.

CONCLUSIONS AND SUGGESTIONS

This article has shown that technology, as language teachers believe, is inseparable with the success of teaching and learning activities. Regardless of the types of the technology, either non web-based or web-based, they facilitate language learning. This article also shows that the presence of technology in language classrooms is a prerequisite for interesting language instruction and success in language learning. These findings lead to the need for considering some action plans for language teachers.

Language teachers should take the challenge to customize their language teaching activities by taking into account new development in learning theories, current teaching trends, and available types of technology in contemporary
settings. Teaching language using technology poses many challenges. For instance, it is not that simple to teach listening and speaking online since teaching both skills asks for stable and excellent quality for clear voice and video image during the interaction between the teacher and the learners.

Moreover, teachers must be able to solve some technical problems in the classroom, as in the reality of some schools do not have a ready technician to help in case of connection breakdown or system problems. Generally speaking, teachers should be as skilled as his/her students so that the students do not destroy the lesson or embarrass the teacher. It is expected that this can give insights to second language teachers regarding the use of technology for language learning practices and their effects on language learning achievement. In relation to the finding of research conducted by Hismanoglu (2012), it is also suggested that prospective teachers should be equipped with practical knowledge in using advanced ICT to ensure that they will be able to teach using ICT in the future.

REFERENCES


APPENDIX

Questionnaire on the Use of Technology in Language Classrooms

This Questionnaire aims to examine the use of technology in the teaching of second language.

Respondent Details:

Gender

___ Male  ___ Female

School

___ Primary  ___ Secondary  ___ Tertiary

Year of Experience

___ <10  ___ 10-20  ___ 20< years

1. The Various Types of Technology Used

   a. Which of the following non web-based types of technology are used in your classroom? (Please tick)

      ____ Commercially-produced audiotapes (tape recorder, CD, MP3)
      ____ Commercially-produced videotapes (VCD, DVD, VCR, CD ROM, MP4)
      ____ Self-made audiotapes (tape recorder, CD, MP3)
      ____ Self-made videotapes (VCD, DVD, VCR, CD ROM, MP4)
      ____ Overhead projection (OHP)
      ____ LCD (multimedia projection)
      ____ Computer
      ____ Others (please mention): ______________________

   b. Which of the following web-based types of technology are used to support the teaching of English in your classroom? (Please tick)

      ____ E-mail
      ____ Website
      ____ Webquest
      ____ Weblog
      ____ Webchat
2. How Technologies are Used and for What Reasons

a. Name of the types of technology:

b. Procedure in using technology:

c. Reason(s) for using it:

d. How did technology affect achievement of your students?

3. Attitudes toward the Use of Technology

What is your opinion about the following statements? Please give your response by giving a tick to the options which suit your opinion.

a. Second language classroom should have various types of technology.
   _____ Strongly Agree
   _____ Agree
   _____ Neither Agree nor Disagree
   _____ Disagree
   _____ Strongly Disagree

b. Language teachers should employ technology in their classrooms.
   _____ Strongly Agree
   _____ Agree
   _____ Neither Agree nor Disagree
   _____ Disagree
   _____ Strongly Disagree

c. Students will learn better if they use technology in their classrooms.
   _____ Strongly Agree
   _____ Agree
d. Teaching English Language Skills (Listening, Speaking, Reading, and Writing) will be effective with the use of technology.
   _____ Strongly Agree
   _____ Agree
   _____ Neither Agree nor Disagree
   _____ Disagree
   _____ Strongly Disagree

e. Teaching English Language Components (Grammar, Vocabulary, and Pronunciation) will be effective with the use of technology.
   _____ Strongly Agree
   _____ Agree
   _____ Neither Agree nor Disagree
   _____ Disagree
   _____ Strongly Disagree