An Analysis of Teachers' Attitude and Teaching Practice toward ICT Use in English Language Teaching

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Abstract. Information and Communication Technology (ICT) is the current issue in this digital era, particularly regarding English language teaching. Then, attitude as the force of teachers' behavior to use ICT in teaching becomes a crucial case. However, a similar study is quite scarce in Indonesian ELT context. This survey study aimed to describe the English teachers' attitude towards ICT use and the frequency of using ICT in their teaching practices. This study also aimed at finding out the correlation between two variables. The participants of this study were 322 English teachers of Junior high schools in Yogyakarta provinces, Indonesia. The questionnaires paper-based were distributed as the instrument for data collection. The research data were analyzed using descriptive and inferential statistics through SPSS program version 24. The results revealed that the teachers had a positive attitude towards the use of ICT by an overall mean score of 3.32. In addition, the total mean score of the frequency of ICT use was 2.44, which means the teachers rarely used ICT in English teaching. Besides, the correlation results showed that there is a significant positive relation between English teachers' attitude and frequency of ICT use by Pearson Correlation value 0.386.Although the teachers' attitude relates to their ICT use is positive, there may be other factors influencing teachers' frequency of ICT use instead of attitude.

Keywords: EFL Teacher, English Instruction, Technology

1 Introduction

In recent years, technological development is often involved with educational aspects, including English language teaching, which offers potential contributions. The use of ICT (Information and Communication Technology) in English instructions refers to computer-and-internet-based-technology that is utilized by the teacher and students to assist English language teaching and learning[1]. In the 1950s and 1960s, the language laboratory has used as the first technology entered the in English teaching and learning process[2]. It came with the audio-lingual method to drill students' pronunciation using the utterances of native speakers[3]. Furthermore, ICT has various advantages that help English teachers in finding and delivering authentic materials from rich sources[4][5]. Also, ICT provides multiple teaching and learning activities to enhance students' language skills[6][7]. Furthermore, ICT offers students' communicative skills[8][9]. And it creates an exciting language exercise[10]. Besides, Azmi[11]reported that the use of ICT in the EFL classroom encourages learning autonomously, increases students' learning motivation, and also supports their English proficiency improvement. Therefore, the teacher, as a critical role in English language instructions, is demanded to make use of ICT. The use of ICT has a positive opportunity to provide a more productive English learning environment with various and attractive media that are technologically based.

Regarding the ICT integration in Indonesia, the Education Ministry determined a regulation in the Decree Number 22 Year 2016 about the Standard Process of Primary and Secondary Education.They stated that one of the learning principles should be using ICT to enhance the environmental learning process to be more efficient and effective[12]. Further, the 2013 Curriculum proposed that the knowledge of information technology should be involved as learning media in all subjects, including English lesson rather than separate subject[13]. It can be concluded that the Indonesian Ministry of Education supports the teachers in using ICT in their teaching.

Especially concerning English teachers, they need ICT to enhance students' English performance because the students' learning outcomes are still at an unacceptable level[14]. Thus, the ICT contribution brings the potential to improve English language teaching effectively. Further, concerningICT utilization in language instructions,Albirini[15]stated that teachers'attitude is a crucial element that determined the teachers' behavior in adopting the technology. Although the teachers' attitude as their booster in employing ICT, the teachers still not yet aware of their attitude toward the use of ICT, whether positively or negatively. Then, there were several previous researchers investigated teachers' attitude towards the use of ICT conducted by Albirini[15], Hernández-Ramos, et al.[16], and Ndibalema[17]. Besides, Bebell, Russell and O'Dwyer[18]and Merç[19]reported on the use of ICT in teaching. Additionally, Al-Zaidiyeen, Mei, and Fook [20] investigated the relationship between teachers' attitude and the level of technology use in classrooms. However, there is limited surveyresearch that focuses on the English teachers' attitude and their teaching toward ICT use, especially in the Indonesian context.

Considering the implementation of English language in Indonesia, English as a compulsory subject started in Junior high school, particularly in public school. Thus, an exciting and effective English teaching and learning environment are highly demanded. Additionally, the millennial students have been familiar with technology, then a study on the attitude and frequency of ICT use for the teacher as a major role in English instruction is imperative. Therefore, this present study focuses on investigating the English teachers' attitude towards ICT practice and its frequency use in English teaching. It aims to describe the English teachers' attitude and the frequency of using ICT in teaching English to evaluate to what extent the teachers utilize the technology. Hence, this case may influence the effectivity in English language teaching and students' language skills development. Besides, this study aims to find out the correlation between English teachers' attitude and their frequency use in teaching practice. It seeks to know whether the English teachers' attitude has a relation with their frequency of using ICT or not.

2 Method

This study was a quantitative study in the form of survey design focused on the teachers' attitude and frequency of ICT use in English language teaching.The researchers employed multistage sampling to select the sampling of the study because of the spread of population in a wide geographic area. The researchers decided the region to be selected randomly (cluster sampling) and then chose the participants randomly (simple random sampling)[21]. The participants of this recent study were 322 (90 male and 232 female) English teachers of Junior public schools from three out of five regencies in Yogyakarta Special Region province, Indonesia. The participants were selected randomly from different

schools with different accreditation ranking based on the School National Accreditation Affairs (BAN-SM). Moreover, the researchers collected the data in two months (April 13, 2019 – May 16, 2019 and July 18, 2019 – August 20, 2019).

In collecting the data, the researchers used two types of paper-based questionnaires as the instrument of the research.The first questionnaire adapted from Hernández-Ramos, et al.[16]to measure teachers' attitude toward the use of ICT in teaching. The questionnaire consisted of four domains, including affective, perceived usefulness, perceived ease of use, and behavior with 15 questionnaire items.Further, to find out the teachers' frequency of ICT use in teaching, the researchers adapted a questionnaire which was developed by Bebell, Russell, and O'Dwyer[18]. The questionnaire contains 21 items in seven domains, namely, teachers' use of ICT for class preparation, professional e-mail use, delivering instruction, accommodation, student use, student products, and grading.

Both questionnaires of teachers' attitude and frequency of ICT use in teaching checked for the validity and reliability as instruments for testing. All questionnaires assessed for validity and reliability using SPSS program version 24. The result showed that all items of questionnaires on teachers' attitude and frequency of ICT use in teaching were valid. The validity showed that the Pearson product-moment (r) values (0.481-0.857) were higher than r table (0.361). Whereas, in the reliability test, the researchers applied Cronbach's Alpha coefficient. Then, the Cronbach Alpha result of teachers' attitude questionnaire was 0.900, and teachers' frequency of ICT use in teaching was 0.940.According to Cohen, Manion, and Morrison[22], the Cronbach's Alpha value >0.90 categorized as very highly reliable. Therefore, the questionnaires of this study considered as an excellent instrument to collect the data for both teachers' attitudes and frequency of ICT use in teaching the English language.

Moreover, descriptive and inferential statistics applied as the technique of data analysis. The descriptive analysis was used to describe the English teachers' attitude towards ICT practice and its frequency use in English teaching by indicating the central tendency (means, modes, medians)[22]. Besides, the domains of each variable also analyzed using descriptive statistic. While the inferential statistic used was Pearson Product Moment Correlation (r) to find out the relation between English teachers' attitude toward the use of ICT and the frequency of ICT use in teaching. The statistical analysis of this study was processed using SPSS program version 24.

3. Results and Discussion

3.1 The teachers' attitude and frequency of ICT use in English language teaching

This study aimed at describing the Englishteachers' attitude towards the use of ICT and the frequency of ICT use in teaching. The first questionnaire was designed to measure English teachers' attitude toward the use of ICT. The questionnaire consists of four domains, namely affective, perceived usefulness, perceived ease of use, and behavior. There were 15 questionnaire items with four-point scales of response mode that can be chosen by the participants. The four-point scales were 4 (Strongly Agree) represents the maximum score, and 1 (Strongly Disagree) represents the minimum score of the scale. Table 1 demonstrates the distribution of mean scores on the English teachers' attitude toward the use of ICT.

Table 1. Distribution of mean scores on the attitude towards ICT use

Scale	Percent (%)				Mean	Std. Deviation (SD)
	SD	D	A	SA		
Affective	0.0	8.4	84.5	7.1	3.27	0.35
Perceived Usefulness	0.0	6.5	83.9	9.6	3.32	0.38
Perceived Ease of Use	0.0	0.9	74.9	24.2	3.39	0.42
Behavior	0.0	5.1	77.5	17.4	3.33	0.43
Overall Attitude	0.0	8.8	87.4	3.8	3.32	0.34

SD, strongly disagree (1); D, disagree (2); A, agree (3); SA, strongly agree (4)

As Table 1 showed, the overall mean score of English teachers' whole attitude towards the use of ICT was 3.32 (SD = 0.34), which indicated a positive attitude result. The participants' positive attitude was supported evidently within the affective (mean = 3.27), perceived usefulness (mean = 3.38), perceived of ease of use (mean = 3.39), and behavior (mean = 3.33) domains. 91.6% of the participants agreed by 84.5% and strongly agreed by 7.1% of the affective domain. It reports that the English teachers had no anxiety on using ICT. They were aware and happy with the development of ICT in the education field. Besides, they felt comfortable with ICT advantages, and they liked to discuss ICT to others and to use ICT in teaching. In the perceived usefulness, most of the participants agreed (83.9%) and there 9.6% who strongly agreed that the ICT tools assisted them in their teaching. ICT saved teachers' time and enhanced students' learning performance and motivation. Within the perceived ease of use domain, the respondents agreed by 74.9% and strongly agreed by 24.2% to operate the ICT tools. Then, in the behavior domain, the participants agreed by 77.5% and strongly agreed by 17.4% in term of utilizing and leaning on how to use ICT in teaching effectively.

Additionally, the second questionnaire was designed to measure the teachers' frequency of ICT use in teaching English. The questionnaire consists of seven domains, including preparation, professional e-mail, delivering instruction, accommodation, students use, students products, and grading. There were 21 questionnaire items with four-point scales of response mode were 4 (Always) stands for the maximum score and 1 (Never) stands for the minimum score. Table 2 below presented the distribution of the mean scores on the teachers' frequency on using ICT in English teaching.

Table 2. Distribution of mean scores on the frequency of ICT use

Scale	Percent (%)				Mean	Std. Deviation (SD)
	Never	Rarely	Often	Always		
Preparation	2.3	32.5	59.9	5.3	2.99	0.51
Professional E-mail	36.0	42.9	19.5	1.6	2.17	0.72
Delivering Instruction	1.6	19.6	69.9	9.0	2.87	0.57
Accommodation	17.1	65.8	16.2	0.9	2.25	0.58
Student Use	31.3	57.7	10.6	0.4	2.15	0.59
Student Products	35.1	51.2	13.1	0.6	2.13	0.65
Grading	1.6	6.8	37.6	54.0	3.44	0.69
Overall Frequency of ICT Use	18.4	71.2	10.2	0.2	2.37	0.45

Table 2 provided the mean scores of overall and each variable domain on the teachers' frequency of ICT use in English teaching. The overall mean score of overall teachers' frequency of ICT use was 2.37 (SD = 0.45), which indicated rare used ICT in teaching. It highly supported within the preparation (2.99), professional e-mail (2.17), delivering instruction (2.87), accommodation (2.25), student use (2.15), student products (2.13), and grading (3.44) domains. The least mean score presented by students products domain in which 51.2% of participants rarely used ICT, and 35.1% of participants never used ICT. This result indicated that the teachers directed the students to utilize non-technological based rather than technology-based learning products. The example of leading students to create language products like asking students to use Microsoft word to write English letters or to make simple greeting cards. Likewise, 57.7% of the participants rarely used ICT, and 31.3% of the participants never used ICT for student use domain. Meaning the teachers did not allow the students to use ICT in learning English during class time. Besides, the professional e-mail domain showed that the participants rarely used ICT by 42.9% and never used the ICT by 36.0%. This result indicates that ICT not commonly employed for communicating among teachers themselves, teachers with public administrators, and teachers with students' parents. Within the accommodation domain, 65.8% of the participants rarely used the ICT, and 17.1% of the participants never used the ICT.

On the other hand, The grading domain had the highest mean score of the frequency of ICT use. It found that a total of 91.6% of the teachers use ICT for grading. Mostly ICT is used by 54.0% and often used by 37.6% for grading. The grading is done by using a computer, laptop, or other devices to save and process students' language records. Moreover, the highest mean score was followed by preparation domain with 65.2% of the respondents. The result reported that the teachers often (59.9%) and always (5.3%) used ICT in preparing a lesson plan, material handouts, and assignment for students. After that, it followed by the mean score on delivering instruction domain, which showed the teachers often used ICT by 69.9% in providing authentic materials, for example, in the form of video.

The results from the descriptive analysis showed that the English teachers had a positive attitude towards the use of ICT in teaching. The four domains of attitude, including affective, perceived usefulness, perceived ease of use, and behavior, revealed positive results that highly supported teachers' positive attitude. It is approved by Albirini[15]that teachers' positive attitude indicated their acceptance of introducing ICT in the education field, particularly the use of ICT in English language teaching. Then, the teachers were also considered the use of ICT as a valuable potential to assist them in teaching effectively and enhance students' English performance. Further, as the attitude boosted individual behavior, then it is expected the teachers always used ICT in teaching. However, the result showed that English teachers used ICT rarely in their teaching practices. The same results reported previously that the teachers had a positive attitude towards the use of ICT but had a low level of using ICT for teaching practices [20]. Thus, the teachers' frequency of ICT use in teaching English might not only be determined by teachers' attitude.

Moreover, [23]stated that ICT use in language teaching and learning depends on many factors associated with the teachers. This finding can be seen from the teachers' response when the researchers asked whether they preferred using ICT in teaching English or not. Most of them reported being interested in using ICT in language teaching because ICT can enhance their students' attention. However, the inadequate ICT facilities in the school prompted the teachers to deliver English instruction traditionally. Besides, most of the Indonesian school regulations forbid the students to operate ICT devices such as handphones and tablet to use during class time. Further, the teachers' lack of ICT competencies also prevents them from using ICT in their teaching practice [17]. Hence, the education government might provide ICT training or

workshop to improve teachers' skills to use ICT as a pedagogical tool in their instructions. The ICT workshop or training should focus on how to use ICT in the language instructions. Additionally, the time limitation in the classroom makes the teachers integrate ICT hesitantly [19]. It seems that the teachers are also demanded to have good time management instead of their ICT competencies. Therefore, regarding the findings concerning English teachers' positive attitude, it indicates the teachers have willing to use ICT in language teaching. Nevertheless, other factors related to ICT use in teaching have to be highlighted to make the teachers able to utilize ICT optimally in English language teaching.

3.2   The correlation between teachers' attitude and frequency of ICT use in English language teaching

The other aim of this present study was to find out the correlation possibility between teachers' attitude and frequency of ICT use in English language teaching.Pearson Product Moment Correlation (r) was applied to assess the relationship between two variables. Table 3 presents the correlation result as below.

Table 3. Summary of the correlation test result

		Attitude	Frequency of ICT Use
Attitude	Pearson Correlation	1	0.386**
	Sig. (2-tailed)		0.000
	N		322
Frequency of ICT Use	Pearson Correlation		1
	Sig. (2-tailed)		
	N		

Table 3 showed that the Pearson correlation value (r-value) was 0.386 with a significance value of 0.000. It shows that there was a significant correlation positively ($p<0.05$) between teachers' attitude towards the use of ICT practiced and its frequency use in English language teaching.The result confirmed the related study by Al-Zaidiyeen, Mei, and Fook [20], which found that the level of teachers' attitude had a direct relation with their ICT use in teaching. In line with Albirini [15] that teachers who have a positive attitude toward the use of ICT more interest and comfortable while using ICT in their teaching practices. While the negative attitude towards the use of ICT in language instructions will discourage the teachers from utilizing ICT in their courses[24]. Afterward, the teachers' attitude proved to be a significant predictor of ICT use, which becomes a crucial factor in the successful ICT utilization in their teaching practices [20]. It indicated that the more the teachers' positive attitude toward the use of ICT, the more they use ICT for language instruction. Then, the teachers' attitude towards ICT use is one of the crucial factors in the success of using ICT in language teaching. Nevertheless,the teachers' frequency of ICT use in teaching might be influenced by other elements from the teachers' personalities-based and school-based.

4   Conclusion

The advancement of technology in this digital era should be optimally and effectively utilized, mainly by English teachers to improve language teaching. The teachers as the principal

organizers in English language teaching and learning, they are demanded to develop their students' English skills. For today's millennial students, it will be more interested in learning the English language through a technologically based environment. Thus, the teachers should adjust the students' conditions to integrate ICT to make the teaching and learning process enjoyable for the students. The English teachers' attitude comes to be a crucial case because it plays a role as teachers' booster in the use of ICT in teaching. However, based on the results of the study, Indonesian EFL teachers were rarely using ICT in their teaching, although they have a positive attitude towards the use of ICT. It means that there are other factors which influence the successful use of ICT in English language teaching. Therefore, the English teachers are expected to utilize ICT in teaching and learning process more frequently. Then, the next researchers interested in the same topic may conduct a related study on investigating other factors that influence the teachers' decision to use ICT in English language teaching.

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